2016 ANNUAL REPORT

DEPENDABILITY
TRUST
PARTNERSHIP

CoBANK®

AS AN INTEGRAL MEMBER OF THE FARM CREDIT SYSTEM, OUR MISSION IS TO SERVE AS A DEPENDABLE PROVIDER OF CREDIT AND OTHER VALUE-ADDED FINANCIAL SERVICES TO AGRICULTURE AND RURAL INFRASTRUCTURE BUSINESSES FOR THE BENEFIT OF RURAL AMERICA.

FINANCIAL HIGHLIGHTS

FOR THE YEAR *($ in millions)*	2016	2015	2014
Net Interest Income	$ 1,362	$ 1,273	$ 1,232
Provision for Loan Losses (Loan Loss Reversal)	63	10	(15)
Net Income	946	937	904
Patronage Distribution	588	514	467
AT YEAR-END *($ in millions)*	**2016**	**2015**	**2014**
Agribusiness	$ 28,660	$ 26,131	$ 24,359
Strategic Relationships	45,994	43,358	39,919
Rural Infrastructure	20,604	19,552	16,104
Total Loans	**$ 95,258**	$ 89,041	$ 80,382
Allowance for Credit Losses	$ 662	$ 602	$ 597
Total Assets	126,131	117,471	107,381
Total Shareholders' Equity	8,574	7,810	7,370
FINANCIAL RATIOS *(for the year)*	**2016**	**2015**	**2014**
Return on Average Common Equity	12.40%	13.57%	14.27%
Return on Average Assets	0.78	0.86	0.89
Return on Active Patron Investments	21.32	19.76	18.59
Net Interest Margin	1.14	1.20	1.23
Permanent Capital Ratio	15.47	14.95	15.70

KEY METRICS

TOTAL ASSETS *(in billions)*

NET INCOME *(in millions)*

PATRONAGE DISTRIBUTION *(in millions)*

TOTAL SHAREHOLDERS' EQUITY *(in millions)*

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TOM HALVERSON, Chief Executive Officer **EVERETT DOBRINSKI,** Chairman

TO OUR SHAREHOLDERS

CoBank has always stood somewhat apart from the rest of the financial services industry—for a long list of reasons. We are a borrower-owned institution, whose customers care first and foremost about dependability and availability of credit regardless of conditions in the market. We are a mission-based lender, with a focus on industries that form the backbone of the U.S. rural economy. We manage the bank for the long term, under the guidance of a board of directors whose time horizon is generational rather than the next quarter.

Yet another important differentiator for CoBank is the consistently strong business performance we've recorded on behalf of our customers and other stakeholders. The broader banking industry has experienced tremendous disruption and volatility since the 2008-2009 financial crisis. CoBank, in contrast, has grown substantially over the same time frame—while remaining safe, sound and profitable.

The intrinsic strength of the CoBank business model is highlighted yet again in our financial results for 2016. The bank is in excellent financial shape, with robust earnings, solid capital and liquidity, and excellent credit quality. Our operating efficiency is world-class, and the patronage distribution approved by our board of directors is the largest in company history.

Beyond financial results, CoBank is focused on other key measures of business performance as well. Our board of directors remains highly engaged and committed to good governance. We employ an outstanding team of banking professionals who are knowledgeable about our customers and the challenges and opportunities they face in the market. CoBank also continues to meet its obligations as a responsible corporate citizen through charitable giving, support for rural communities, and advocacy on behalf of the industries we serve.

The pages that follow provide a comprehensive overview of the bank, including year-end financials, governance information, customer profiles, and details about our various loan portfolios and operating segments. We hope this report provides you with a good understanding of our business and the role we play as a strategically important source of credit for rural America. We also hope that the words on the cover—Dependability, Trust and Partnership—ring true as a description of CoBank's approach to the marketplace and the relationship we strive to build with every single customer.

2016 FINANCIAL RESULTS AND PATRONAGE

CoBank's average loan and lease volume increased 10 percent in 2016, to $91.6 billion. That growth was driven by higher levels of borrowing from customers in all three of our operating segments, including affiliated Farm Credit associations, grain cooperatives, food and agribusiness companies, rural electric cooperatives, and communications service providers. Net interest income increased by 7 percent, to $1.4 billion, as a result of higher loan volume and increased earnings from balance sheet positioning, partially offset by lower spreads in our loan and investment portfolios. Net income rose 1 percent, to $945.7 million, reflecting higher net interest income offset by a higher provision for loan losses as well as increased Farm Credit Insurance Fund premiums and other operating expenses.

Credit quality in CoBank's loan portfolio declined slightly from 2015, in part due to stresses stemming from the downturn in agricultural commodity prices. Nonetheless, overall credit quality continued to be favorable, reflecting the generally strong credit profile of our customer base. At year-end, 0.81 percent of the bank's loans were classified as adverse assets, compared to 0.70 percent at December 31, 2015. Nonaccrual loans increased to 0.22 percent of total loans, compared to 0.18 percent at year-end 2015. CoBank's allowance for credit losses, which protects the bank's capital base against losses embedded in our loan portfolio, totaled $662.5 million at year-end.

CoBank's capital and liquidity levels remain well in excess of regulatory minimums. As of December 31, 2016, shareholders' equity was $8.6 billion, and the bank's permanent capital ratio was 15.47 percent, compared with the 7.0 percent minimum established by the Farm Credit Administration (FCA), the bank's independent regulator. At year-end, the bank held approximately $30.2 billion in cash and investments. The bank had 197 days of liquidity at the end of 2016, which exceeded the FCA minimum.

Patronage payouts for 2016 will total a record $588 million—well over half of the bank's earnings for the year. Patronage is an important part of the value proposition we provide our customers: It effectively lowers their overall cost of borrowing while enabling them to build equity in the bank over time and to have a voice in the governance of our business. Over the past five years alone, CoBank has distributed a remarkable $2.4 billion in patronage to customers across rural America, highlighting once again the enduring power of the cooperative model.

Like all banks, we face a number of persistent challenges, including intense competition for the business of our customers, downward pressure on margins and continuing low interest rates that impact our returns on invested capital. Nonetheless, we are delighted with our overall financial results for 2016 and strongly believe that CoBank is well positioned for the year ahead.

THE FARM CREDIT ADVANTAGE

CoBank remains the largest single institution in the $300 billion Farm Credit System, a nationwide network of borrower-owned financial cooperatives specifically chartered to provide dependable credit to agriculture and other industries in rural America. As a government sponsored enterprise, Farm Credit enjoys ready access to the capital markets and System-wide debt securities that fund our loans, which strongly benefits our customers and enhances CoBank's overall operating efficiency.

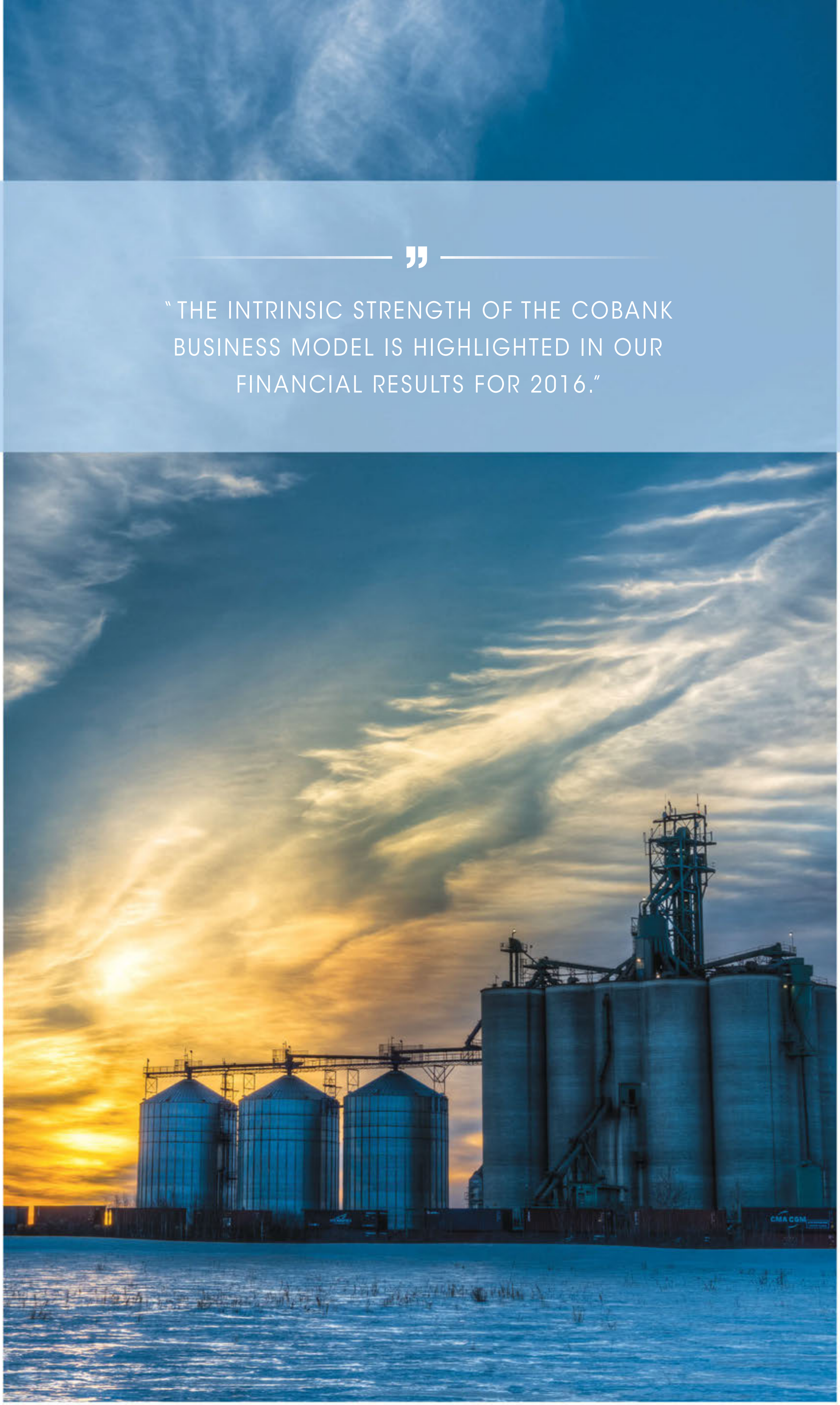
System membership also bolsters our lending capacity and enables us to meet the needs of customers with very large borrowing requirements. CoBank frequently syndicates loans to our 23 affiliated associations and other Farm Credit institutions around the country. We also purchase loans from Farm Credit partners in order to enhance the diversification of our own loan portfolio. At year-end, CoBank's syndication and participations business with other Farm Credit entities totaled over $38 billion in commitments, underscoring the importance of System membership to our mission and our business model.

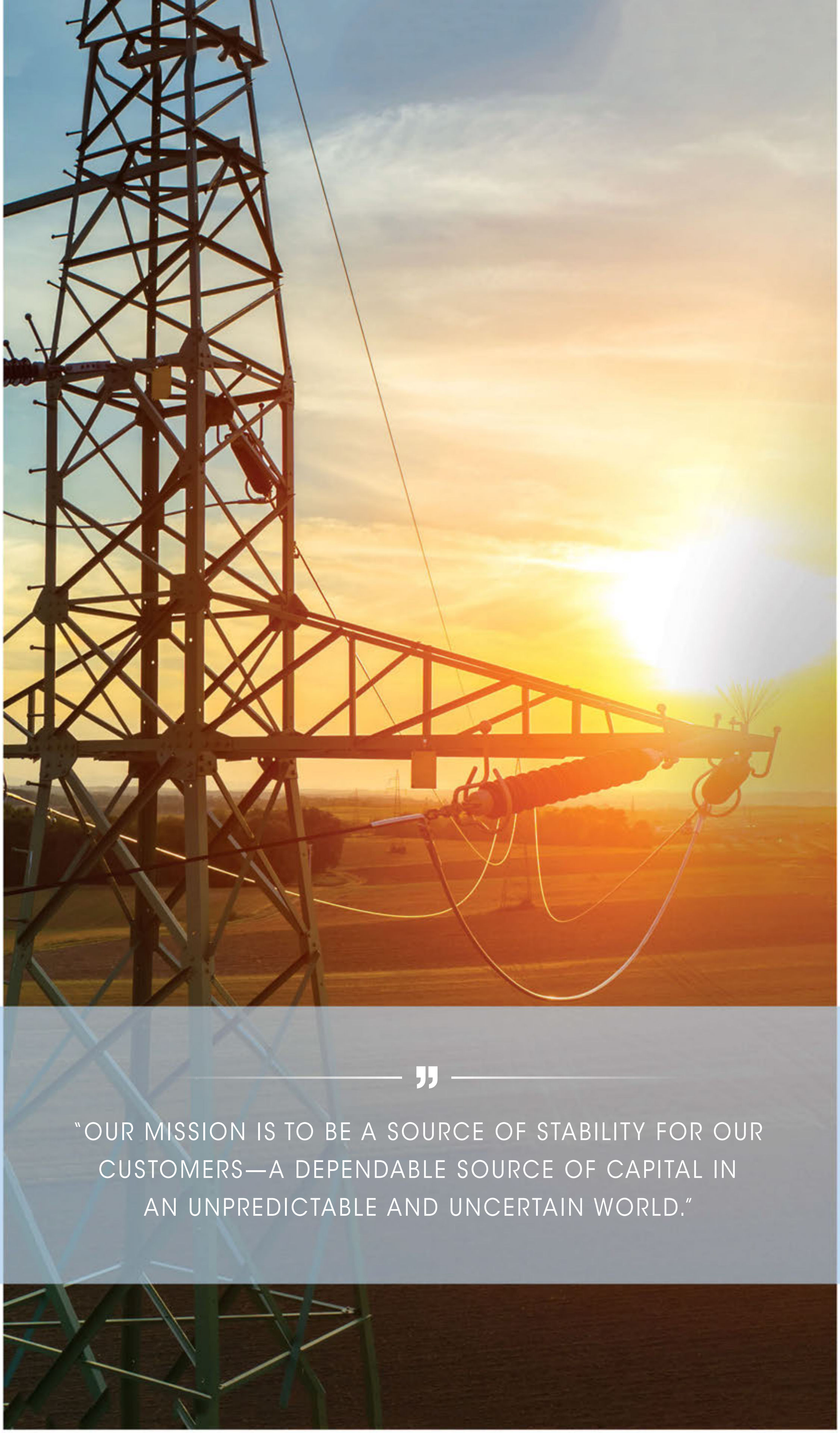
In 2016, the Farm Credit System marked its 100th anniversary with a special celebration in Washington, D.C., that included congratulatory proclamations from the U.S. Congress and President Barack Obama. We're deeply proud to be part of such an important and long-lived institution, and we look forward to Farm Credit's next century of success and service to rural America.

GOVERNANCE AND BOARD RESTRUCTURING

In 2016, CoBank began implementing a shareholder-approved board restructuring process that will take a total of four years to complete. The size of our board increased dramatically following CoBank's merger with U.S. AgBank in 2012, and we are now downsizing the board to return it closer to historical norms.

"THE INTRINSIC STRENGTH OF THE COBANK BUSINESS MODEL IS HIGHLIGHTED IN OUR FINANCIAL RESULTS FOR 2016."





"OUR MISSION IS TO BE A SOURCE OF STABILITY FOR OUR CUSTOMERS—A DEPENDABLE SOURCE OF CAPITAL IN AN UNPREDICTABLE AND UNCERTAIN WORLD."

CoBank currently has 22 elected directors, along with four outside and appointed directors, as well as one vacant seat. By 2020, the number of elected board seats will be reduced to 14, making the size of the board more manageable while still allowing for appropriate geographic and industry representation.

Other aspects of our governance remain the same as in recent years. Customers continue to elect directors from six voting regions around the country. We are also maintaining the even balance between board seats elected on a one-member-one-vote basis and those elected on a modified equity basis, which we believe provides a fair and equitable system of representation for all of our customer-owners. Most importantly, our board members continue to be drawn from the rural industries we serve, and reflect our enduring commitment to CoBank's mission and the needs of rural America.

CORPORATE SOCIAL RESPONSIBILITY

Our board has made it clear it expects CoBank to embrace the cooperative principle of "Concern for Community" and that fulfilling our mission requires more than simply providing dependable credit to rural industries. To that end, the bank contributed over $8 million to nonprofit organizations around the country in 2016, including hundreds of charities in rural areas supported by our customers, as well as in locations where we have business operations. In addition, the bank invested $3 million in commercial sponsorships with trade associations and other groups that support our customers and advocate the policy interests of the industries we serve.

Beyond our charitable donations and sponsorships, we have formal programs in place designed to ensure we serve the full continuum of borrowers in each of our industry segments, from large, established enterprises with substantial capital needs to smaller cooperatives and other businesses that are just starting out. We have also invested tens of millions of dollars in equity funds and public-private partnerships designed to promote economic development and job creation in rural communities.

More information about all of these programs is available in our 2016 corporate social responsibility report, which is being published and distributed to customers as a companion to our annual report. That document, entitled "Growing Rural America," is one we hope you will take time to review in detail. As you'll see, the investments that CoBank is making are having a significant positive impact on the ground and helping to promote the continued strength and development of rural areas.

BUSINESS OUTLOOK

As we begin 2017, the word that seems to best describe the outlook for the U.S. rural economy is "uncertain." Generally lower commodity prices persist, impacting every layer of the agricultural value chain as well as the energy sector, which has been such an important driver of jobs and business investment in rural areas in recent years. The strength of the dollar relative to other currencies continues to weigh on agriculture and other industries that depend on exports, as does slowing demand growth in China and other vital international markets. Government policy is yet another question mark, as the new administration and Congress consider trade agreements, business taxes, regulation, immigration law and other areas of policy that impact rural America.

It is in this kind of operating environment that CoBank can deliver the most value. At the end of the day, our mission is to be a source of stability for our customers—a dependable source of capital in an unpredictable and uncertain world. It is a role we embrace wholeheartedly.

As always, we remain grateful for the enormous trust our customers place in CoBank as their financial partner. We thank you for your ongoing support and look forward to reporting back to you on our future progress.

EVERETT DOBRINSKI
Chairman

TOM HALVERSON
Chief Executive Officer

A LEGACY OF SUCCESS AND SIGNIFICANCE

At the end of 2016, Bob Engel stepped down as CoBank's chief executive officer and will retire on June 30, 2017, after more than 17 years with the organization. Throughout his tenure, including the last decade as CEO, Engel exhorted CoBank employees to "know more and care more" about the bank's customers than any other financial institution, and to always be mindful of its broad mission of service to rural America.

Engel's legacy of success is told in part by the numbers, including 17 consecutive years of earnings growth and a fourfold increase in assets, with $4.1 billion in patronage paid to stockholders during his CEO tenure. But Engel insists that CoBank's competitive advantage stemmed not from its growing financial strength, but from its people—knowledgeable, committed professionals delivering an outstanding customer experience, day in and day out.

"I'd love to tell you there is a secret sauce that I brought to the table," Engel recalled shortly before stepping down. "But we have achieved success simply by focusing on having people who believe deeply in our mission, and on delivering exceptional value to our customer-owners—as both customers and stockholders. By and large we've been able to do that consistently, and the financial performance of the bank has pretty much taken care of itself."

A native of Buffalo, New York, Engel spent his early career in public accounting and commercial banking, including a stint as chief banking officer at HSBC USA, one of the largest financial institutions in the world. He was drawn to CoBank in part due to its cooperative structure, and the ability to manage the bank for long-term success rather than short-term earnings and returns for investors.

"Our customers operate in capital-intensive industries," Engel said. "They want a lender who not only has the capacity to meet their borrowing needs but who will be with them for the long term. Many commercial banks have a tendency to be fair-weather friends; they will pull out of an industry at the drop of a hat if conditions get tough. Our board would never let us do that; just look at the confidence they put in us to fund our customers when commodity prices soared as the financial crisis approached. CoBank is specifically chartered to serve rural America, in the best of times and, more importantly, in the worst of times."

Engel took genuine pride in CoBank's membership in the Farm Credit System, which celebrated its centennial in 2016. As a government sponsored enterprise, Farm Credit was established in 1916 in order to ensure that farmers and other rural borrowers had dependable access to credit and financial services. The System has since grown to over $300 billion in assets and accounts for approximately 40 percent of all farm lending.

"Very few business enterprises have the staying power to last for a century," Engel said. "They get acquired, go out of business or become obsolete because of technological or market changes. But Farm Credit has survived and thrived by remaining true to its essential characteristics and principles, including cooperative ownership and an exclusive focus on rural America."

At CoBank, one major endeavor for Engel in recent years was building a vibrant corporate social responsibility program, particularly the bank's Sharing Success program, which created powerful partnerships with its customers to address important unmet needs in rural communities. He saw these initiatives as a necessary extension of the bank's broader mission of service to rural America. With the support of the board of directors, CoBank now targets 1 percent of the bank's budgeted net income annually for contributions to charitable organizations.

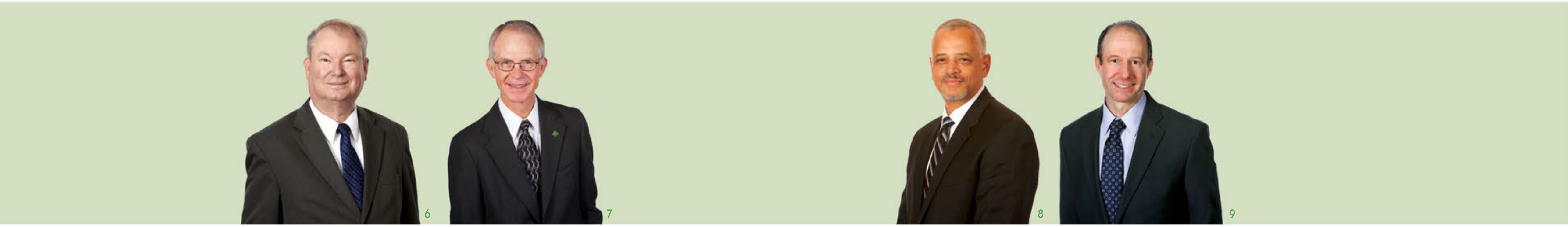
"One of the great things about the financial success we have had is that it enables us to be a good corporate citizen," Engel said. "Our margins have allowed us to further support our mission in meaningful ways. And we have been able to give back to the community in a significant way, including in rural communities all over the country."

Engel said his time at CoBank, both in terms of supporting the vital industries of rural America and in giving back to the community, "has been rewarding because it is a clear demonstration of turning success into significance."

"I am extremely proud of and grateful for what we have accomplished together," he said. "I believe the work we've done and the investments we've made will bear fruit for generations to come."

BOB ENGEL, COBANK CEO, 2006–2016

2017 BOARD OF DIRECTORS


1 EVERETT M. DOBRINSKI CHAIRMAN
Occupation: Farming
Hometown: Makoti, ND

2 KEVIN G. RIEL 1ST VICE CHAIR
Occupation: Farming
Hometown: Yakima, WA

3 JON E. MARTHEDAL 2ND VICE CHAIR
Occupation: Farming
Hometown: Fresno, CA

4 ROBERT M. BEHR
Occupation: Agribusiness cooperative management
Hometown: Lakeland, FL

5 MICHAEL S. BROWN
Occupation: Retired, commercial banking
Hometown: San Diego, CA

6 RUSSELL G. BROWN
Occupation: Banking, electric cooperative director
Hometown: Warsaw, VA

7 M. DAN CHILDS
Occupation: Farming and livestock
Hometown: Mannsville, OK

8 WILLIAM M. FARROW, III
Occupation: Banking
Hometown: Chicago, IL

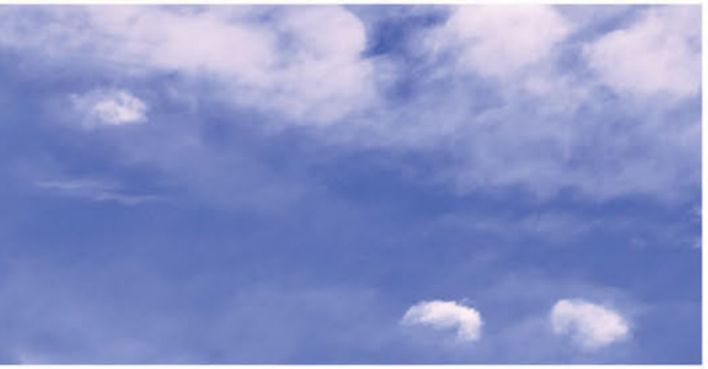
9 BENJAMIN J. FREUND
Occupation: Farming
Hometown: East Canaan, CT

10 ANDREW J. GILBERT
Occupation: Farming
Hometown: Potsdam, NY

11 DANIEL T. KELLEY
Occupation: Farming
Hometown: Normal, IL

12 DAVID J. KRAGNES
Occupation: Farming
Hometown: Felton, MN

13 JAMES R. MAGNUSON
Occupation: Agribusiness cooperative management
Hometown: Sully, IA



14 GARY A. MILLER

Occupation: Electric cooperative management

Hometown: Douglasville, GA

15 CATHERINE MOYER

Occupation: Rural communications management

Hometown: Ulysses, KS

16 ALARIK MYRIN

Occupation: Farming and ranching

Hometown: Altamont, UT

17 RONALD J. RAHJES

Occupation: Farming

Hometown: Kensington, KS

18 DAVID L. REINDERS

Occupation: Agribusiness cooperative management

Hometown: Sunray, TX

19 CLINT E. ROUSH

Occupation: Farming and livestock

Hometown: Arapaho, OK

20 STEPHANIE HERSETH SANDLIN

Occupation: General counsel

Hometown: Sioux Falls, SD

21 KAREN L. SCHOTT

Occupation: Farming

Hometown: Broadview, MT

22 KENNETH W. SHAW

Occupation: Livestock

Hometown: Mountainair, NM

23 RICHARD W. SITMAN

Occupation: Electric cooperative director

Hometown: Kentwood, LA

24 KEVIN A. STILL

Occupation: Agribusiness cooperative management

Hometown: Danville, IN

25 EDGAR A. TERRY

Occupation: Farming

Hometown: Ventura, CA

26 SCOTT H. WHITTINGTON

Occupation: Electric cooperative management

Hometown: Burlington, KS

REMEMBERING

BILL SQUIRES

Bill Squires, a member of CoBank's board of directors since 2015, passed away on November 18, 2016, at the age of 54. A leader in the communications industry and a highly respected community figure, Squires served as the chief executive officer of Blackfoot Telecommunications Group in Missoula, Montana.

Squires joined Blackfoot in 2001, serving as its senior vice president and general counsel prior to being named CEO in January 2012. As CEO, he oversaw the acquisitions of three other communications companies, transforming Blackfoot into a regional provider serving more than 20,000 customers in Montana and Idaho. He also served for years as president of the Montana Telecommunications Association, the U.S. Telecom Association's Leadership Committee, and the Industry & Policy Committee of NTCA—The Rural Broadband Association.

"Bill was an extremely effective and persuasive advocate in Washington for Montana and for the rural economy," recalled Catherine Moyer, a telecommunications executive from Ulysses, Kansas, and a fellow CoBank director. "He was always able to take a difficult subject and bring it down to a level that everyone could understand. When he spoke, people paid attention. That brought a lot of respect to him from his peers in the telecom industry."

Squires served on the boards of the Missoula Economic Partnership, Alaska Power and Telephone, Vision Net and Syringa Networks, as well as on CoBank's board. Moyer said that when Squires had the opportunity to join the CoBank board, the bank's mission was very important to him. "He said, 'If I'm going to commit my time to an organization, I want to know that it's doing the things I think we need to be doing in our rural communities,'" she said.

His devotion to Missoula and its economic development was strong and deep; under his leadership, Blackfoot became the lead private financial contributor to the new campus of Missoula College. In 2014, Squires won the Missoula Area Chamber of Commerce's Circle of Excellence Award in recognition of his business leadership and commitment to the community.

WILIAM A. SQUIRES
1962–2016

"He really believed that people in rural areas and small towns deserve service equal to or better than what urban audiences were receiving," said Moyer. "He was deeply committed to rural America."

Colleagues remember Squires as a gregarious, larger-than-life personality who had the ability to make everyone he dealt with feel like the most important person in his life at that moment. CoBank director Karen Schott, a native of Broadview, Montana, said that their home state was a huge influence on Squires, who had grown up in Butte. "Butte was a mining town, very blue collar, and that showed through in Bill's personality—how he treated people and what he treasured in life," Schott said. "This was a person you wanted to be around. Bill loved to enjoy life, but most importantly to share it with the people he enjoyed."

INDUSTRY PORTFOLIOS

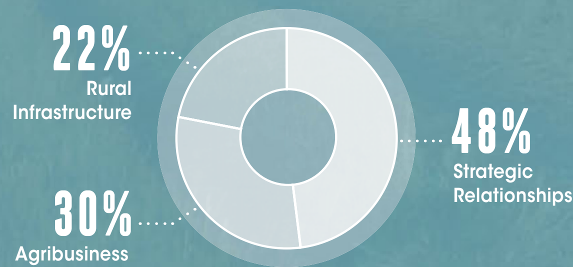
COBANK CONDUCTS LENDING OPERATIONS THROUGH THREE OPERATING SEGMENTS:

- **AGRIBUSINESS**
- **RURAL INFRASTRUCTURE**
- **STRATEGIC RELATIONSHIPS**

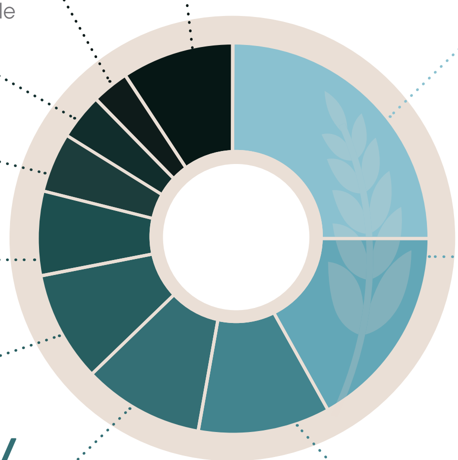
THESE OPERATING SEGMENTS CHARACTERIZE THE DIVERSE SCOPE OF COBANK'S CUSTOMER BASE, AND THE CUSTOMERS THAT MAKE UP EACH OPERATING SEGMENT PROVIDE VITAL SERVICES AND PRODUCTS TO RURAL COMMUNITIES ACROSS THE COUNTRY.

Total Loans

$95.3
BILLION
at 12/31/16



AGRIBUSINESS
PORTFOLIO



Average Loan Volume

$27.6 BILLION in 2016

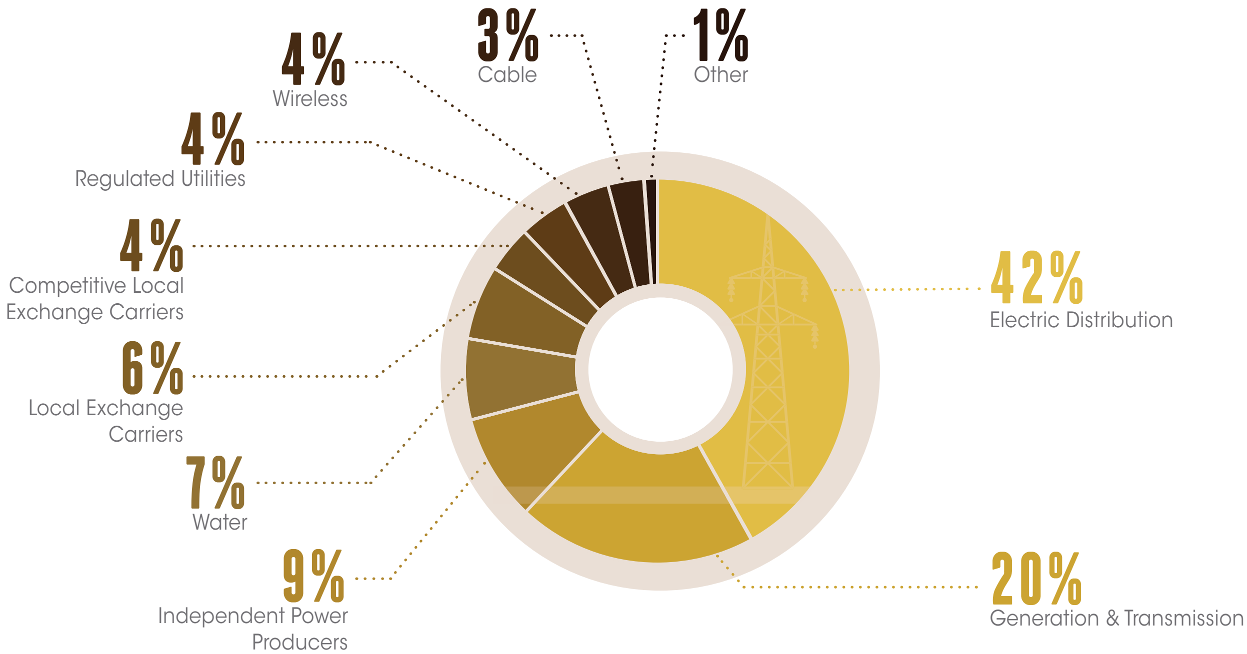
30% OF PORTFOLIO

FOR THE YEAR *($ in millions)*	2016	2015	2014
Period-end Loans	$ 28,660	$ 26,131	$ 24,359
Average Loans	27,563	24,872	23,598
Net Income	403	449	386

CoBank's Agribusiness operating segment includes the Regional Agribusiness Banking Group, Corporate Agribusiness Banking Group, Agricultural Export Finance Division and the Banking Services Group, which includes Farm Credit Leasing. It serves cooperatives and other customers involved in a wide variety of industries, including grain handling and marketing, farm supply, food processing, dairy, livestock, fruits, nuts, vegetables, cotton, biofuels and forest products.

RURAL INFRASTRUCTURE

PORTFOLIO



Average Loan Volume

$20.1 BILLION in 2016

22% OF PORTFOLIO

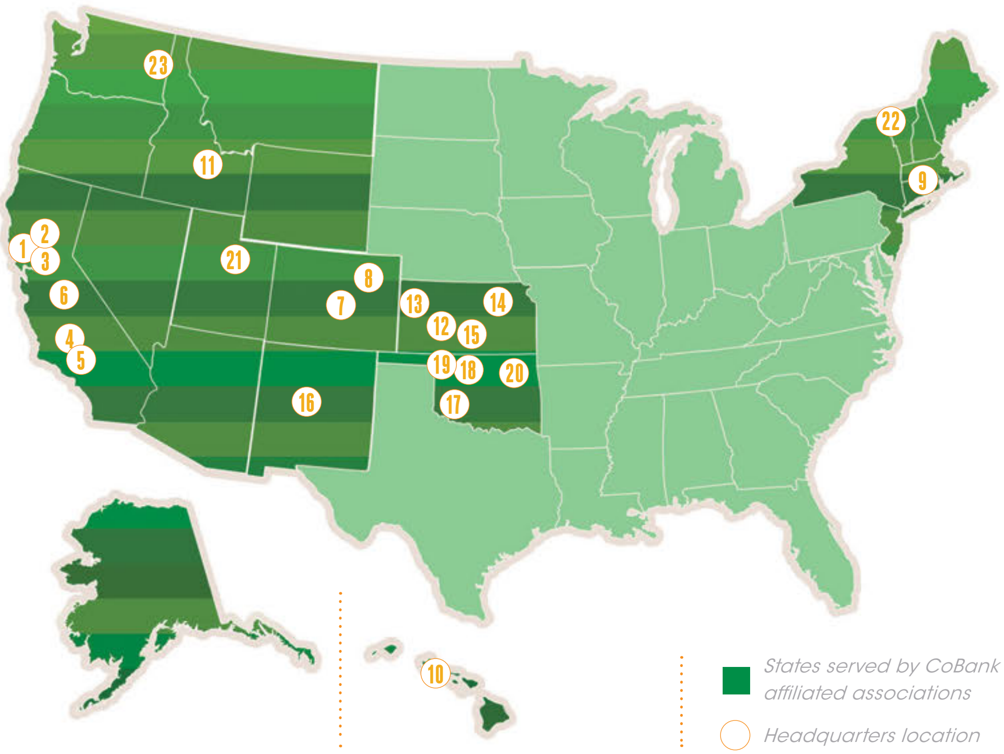
FOR THE YEAR *($ in millions)*	2016	2015	2014
Period-end Loans	$ 20,604	$ 19,552	$ 16,104
Average Loans	20,092	17,770	15,192
Net Income	308	255	280

CoBank's Rural Infrastructure operating segment includes the following banking divisions: Electric Distribution, Water & Community Facilities; Power, Energy & Utilities; Project Finance; and Communications. It serves rural utilities and other customers across a wide variety of industries, including electric generation, transmission and distribution cooperatives; water and wastewater companies; broadband, wireline, cable and wireless communications service providers; and rural health care and other community facilities.

STRATEGIC RELATIONSHIPS

AFFILIATED FARM CREDIT ASSOCIATIONS

(as of 1/1/17)



CALIFORNIA

1 .... American AgCredit
Santa Rosa

2 .... FCS of Colusa-Glenn
Colusa

3 .... Farm Credit West
Rocklin

4 .... Fresno-Madera Farm Credit
Fresno

5 .... Golden State Farm Credit
Kingsburg

6 .... Yosemite Farm Credit
Turlock

COLORADO

7 .... FC of Southern Colorado
Colorado Springs

8 .... Premier Farm Credit
Sterling

CONNECTICUT

9 .... Farm Credit East
Enfield

HAWAII

10 .... FCS of Hawaii
Aiea

IDAHO

11 .... Idaho AgCredit
Blackfoot

KANSAS

12 .... FC of Ness City
Ness City

13 .... FC of Western Kansas
Colby

14 .... Frontier Farm Credit
Manhattan

15 .... High Plains Farm Credit
Larned

NEW MEXICO

16 .... FC of New Mexico
Albuquerque

OKLAHOMA

17 .... AgPreference
Altus

18 .... Farm Credit of Enid
Enid

19 .... FC of Western Oklahoma
Woodward

20 .... Oklahoma AgCredit
Broken Arrow

UTAH

21 .... Western AgCredit
South Jordan

VERMONT

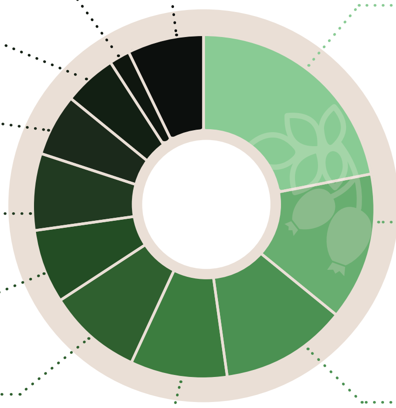
22 .... Yankee Farm Credit
Williston

WASHINGTON

23 .... Northwest FCS
Spokane

STRATEGIC RELATIONSHIPS

PORTFOLIO



Average Loan Volume

$43.9 BILLION
in 2016

48% OF PORTFOLIO

FOR THE YEAR *($ in millions)*	2016	2015	2014
Period-end Loans	$ 45,994	$ 43,358	$ 39,919
Average Loans	43,924	40,414	37,804
Net Income	245	242	244

In addition to providing loans to cooperatives and other customers in all 50 states, CoBank serves as a funding bank for 23 affiliated Farm Credit associations across the country. Those associations provide loans and financial services to more than 70,000 farmers, ranchers and other rural borrowers in 23 states.

They serve a diverse array of industries, from fruits, nuts and vegetables to grains and other row crops to dairy, beef, poultry and forest products.

CoBank provides these association customers with wholesale financing as well as other value-added products and services. In turn, the associations provide the bank with added lending capacity by serving as participation partners on large credit transactions. At the same time, CoBank derives additional value from our association partners by being able to purchase participations in their loans.

CoBank also serves as a partner of choice for a number of nonaffiliated Farm Credit System associations throughout the country for leasing, cash management and other non-credit services.

REGIONAL AGRIBUSINESS
BANKING GROUP

HERITAGE COOPERATIVE

WEST MANSFIELD, OHIO

From the top of the tallest silo on Heritage Cooperative's new grain-processing facility in Marysville, Ohio, you can see all the way to downtown Columbus, 35 miles away. The automated, state-of-the-art facility sits on 277 acres and can hold more than 3 million bushels of grain on behalf of the co-op's 3,500 farmer-members.

But what Heritage CEO Eric Parthemore may be most proud of is how environmentally sensitive the new facility is. Opened in late 2015, the Marysville campus is built around a sensitive wetlands area and won a prestigious industry award for sustainable design.

"This is one of the most socially responsible facilities in our entire industry," says Parthemore. "But it's also hugely practical for our customer-owners. They can deliver a truckload of grain in about five minutes."

To fund this and other infrastructure projects, Heritage relies on CoBank and the Farm Credit System for its financing needs. The relationship extends back more than 25 years to Heritage's predecessor co-ops: Champaign Landmark and Farmers Commission Company were both CoBank customers when they merged to form Heritage in 2009.

Parthemore gives credit to CoBank's experience with agricultural lending, resulting in a willingness to stick with borrowers through seasons that are both up and down. "Like a lot of co-ops, we've gone through our share of tough times, but CoBank has always stood by us," he says. "It's great to work with a lender that understands that agriculture is a cyclical business, one that won't turn its back on you in a down cycle."

Parthemore is excited about the future at Heritage, especially with the productivity and efficiency provided by the new $40 million Marysville facility, which was financed 50 percent by CoBank, with the remainder funded internally. "Our growth has been tremendous because of the way we serve our members," says Parthemore. "The new campus is only going to further that growth."

"We're thrilled that the bank has been able to grow alongside a co-op as progressive as Heritage," says Amy Gales, executive vice president of agribusiness banking at CoBank. "As they move into an even brighter future, we plan to be right beside them."

1 **CRAIG LONG**
Relationship Manager
CoBank Farm Credit Leasing

2 **GARY WEIDENBORNER**
Senior Relationship Manager
CoBank

3 **ERIC PARTHEMORE**
President & CEO
Heritage Cooperative

4 **LYLE GOTTFRIED**
CFO
Heritage Cooperative

5 **DAVE McINTOSH**
Manager of Marysville Ag Campus & Research Farm
Heritage Cooperative

POET

SIOUX FALLS, SOUTH DAKOTA

Back in 1987, Jeff Broin and his family took a big gamble, buying a foreclosed ethanol plant in a remote corner of South Dakota with a plan to turn it into a profitable enterprise. Broin, then just 22 years old and fresh out of college, assumed the role of general manager, living in the plant's office to cut costs while he and his brothers overhauled equipment using parts salvaged from other bankrupt ethanol facilities.

Thirty years later, Broin's vision and entrepreneurial spirit have paid off in a big way. His company, POET, LLC, is now one of the largest ethanol operations in the United States. The company manages a network of 28 plants throughout the Midwest, maintaining at least a partial ownership stake in all of them. Combined, the facilities produce over 1.75 billion gallons of ethanol a year and employ over 1,900 engineers, technicians and other workers.

"We believed in our model, and more importantly we believed in ourselves," Broin says proudly. "We believe that ethanol is a vital part of the agricultural economy. As corn yields increase, we are positioned to convert that corn to energy and keep the demand for corn strong."

POET has been a CoBank customer since 1992, when it built a plant in Aberdeen, South Dakota, on behalf of a farmer-owned co-op that received its financing through CoBank. Since then, CoBank and its partners in the Farm Credit System—including AgCountry and Farm Credit Services of America, both of which serve as lead arrangers—have become POET's primary source of financing.

"It has been a great partnership," Broin says. "And the fact that CoBank and Farm Credit have been so heavily involved in renewable energy has been a strategic advantage to us."

Amy Gales, executive vice president for agribusiness banking at CoBank, notes that CoBank's $713 million ethanol portfolio makes it one of the largest providers of credit to the ethanol industry in the United States. "Ethanol is a critical source of demand for U.S. grain farmers, and an important form of renewable energy," Gales says. "It gives us great pride to work with customers like POET who are leaders in their field and helping to drive their industry forward."

1 **RANDY ABERLE**
Senior VP Agribusiness & Capital Markets
AgCountry Farm Credit Services

2 **JEFF BROIN**
Chairman & CEO
POET

3 **TROY COLLINS**
Senior Relationship Manager
CoBank

4 **KATHY FRAHM**
Vice President-Commercial Lender
Farm Credit Services of America

5 **JEFF LAUTT**
President & Chief Operating Officer
POET

6 **BOB CASPER**
President
POET Ethanol Products

7 **JEFF PINKERMAN**
CFO
POET

CORPORATE AGRIBUSINESS
BANKING GROUP

RAYONIER

JACKSONVILLE, FLORIDA

By definition, the timber industry is a long-term business, as it can take 40 years or more before certain stands of forest are ready for harvesting. But timberland companies still have to move quickly when compelling opportunities arise. Such was the case when Rayonier, one of the largest timber companies in the United States, had the chance to buy 61,000 acres of well-stocked, highly productive timberlands in Oregon and Washington in 2016.

"This was an opportunity to meaningfully upgrade our Pacific Northwest portfolio and rebalance our age-class distribution," recalls Mark McHugh, Rayonier's chief financial officer. "But we had to be nimble, as it was a complex transaction and the seller had a short closing window."

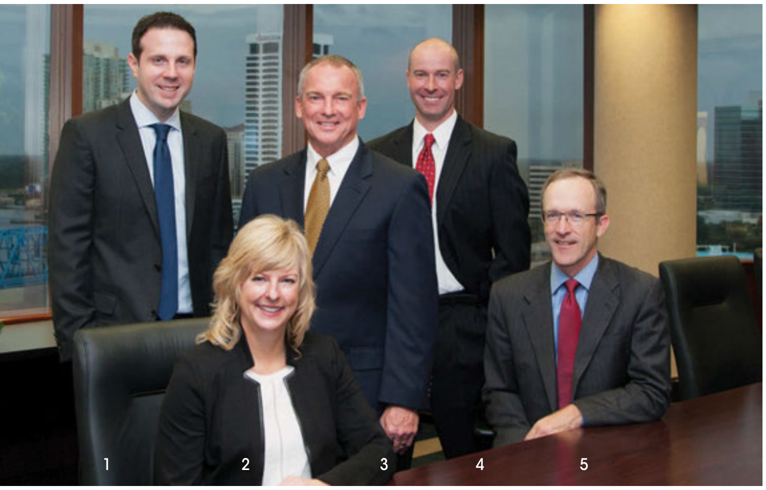
Ultimately, Rayonier was able to complete the $263 million acquisition on an accelerated timetable, using a $300 million term loan from CoBank to finance the deal. The bank then syndicated the loan to Farm Credit Florida and a number of other partners in the Farm Credit System.

"With other lenders, who are less familiar with the asset class, you run some execution risk in getting them up to speed," says McHugh. "In this case, there wasn't a delay to research the seller or understand the value proposition—CoBank knew what we needed to accomplish." McHugh also cited CoBank's approach to evaluating the credit profile of timberland assets, as well as the depth of its experience in the sector relative to other lenders.

With approximately 2.3 million acres of timberland under management in the United States, Rayonier supplies logs to a wide variety of industries and markets, including pulp, paper, lumber, plywood, and renewable energy production. Organized as a real estate investment trust, the 90-year-old company is known for its commitment to sustainable management of its forests, sector-leading transparency with the investment community, and responsible environmental stewardship.

Jonathan Logan, executive vice president of CoBank's Corporate Agribusiness Banking Group, says CoBank's membership in the Farm Credit System is a key advantage for customers like Rayonier.

"Our relationships with Farm Credit partners enhance our already strong balance sheet capacity and enable us to meet the needs of companies with significant borrowing requirements," Logan says. "We always appreciate the chance to partner with an industry leader like Rayonier and to help them achieve their business goals."



1 **MARK McHUGH**
Senior Vice President & CFO
Rayonier

2 **HEIDI CHAFE**
Director, Capital Markets
CoBank

3 **MARCUS BOONE**
Senior Vice President & Chief Lending Officer
Farm Credit Florida

4 **ZACHARY CARPENTER**
Lead Relationship Manager
CoBank

5 **DAVID NUNES**
President & CEO
Rayonier

DAIRY FARMERS OF AMERICA

KANSAS CITY, MISSOURI

It's a challenge the U.S. milk industry faces every day—how to generate growth opportunities in a mature domestic market where new demand growth is slower than supply growth.

Dairy Farmers of America, the largest dairy cooperative in the country, is continually looking for new ways to overcome this problem on behalf of its member producers. One key strategy is to invest in new processing facilities that can turn liquid milk into powder for export to growing international markets.

In 2017, DFA will open a new plant in Garden City, Kansas. The plant, co-owned by DFA and 12 cooperative members that are directly invested in the facility, will be able to process an impressive 4 million pounds of milk a day, producing 180 million pounds of whole, skim and nonfat milk powder a year.

In addition to creating as many as 60 new jobs in southwest Kansas, DFA Garden City will provide local farmers with an opportunity to expand their market. "We are targeting to ship powder from the facility to customers not just in the U.S., but in Latin America, China and southeast Asia as well," says Greg Wickham, DFA's chief financial officer.

To finance the new project, DFA turned to CoBank and the Farm Credit System. CoBank led the $180 million deal, which included participation by 13 Farm Credit associations. The financing includes $70 million in leased plant equipment.

"For an investment of this magnitude, we needed a lender who was familiar with our business and could deliver credit seamlessly," Wickham says. "CoBank is a longtime financial partner for DFA, so they were a natural fit. We're delighted with how the project came together and look forward to the benefits it will deliver to our members."

Jonathan Logan, executive vice president of CoBank's Corporate Agribusiness Banking Group, appreciates DFA's effort to expand markets on behalf of its members. "The co-op has only continued to impress," says Logan. "The innovation shown in the Garden City facility helps demonstrate why DFA is one of the premier milk marketing cooperatives in the nation."

1 **AUSTIN TAYLOR**
Associate Relationship Manager
CoBank

2 **JOHN McGREEVY**
Director of Finance
Dairy Farmers of America

3 **ALAN McENTEE**
Program Manager
Dairy Farmers of America

4 **KEN KANEVERSKY**
Plant Manager
Dairy Farmers of America

5 **JIM MATZAT**
Relationship Manager
CoBank

GROWER DIRECT NUT COMPANY

HUGHSON, CALIFORNIA

Ron Martella spends his workday eating walnuts. All day long, as he makes the rounds of his family's walnut processing plant in Hughson, California, Martella grabs walnuts, cracks them open with his fist and nibbles on the meat inside.

"They're very good for you," Martella observes proudly. "They're six times healthier than other nuts, because of all the oils in them."

Martella's Grower Direct Nut Company processed nearly 100 million pounds of walnuts during the 2016 growing season, many of them in a new storage facility that can hold up to 20 million pounds of walnuts at a time. In Grower Direct's first season, in 2004, the company processed just 4 million pounds of walnuts, with hopes of reaching 10 million. Instead, Grower Direct has exceeded its expectations tenfold, thanks in large part to strong relationships with customers.

The company's walnuts are now shipped to 25 countries around the world, including industrial food processors, retail stores and produce markets. That's a testament to the entire Martella family, which includes Ron's son Aaron, Grower Direct's president; daughter Jennifer, the sales and marketing director; and son-in-law Lucio Salazar, who has optimized the company's facilities as chief operations officer.

Since its founding, Grower Direct has been a customer of Yosemite Farm Credit, one of CoBank's California-based affiliated associations. Today the company is one of Yosemite's largest customers. CoBank has participated in the relationship since 2007, providing balance sheet capacity as well as ancillary financial services like cash management and export financing.

"We have a lot of requests from other bankers, but we tell them we're not inclined to move," says Martella. "No matter who we work with at Farm Credit, we've been impressed with their straightforward approach and enthusiasm for our growing business."

Stan Chance, vice president and senior relationship manager with Yosemite Farm Credit, says the Martella family is a "classic success story in California agriculture."

"They are wonderful people, with an incredible work ethic, integrity and a huge commitment to quality," Chance says. "It's a privilege to serve customers like that and to be able to contribute to their success."

1 **RIDGE EASTON**
Relationship Manager
CoBank

2 **AARON MARTELLA**
President
Grower Direct

3 **RON MARTELLA**
Chairman
Grower Direct

4 **STAN CHANCE**
Senior Relationship Manager
Yosemite Farm Credit

LUND'S
FISHERIES
Wild caught product of USA

LUND'S FISHERIES

CAPE MAY, NEW JERSEY

New Jersey-based Lund's Fisheries has been harvesting fish from the Atlantic Ocean since 1954, but the business has changed a great deal since its early days.

Under the leadership of owner and president Jeff Reichle, Lund's has evolved from a sleepy domestic operation into a world-class fishery that catches, processes and ships mackerel, menhaden, squid and other seafood to markets all over the globe.

"We used to be 100 percent domestic, now we're 50 percent export," says Reichle. "Our business used to be 95 percent fresh product that had to be consumed quickly. Now it's 85 percent frozen product, which means the entire world can be our market."

Fishing is still a critical part of the business; Lund's sources fish from a network of both independently owned and family-owned vessels operating out of its seaside headquarters in Cape May and Oxnard, California. But processing, freezing and packaging are even more critical to the company's bottom line. To that end, Lund's has invested significantly in processing facilities over the years, including a scallop processing operation launched three years ago. The company now produces a million and a half pounds of scallops a year, with its average inventory growing from $8 million to $30 million in market value.

For financing, Lund's relies heavily on Farm Credit East, one of CoBank's affiliated Farm Credit associations. CoBank has partnered with Farm Credit East on a number of transactions for Lund's.

"Farm Credit is the best financing we've ever had," says Reichle. "Farm Credit just understands the business better. They know that sometimes when you have an off year, it's not because you're running a bad business; it's because Mother Nature hasn't provided enough to make available what you need. We really appreciate having a lender that knows us and that will stand by us for the long term."

Bill Lipinski, CEO of Farm Credit East, says the association's relationship with Lund's is a perfect example of the Farm Credit value proposition in action.

"The Farm Credit System exists to support businesses like Lund's Fisheries that supply high-quality food for people all over the world," Lipinski says. "We're proud to have played a role in their incredible growth and look forward to their continued success in the future."

1 **WILL BAILDON**
Regional Vice President
CoBank

2 **SCOTT ANDERSEN**
Branch Manager
Farm Credit East

3 **WAYNE REICHLE**
Vice President
Lund's Fisheries

4 **JEFF REICHLE**
President
Lund's Fisheries

5 **JUSTIN BROWN**
Vice President
Farm Credit East

ELECTRIC DISTRIBUTION, WATER & COMMUNITY FACILITIES
BANKING DIVISION

PEDERNALES ELECTRIC COOPERATIVE

JOHNSON CITY, TEXAS

Texas-based Pedernales Electric Cooperative enjoys the distinction of being the largest electric distribution co-op in the United States. It serves over 275,000 members spread among 24 counties in the Texas hill country west of Austin and is constantly adding to its 21,000 miles of power lines.

Keeping up with ongoing population growth and the associated demand on their electric distribution system is the single biggest challenge faced by Chief Executive Officer John Hewa and his board of directors.

"We need to make sure that we're growing in a wise and economical manner," Hewa says. "It's one thing to take on growth and be able to manage it safely and securely. It's another thing to grow in a way that maximizes economies of scale and benefits the entire cooperative. That is one of our top priorities here at PEC."

Pedernales could need as much as a half billion dollars for its capital investments over the next five years, and Hewa wanted a dependable lender that could provide reliable and efficient financing. The co-op's relationship with CoBank began in March 2016 with the establishment of a $200 million revolving line of credit, which was followed by an additional term loan commitment of $100 million in November.

"We're thrilled about our relationship with CoBank," says Hewa. "We know that today and into the future our capital needs are substantial, and we want to know we have the right partners at the table, to make sure we are as economical as we can be for the membership."

One important initiative for Pedernales is an on-bill financing program for solar energy, allowing members to pay for renewable energy enhancements through a surcharge on their monthly electric bills. "We want to benefit members who want to make that investment," Hewa says. "At the same time, we want to make sure we're not subsidizing those investments with other members' dollars."

Pedernales and CoBank's Knowledge Exchange Division are even collaborating on a research project, a case study on Pedernales members' solar initiative. "We're very proud of the fact that our relationship with Pedernales goes far beyond financing," says Rob West, executive vice president of infrastructure banking at CoBank. "We have established a true partnership with them."

1 **KEN GAJDOS**
Relationship Manager
CoBank

2 **JOHN D. HEWA**
CEO
Pedernales Electric Cooperative

3 **EMILY PATAKI**
Board President
Pedernales Electric Cooperative

EJ WATER COOPERATIVE

DIETERICH, ILLINOIS

The economic downturn of 2008-2009 created problems for many co-ops throughout the country, but it also presented opportunities. When the recession hit, rather than reduce services, EJ Water Cooperative in Dieterich, Illinois, took advantage of historically low interest rates to invest in infrastructure it would need when the economy rebounded.

Fast-forward to 2017, and the co-op is reaping the benefits of two new water treatment plants that have opened in the past six years. Combined, the plants can produce 4.5 million gallons of water a day for area residents and businesses. The extra capacity has allowed EJ to expand its business across downstate Illinois: Today, in addition to providing water for 10,000 member households, it also sells water on a wholesale basis to 12 communities in its service area, which extends over 2,400 square miles.

"Our leadership team is always looking for ways to improve our service to our customers," says Chief Executive Officer Bill Teichmiller. "We knew these upgrades were going to have long-term positive impacts."

EJ's primary source of debt capital for investments is long-term USDA Rural Development loans. Nonetheless, water and wastewater projects usually require interim financing before construction begins. CoBank played that role for both of EJ's new treatment plants, which was critical to getting them completed in a timely fashion.

"We use CoBank's interim financing tool on every project now, because it's so easy," says Teichmiller. "The bank understands Rural Development, and Rural Development understands CoBank."

EJ has been a CoBank borrower since 2006, and has also taken advantage of the bank's bridge financing options. When the federal government temporarily shut down in 2013, EJ thought it would have to suspend several construction projects—but CoBank stepped in to fill the void. "CoBank set up an emergency $1 million bridge line for us within a week," Teichmiller says. "When things aren't going so well, CoBank's always there for us."

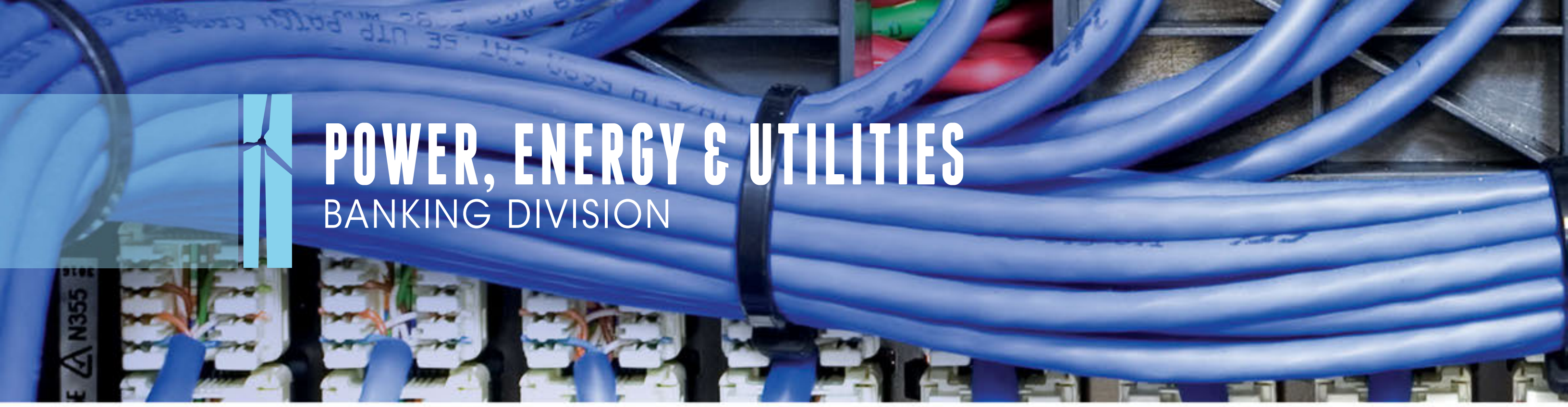
"As one of the fastest-growing water systems in Illinois, EJ's forward-thinking approach has served them and their customers well," says Christopher Shaffner, sector vice president and manager of CoBank's rural water lending business. "It's a privilege to serve as their financial partner as they provide a vital service to rural communities in their service territory."

1 **MIKE HALL**
Board Vice President
EJ Water

2 **DIANE AHERIN**
Board President
EJ Water

3 **BILL TEICHMILLER**
CEO
EJ Water

4 **JULIA McCUSKER**
Senior Relationship Manager
CoBank



POWER, ENERGY & UTILITIES
BANKING DIVISION

SEMINOLE ELECTRIC COOPERATIVE

TAMPA, FLORIDA

Seminole Electric Cooperative, Inc., has a vital mission to fulfill: providing power to 1.6 million members and businesses in 42 of Florida's 67 counties. The generation and transmission cooperative owns and operates two large generating stations fueled by coal and natural gas, and delivers energy through its nine member electric distribution cooperatives.

In recent years, in response to the evolving desires of its members, Seminole has also embarked on an ambitious move into large-scale renewable energy.

"There was grassroots interest on the part of our member co-ops' end-users about solar, and how that might fit in our portfolio," says Seminole CEO Lisa Johnson. "However, it was imperative to our membership that we do this in the most economical way possible."

Thus was born the Cooperative Solar project, a new 2.2-megawatt facility that is scheduled to begin commercial operations in early 2017. Located on a reclaimed phosphate mine in Bowling Green, Florida, the $4.4 million facility consists of more than 8,000 photovoltaic panels mounted on motorized pedestals designed to track solar movements and maximize energy production.

Johnson had been familiar with CoBank from her long career in the G&T industry and appreciated the bank's familiarity with the co-op model. "We were eager to explore a variety of solar power options, but knew we needed a trusted financial partner for the effort—and that was CoBank," notes Johnson. The bank's relationship with Seminole spans more than 25 years.

Seminole relied on CoBank and its leasing subsidiary, Farm Credit Leasing, to finance the project, opting for an innovative net-lease agreement that enabled Seminole to capitalize on federal tax incentives for renewable projects.

"Seminole needed cost-effective, flexible and creative financing solutions for its initial foray into renewable energy," says Todd Telesz, senior vice president of CoBank's Power, Energy and Utilities Banking Division. "We're extremely proud that Seminole entrusted us with the opportunity to help them bring this important project to fruition, while keeping the costs as low as possible to ensure an economical project for Seminole's members."

1 **MIKE REHMER**
Senior Relationship Manager
CoBank

2 **LISA JOHNSON**
CEO & General Manager
Seminole Electric

COMMUNICATIONS
BANKING DIVISION

UNION WIRELESS

MOUNTAIN VIEW, WYOMING

Union Telephone Company got its start in a tiny town in southwestern Wyoming in 1914, when founder John D. Woody built a telephone by hand, fashioning a connector plug out of two slightly different caliber rifle shells.

Since then, the company has come a long way, evolving from a small-town local phone carrier to a regional wireless and broadband services provider. Now known as Union Wireless, the company is still run by the Woody family. John D.'s son Howard, the company's president, still comes into the office every afternoon, at the age of 94.

Serving customers across Wyoming and neighboring states, Union now has 4,000 wireline phone customers—and ten times as many wireless customers, covering more than 120,000 square miles and serviced by over 400 cell towers.

Eric Woody, John D.'s great-grandson and Union's chief technical and operations officer, said the move into wireless and broadband was critical not only for the company's growth but to meet the needs of the communities it serves. "Rural America depends on reliable communications service to keep it connected to the rest of the world, even more than urban communities do," he says.

Woody likens the maintenance of network infrastructure to painting the Golden Gate Bridge: As soon as you get to one end, you have to go back to the beginning to start over again. That kind of work requires a flexible capital structure, and Union has chosen to rely solely on CoBank for its funding needs, the result of a relationship that stretches back 25 years.

In July 2016, CoBank closed on $60.5 million in credit facilities to, among other things, support the company's FCC Mobility Fund network upgrade project. "We have a lot of confidence in CoBank," says John Woody, Union's CEO and John D. Woody's grandson. "They understand our industry and have been there for us for an awfully long time."

"Wireless and broadband services are vital to the quality of life in rural America," says Ted Koerner, senior vice president and manager of CoBank's Communications Banking Division. "Regional service providers like Union are essential to the delivery of these services to rural communities, as well as everything from small local phone companies to large national carriers. CoBank's mission is to serve the full spectrum of companies that support rural America and provide all of them with credit they can rely on."

1 **ERIC WOODY**
Chief Technology & Operations Officer
Union Wireless

2 **STACEY AUGHE**
Chief Administrative & Information Officer
Union Wireless

3 **JOHN WOODY**
Vice President & CEO
Union Wireless

4 **LENNIE BLAKESLEE**
Lead Relationship Manager
CoBank

5 **BRIAN WOODY**
Chief Customer Relations Officer
Union Wireless

PROJECT FINANCE
BANKING DIVISION

INVENERGY

CHICAGO, ILLINOIS

As the country's largest independent, privately held renewable energy firm, Invenergy harvests more wind power than any other company in North America. The Chicago-based company operates 83 clean-power sites across the United States, including 36 wind farms, and continues to grow through investment in new projects.

Invenergy was founded in 2001 by Michael Polsky, who had emigrated to the United States from the Soviet Union at the age of 27, and had already founded two other independent power producers before Invenergy. The new enterprise first looked to invest in power plants before switching its focus to renewables. "When I got into wind in 2002, I thought we were late," Polsky says. "But I look at this country, and I see that we're at the very, very beginning stage of using alternative energies."

Invenergy has found that the financing strategy that works best for renewable plants is so-called "project finance," where loan obligations and payments are tied to the project itself rather than the parent company. Invenergy has relied largely on project finance to build a global portfolio totaling 13.5 gigawatts of electric generation capacity, the majority of which comes from wind and solar assets.

That makes the company a natural partner for CoBank's Project Finance Division, which currently has seven separate financings with Invenergy. "We know how it works in CoBank's shop, CoBank knows how it works in our shop, and when you put it all together, we get a pretty quick response," says Invenergy Chief Financial Officer Jim Murphy.

In 2016, CoBank served as the administrative agent for Invenergy on refinancings of three wind farms located in Idaho, Colorado and Montana. The sites supply power throughout the Mountain West, from Oregon to the eastern foothills of the Rockies.

"We bring an increased appetite for long-term lending, which commercial banks may not be as interested in," says Brian Goldstein, CoBank's vice president for project finance. "And the fact that Invenergy has been such a leader in the field of renewable energy puts their work squarely within our mission."

1 **BRIAN GOLDSTEIN**
Sector Vice President, Project Finance
CoBank

2 **JIM SHIELD**
Executive Vice President
& Chief Development Officer
Invenergy

3 **MICHAEL POLSKY**
President & CEO
Invenergy

4 **JIM MURPHY**
Executive Vice President, CFO
& President–Operating Business Group
Invenergy

5 **BILL GALLAGHER**
Lead Relationship Manager
CoBank

VALUE PROPOSITION

COBANK IS A FINANCIALLY STRONG, **DEPENDABLE** COOPERATIVE BANK THAT PROVIDES CREDIT AND FINANCIAL SOLUTIONS TO RURAL AMERICA.

WE ARE **KNOWLEDGEABLE**, RESPONSIVE AND COMMITTED TO ENHANCING OUR **CAPACITY** TO DELIVER A SUPERIOR CUSTOMER EXPERIENCE AND COMPETITIVELY PRICED PRODUCTS, WHILE MAINTAINING THE SAFETY AND SOUNDNESS OF THE BANK FOR FUTURE GENERATIONS.

WE CONSISTENTLY DEMONSTRATE OUR **FOCUS** ON RURAL AMERICA, REPEATEDLY STRIVE TO BE A TRUSTED ADVISOR FOR OUR CUSTOMERS AND A TRUSTED PARTNER FOR THOSE WITH WHOM WE DO BUSINESS, WHILE PROVIDING A CONSISTENT RETURN ON SHAREHOLDERS' INVESTMENT AND **OWNERSHIP** IN COBANK.

COBANK 2016
FINANCIAL REPORT

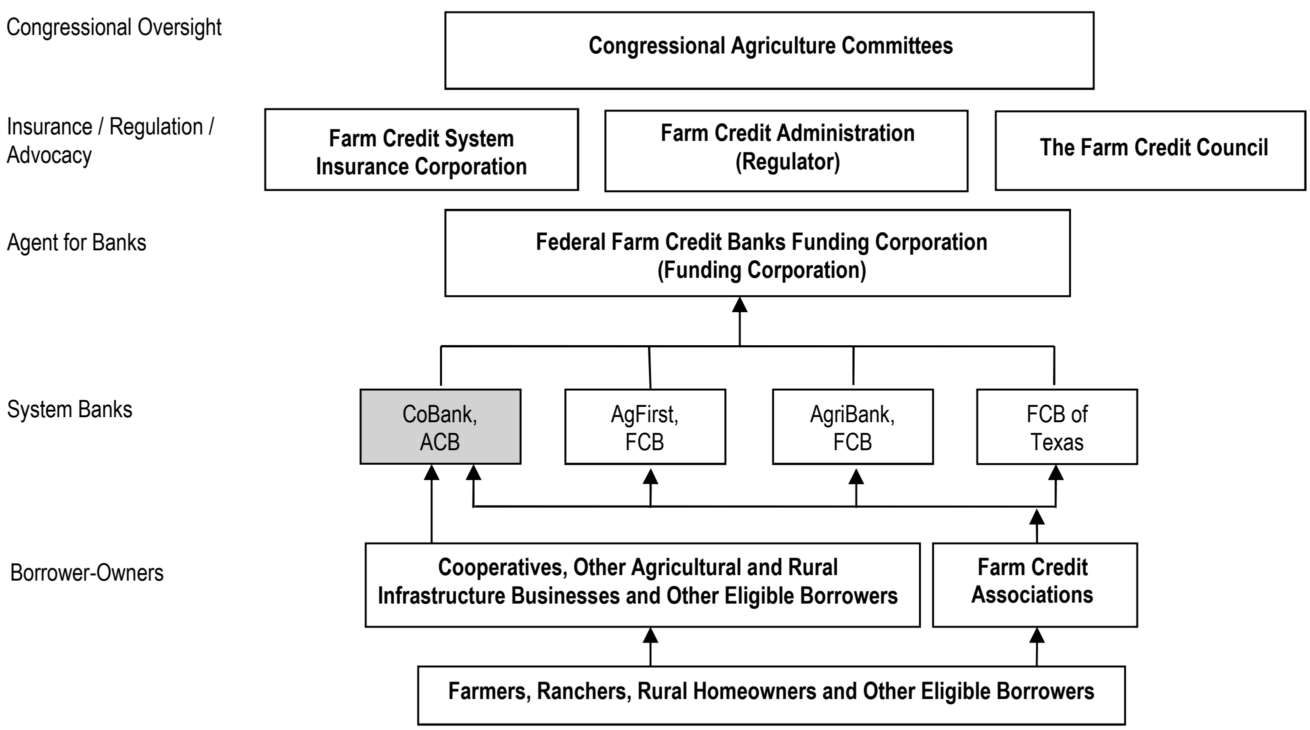
TABLE OF CONTENTS

Company Introduction

CoBank, ACB (CoBank or the Bank) is one of the four banks of the Farm Credit System (System) and provides loans, leases and other financial services to vital industries across the rural communities of America. The System is a federally chartered network of borrower-owned cooperative lending institutions and related service organizations. Cooperatives are organizations that are owned and governed by the members who use the cooperative's products or services.

The System was established in 1916 by the U.S. Congress, and is a Government Sponsored Enterprise (GSE). As a member of a GSE, we have certain attributes that are important to our ability to fulfill our mission to a highly diverse customer base – in good times and bad – irrespective of market conditions. We also fulfill our broader mission as a member of a GSE by supporting rural communities and agriculture in their vital role of providing food security, energy security, economic growth, and a high-quality of life to all Americans.

The following chart depicts the structure and ownership of the System.



CoBank is federally chartered under the Farm Credit Act of 1971, as amended (the Farm Credit Act), and is subject to supervision, examination, and safety and soundness regulation by an independent federal agency, the Farm Credit Administration (FCA). We are a mission-based lender with authority to make loans and provide related financial services to eligible borrowers in the agribusiness and rural infrastructure industries, and to certain related entities, as defined by the Farm Credit Act. Unlike commercial banks, we are not legally authorized to accept deposits to fund our operations. Instead, we raise funds primarily by issuing debt securities through the System's agent, the Federal Farm Credit Banks Funding Corporation (Funding Corporation). Such securities are the joint and several obligations of the four System banks.

We are cooperatively owned by our U.S. customers. Our customers consist of agricultural cooperatives; other food and agribusiness companies; rural power, communications and water cooperatives and companies; rural community facilities; farmer-owned financial institutions including Agricultural Credit Associations and Federal Land Credit Associations (Associations); and other businesses that serve agriculture and rural communities. We are the primary funding source for certain Associations serving specified geographic regions in the United States (which are also regulated cooperative financial institutions and members of the System). We collectively refer to these entities as our affiliated

Associations. We provide a broad range of loans and other financial services through three operating segments: Agribusiness, Strategic Relationships and Rural Infrastructure.

The accompanying consolidated financial statements exclude financial information of our affiliated Associations. CoBank and our affiliated Associations are collectively referred to as the "District." We separately publish certain unaudited combined financial information of the CoBank District, including a condensed statement of condition and statement of income, which can be found on our website at www.cobank.com. Such information is not incorporated by reference into, and should not be viewed as part of, this Annual Report to Shareholders.

System annual and quarterly information statements and press releases for the current fiscal year and the two preceding fiscal years, as well as offering circulars relating to Federal Farm Credit Banks Consolidated Systemwide bonds, medium term notes and discount notes (collectively referred to as Systemwide Debt Securities), are available for inspection at, or will be furnished without charge upon request to, the Federal Farm Credit Banks Funding Corporation, 101 Hudson Street, 35th Floor, Jersey City, New Jersey 07302; telephone (201) 200-8000. These documents are also available on the Funding Corporation's website at www.farmcreditfunding.com. This website also provides a link to each System bank's website where financial and other information of each bank can be found.

The Federal Agricultural Mortgage Corporation (Farmer Mac) is a federally chartered corporation that was formed to provide a secondary market for a variety of loans made to borrowers in rural America. Although Farmer Mac is examined and regulated by the FCA, it is a separate enterprise, and any reference to "the System" herein does not include Farmer Mac. For more information on Farmer Mac and its relationship with System entities, please see "Relationship with the Federal Agricultural Mortgage Corporation" on page 59.

Financial Condition and Results of Operations

Overview

CoBank's loans outstanding grew to $95.3 billion as of December 31, 2016, compared to $89.0 billion at the end of 2015. Our average loan volume was $91.6 billion during 2016, compared to $83.1 billion in 2015. The increases in both year-end and average loan volume resulted from increased lending across all three of our operating segments.

Our earnings grew to $945.7 million in 2016, a $9.0 million increase compared to 2015 earnings. The increase in earnings primarily resulted from greater net interest income and noninterest income, somewhat offset by an increase in operating expenses, including an increase in Farm Credit Insurance Fund (Insurance Fund) premiums, and a higher provision for loan losses.

Loan quality measures remained strong throughout 2016, although we did experience some deterioration in loan quality due to generally lower agricultural commodity prices and other factors impacting certain of our Agribusiness customers. Adversely classified loans and accrued interest were 0.81 percent of total loans and accrued interest at December 31, 2016 compared to 0.70 percent at December 31, 2015. Nonaccrual loans increased to $207.2 million at December 31, 2016 from $156.8 million at December 31, 2015 primarily resulting from credit quality deterioration impacting customers in our Agribusiness operating segment.

Our financial position remains strong as of December 31, 2016, reflecting solid levels of capital and liquidity. Our shareholders' equity increased to $8.6 billion at year-end 2016, compared to $7.8 billion at year-end 2015. Our permanent capital and core surplus ratios were 15.47 percent and 11.02 percent, respectively, as of December 31, 2016, compared to the regulatory minimum requirements of 7.00 percent and 3.50 percent, respectively. As of year-end 2016, we held a total of $30.2 billion in investments, federal funds sold and other overnight funds and cash, primarily as a liquidity reserve, and our days liquidity was 197 days.

A five-year summary of selected consolidated financial data is shown in the following table.

Five-Year Summary of Selected CoBank Consolidated Financial Data ($ in Thousands)

As of and for the Year Ended December 31,	2016	2015	2014	2013	2012
Consolidated Statement of Income Data					
Net Interest Income	$ 1,361,778	$ 1,273,335	$ 1,231,767	$ 1,163,433	$ 1,238,170
Provision for Loan Losses/(Loan Loss Reversal)	63,000	10,000	(15,000)	-	70,000
Noninterest Income	184,885	169,773	124,171	132,085	113,321
Operating Expenses	379,702	325,315	303,800	280,094	263,883
Provision for Income Taxes	158,285	171,120	162,868	158,969	163,691
Net Income	$ 945,676	$ 936,673	$ 904,270	$ 856,455	$ 853,917
Net Income Distributed					
Patronage Distributions:					
Common Stock	$ 114,258	$ 98,117	$ 88,745	$ 76,527	$ 80,472
Cash	473,853	415,982	378,735	338,001	344,516
Total Patronage Distributions	588,111	514,099	467,480	414,528	424,988
Preferred Stock Dividends	77,232	59,179	53,564	62,980	72,065
Total Net Income Distributed	$ 665,343	$ 573,278	$ 521,044	$ 477,508	$ 497,053
Consolidated Balance Sheet Data					
Total Loans	$ 95,258,281	$ 89,040,580	$ 80,382,497	$ 73,603,375	$ 71,980,458
Less: Allowance for Loan Losses	558,974	486,144	481,156	447,126	437,376
Net Loans	94,699,307	88,554,436	79,901,341	73,156,249	71,543,082
Investment Securities, Federal Funds Sold and Other Overnight Funds	28,515,188	24,504,448	24,319,943	21,688,489	17,999,191
Cash and Cash Equivalents	1,660,517	3,113,101	1,855,634	1,335,024	1,253,509
Other Assets	1,255,614	1,298,581	1,304,171	1,416,695	1,634,742
Total Assets	$ 126,130,626	$ 117,470,566	$ 107,381,089	$ 97,596,457	$ 92,430,524
Debt Obligations with Maturities ≤ 1Year	$ 50,788,645	$ 45,904,672	$ 46,263,479	$ 35,650,715	$ 27,794,604
Debt Obligations with Maturities > 1Year	64,796,055	61,968,079	52,174,200	53,663,787	56,669,966
Reserve for Unfunded Commitments	103,496	115,444	115,680	167,592	157,703
Other Liabilities	1,868,672	1,671,902	1,458,067	1,409,747	1,367,107
Total Liabilities	117,556,868	109,660,097	100,011,426	90,891,841	85,989,380
Preferred Stock	1,500,000	1,125,000	1,125,000	961,750	961,750
Common Stock	3,072,232	2,899,728	2,768,546	2,677,485	2,605,933
Unallocated Retained Earnings	4,121,409	3,845,728	3,482,379	3,103,926	2,729,031
Accumulated Other Comprehensive Income (Loss)	(119,883)	(59,987)	(6,262)	(38,545)	144,430
Total Shareholders' Equity	8,573,758	7,810,469	7,369,663	6,704,616	6,441,144
Total Liabilities and Shareholders' Equity	$ 126,130,626	$ 117,470,566	$ 107,381,089	$ 97,596,457	$ 92,430,524
Key Financial Ratios					
For the Year:					
Return on Average Common Shareholders' Equity	12.40 %	13.57 %	14.27 %	14.40 %	15.16 %
Return on Average Total Shareholders' Equity	11.25	12.34	13.07	13.15	14.03
Return on Average Assets	0.78	0.86	0.89	0.91	0.94
Net Interest Margin	1.14	1.20	1.23	1.26	1.41
Net (Charge-offs) Recoveries / Average Loans	(0.00)	(0.01)	(0.00)	0.03	(0.02)
Patronage Distributions / Total Average Common Stock Owned by Active Borrowers	21.32	19.76	18.59	17.53	18.41
At Year-end:					
Debt / Total Shareholders' Equity (: 1)	13.71	14.04	13.58	13.56	13.36
Total Shareholders' Equity / Total Assets	6.80 %	6.65 %	6.86 %	6.87 %	6.97 %
Allowance for Credit Losses[(1)] / Total Loans	0.70	0.68	0.74	0.84	0.83
Permanent Capital Ratio	15.47	14.95	15.70	16.72	16.14
Total Surplus Ratio	14.52	14.07	14.81	15.74	15.22
Core Surplus Ratio	11.02	10.29	10.47	10.82	10.06
Net Collateral Ratio	106.94	106.82	107.22	107.57	107.08

[(1)] Includes the allowance for loan losses and the reserve for unfunded commitments.

Net Interest Income

Interest income and interest expense for the major categories of interest-earning assets and interest-bearing liabilities are shown in the following table.

Average Balances and Rates

Year Ended December 31,	2016			2015			2014		
($ in Millions)	Average Balance	Average Rate	Interest Income/ Expense	Average Balance	Average Rate	Interest Income/ Expense	Average Balance	Average Rate	Interest Income/ Expense
Interest-earning Assets									
Total Loans	$ 91,579	2.37 %	$ 2,174	$ 83,056	2.23 %	$ 1,850	$ 76,594	2.25 %	$ 1,725
Investment Securities	27,355	1.59	436	23,139	1.56	360	23,286	1.50	350
Total Interest-earning Assets	$ 118,934	2.19	$ 2,610	$ 106,195	2.08	$ 2,210	$ 99,880	2.08	$ 2,075
Interest-bearing Liabilities									
Bonds and Notes	$ 95,264	1.22 %	$ 1,158	$ 85,681	1.01 %	$ 867	$ 76,682	1.03 %	$ 792
Discount Notes	13,019	0.53	69	10,914	0.25	27	13,511	0.13	18
Subordinated Debt	615	2.76	17	902	4.10	37	902	4.10	37
Other Notes Payable	1,521	0.26 [1]	4 [1]	1,914	0.31 [1]	6 [1]	1,931	(0.21) [1]	(4) [1]
Total Interest-bearing Liabilities	$ 110,419	1.13	$ 1,248	$ 99,411	0.94	$ 937	$ 93,026	0.91	$ 843
Interest Rate Spread		1.06			1.14			1.17	
Impact of Equity Financing	$ 8,452	0.08		$ 7,668	0.06		$ 7,011	0.06	
Net Interest Margin and Net Interest Income		1.14 %	$ 1,362		1.20 %	$ 1,273		1.23 %	$ 1,232

[1] Average rate was favorably impacted by derivative-related fair value accretion resulting from merger accounting.

Changes in our interest income, interest expense and net interest income due to volume and rate variances for interest-earning assets and interest-bearing liabilities are summarized in the table below.

Changes in Net Interest Income Due to Changes in Average Volume and Interest Rates[1]

	2016			2015		
($ in Millions)	Increase/(Decrease) From Previous Year Due To			Increase/(Decrease) From Previous Year Due To		
	Volume	Yield/Rate	Total	Volume	Yield/Rate	Total
Total Loans	$ 194	$ 130	$ 324	$ 144	$ (19)	$ 125
Investment Securities	66	10	76	(2)	12	10
Total Interest Income	260	140	400	142	(7)	135
Total Interest Expense	86	226	312	59	35	94
Changes in Net Interest Income	$ 174	$ (86)	$ 88	$ 83	$ (42)	$ 41

[1] The change in interest income or 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 increased $88.4 million, or 7 percent, to $1,362 million in 2016, compared to $1,273 million in 2015. The increase in net interest income was primarily driven by higher average loan volume and increased earnings on balance sheet positioning, somewhat offset by lower spreads in our loan and investment portfolios. Average loan volume increased $8.5 billion, or 10 percent, to $91.6 billion in 2016 primarily as a result of growth in lending to affiliated Associations in our Strategic Relationships operating segment, cooperatives and other food and agribusiness companies in our Agribusiness operating segment, and power and communications customers in our Rural Infrastructure operating segment. Average investment securities increased to $27.4 billion in 2016 from $23.1 billion in 2015.

Our net interest margin declined to 1.14 percent in 2016 from 1.20 percent in 2015, and interest rate spread decreased to 1.06 percent in 2016 from 1.14 percent in 2015. The reduction in our net interest margin included the impact of lower loan spreads in our Agribusiness and Rural Infrastructure operating segments, reflective of continued strong competition for the business of our customers, as well as spread compression in our investment portfolio, a higher cost of System short-term debt and lower fair value accretion income resulting from merger accounting. These items were somewhat offset by increased earnings on balance sheet positioning including, among other things, interest savings from the redemption of a portion of our subordinated debt.

In 2015, our net interest income increased 3 percent to $1,273 million, compared to $1,232 million in 2014. The increase in net interest income was primarily driven by higher average loan volume, partially offset by lower spreads in our lending and investment portfolios. Average loan volume increased $6.5 billion, or 8 percent, to $83.1 billion in 2015 as a result of growth in lending in all three of our operating segments. Average investment securities decreased slightly to $23.1 billion in 2015 from $23.3 billion in 2014. Net interest margin declined in 2015 to 1.20 percent from 1.23 percent in 2014, and interest rate spread decreased to 1.14 percent in 2015 from 1.17 percent in 2014. The reduction in our net interest margin included the impact of a higher level of cash balances held during 2015 as compared to 2014; lower spreads in many sectors of our loan portfolio, reflective of increased competition for the business of our customers; and spread compression in our investment portfolio.

Provision for Loan Losses (Loan Loss Reversal) and Allowance for Credit Losses

The provision for loan losses (loan loss reversal) reflects our estimate of credit losses inherent in our loan and finance lease portfolios, including unfunded commitments. The allowance for loan losses covers the funded portion of our loans outstanding, while the reserve for unfunded commitments covers losses on unfunded lending commitments. The sum of the allowance for loan losses and the reserve for unfunded commitments is referred to as the allowance for credit losses. We base our allowance for probable and estimable losses on the factors discussed in "Critical Accounting Estimates – Allowance for Credit Losses" beginning on page 64. The tables on page 41 summarize the activity in our allowance for credit losses, by operating segment, for the past five years.

We recorded a $63.0 million provision for loan losses in 2016 driven by increased exposure resulting from growth in overall lending activity and deterioration in credit quality in our Agribusiness operating segment. The $63.0 million net provision for loan losses included a $71.0 million provision for loan losses in our Agribusiness operating segment offset by an $8.0 million loan loss reversal in our Rural Infrastructure operating segment.

In 2015, we recorded a $10.0 million provision for loan losses which primarily reflected increased exposure resulting from growth in overall lending activity. The $10.0 million net provision for loan losses included a $40.8 million provision for loan losses in our Rural Infrastructure operating segment offset by a $30.8 million loan loss reversal in our Agribusiness operating segment.

Adversely classified loans and accrued interest were 0.81 percent of total loans and accrued interest at December 31, 2016, compared to 0.70 percent at December 31, 2015 and 1.84 percent at December 31, 2014. The increase in adversely classified loans and accrued interest in 2016 was driven by deterioration in credit quality in our Agribusiness operating segment.

Adversely classified loans and accrued interest at December 31, 2014 included a wholesale loan to one of our affiliated Associations, which merged with another of our affiliated Associations during 2015, as discussed further on page 127. Excluding the impact of this Association loan, adversely classified loans and accrued interest represented 0.73 percent of total loans and accrued interest at December 31, 2014. The adverse classification of this wholesale loan did not impact our provision for loan losses or allowance for credit losses. We did not experience any losses related to this Association loan and the wholesale loan of the merged entity is rated in the Acceptable credit quality classification.

Total nonaccrual loans increased $50.4 million to $207.2 million (0.22 percent of total loans) at December 31, 2016 from $156.8 million (0.18 percent of total loans) at December 31, 2015 resulting from credit quality deterioration impacting customers in our Agribusiness operating segment, somewhat offset by activity related to three communications loans, of which one was returned to accruing status and the others were paid off. During 2015, total nonaccrual loans increased by $26.5 million due to credit quality deterioration impacting a small number of agricultural customers and a communications customer, somewhat offset by the sale of a power loan that had been in nonaccrual status. We recorded loan charge-offs, net of recoveries, of $2.1 million in 2016 compared to $5.2 million and $2.9 million in 2015 and 2014, respectively.

Our allowance for credit losses was $662.5 million at December 31, 2016, compared to $601.6 million and $596.8 million as of December 31, 2015 and 2014, respectively. The allowance for credit losses represented 0.70 percent of total loans as of the end of 2016, compared to 0.68 percent and 0.74 percent of total loans at December 31, 2015 and 2014, respectively. At December 31, 2016, our allowance for credit losses represented 1.37 percent of non-guaranteed loans excluding wholesale loans to Associations, compared to 1.36 percent and 1.54 percent at December 31, 2015 and 2014, respectively.

Refer to "Enterprise Risk Profile – Credit Risk Management" beginning on page 45 for further information on nonperforming loans, charge-offs, loan quality trends and the factors considered in determining the levels of our provision for loan losses and allowance for credit losses.

Noninterest Income

The following table details our noninterest income for each of the last three years.

Noninterest Income ($ in Thousands)

Year Ended December 31,	2016	2015	2014
Net Fee Income	**$ 103,365**	$ 104,441	$ 108,584
Prepayment Income	**34,142**	31,946	25,079
Losses on Early Extinguishments of Debt	**(34,197)**	(37,455)	(58,316)
Gain on Sale of Investment Securities	**4,617**	22,603	4,206
Other-Than-Temporary Impairment Losses on Investment Securities	**(750)**	(11,100)	-
Other, Net	**77,708**	59,338	44,618
Total Noninterest Income	**$ 184,885**	$ 169,773	$ 124,171

Noninterest income is primarily composed of fee income, loan prepayment income, patronage income and miscellaneous gains and losses, offset by losses on early extinguishment of debt and impairment losses on investment securities.

Total noninterest income increased in 2016 to $184.9 million, or by 9 percent, from $169.8 million in 2015. The higher level of noninterest income was driven by an increase in other noninterest income of $18.4 million, driven by increased patronage income received from other System institutions on loan participations we sold to them. In addition, only $0.8 million of impairment losses on investment securities were recorded in 2016 while $11.1 million in such losses were recognized in 2015 and losses on early extinguishments of debt, net of prepayment income, declined by $5.5 million. These items were partially offset by a decrease of $18.0 million in gains recognized on sales of investment securities.

Our net fee income, which includes arrangement fees and unused commitment fees, among others, decreased slightly to $103.4 million in 2016 compared to $104.4 million in 2015 primarily due to a lower level of fee income in our Agribusiness operating segment.

Prepayment income increased to $34.1 million in 2016 from $31.9 million in 2015. We extinguish debt to offset the current and prospective impact of prepayments in our loan and investment portfolios and to maintain a desired mix of interest-earning assets and interest-bearing liabilities. During 2016, we extinguished $2.1 billion of Systemwide Debt Securities compared to $5.8 billion in 2015. The 2016 and 2015 debt extinguishments included $1.8 billion and $5.4 billion, respectively, in Systemwide Debt Securities sold at market value to other Farm Credit Banks. Losses on early extinguishment of Systemwide Debt Securities were $34.2 million in 2016 compared to $37.5 million in 2015. Debt extinguishment losses in excess of prepayment income reflect debt extinguishments to better position our balance sheet, which reduces our future interest expense.

During 2016, we sold investment securities with a combined book value of $879.5 million for gains totaling $4.6 million. In 2015 and 2014, sales of investment securities resulted in gains totaling $22.6 million and $4.2 million, respectively. The sale of investment securities is discussed in "Liquidity and Capital Resources" beginning on page 60.

We recorded $0.8 million of other-than-temporary impairment losses related to one investment security during 2016. In 2015, we recorded impairment losses of $11.1 million on two FHA/VA non-wrapped reperformer mortgage-backed securities (MBS) with a total fair value of $54.5 million. The losses in 2015 resulted from lower projected cash flows due to the impact of loan modification activity in the underlying collateral. One of these securities was subsequently sold during 2015 for total proceeds of $21.3 million, which resulted in a gain of $0.8 million. The 2016 and 2015 impairments related to securities originally acquired in connection with our 2012 merger with U.S. AgBank, FCB (AgBank). Such securities were among those identified as credit-impaired investment securities acquired in the merger. The credit quality of our investment portfolio is discussed in "Liquidity and Capital Resources" beginning on page 60.

Other net noninterest income increased to $77.7 million in 2016 from $59.3 million in 2015 primarily due to an increase of $14.5 million in patronage income received from other System institutions on loan participations we sold to them and $6.5 million in proceeds received in 2016 from the disposition of warrants obtained in lending transactions.

In 2015, total noninterest income increased to $169.8 million, or by 37 percent, from $124.2 million in 2014. The increase in noninterest income was driven by a $27.7 million decrease in losses on early extinguishments of debt, net of prepayment income, $18.4 million of higher gains on sales of investment securities and an increase in other noninterest income of $14.7 million due to a higher level of patronage income received from other System institutions. These items were partially offset by impairments recognized on investment securities and a lower level of net fee income.

Operating Expenses

The following table details our operating expenses for each of the last three years.

Analysis of Operating Expenses ($ in Thousands)			
Year Ended December 31,	**2016**	**2015**	**2014**
Employee Compensation	**$ 165,159**	$ 150,585	$ 145,803
General and Administrative	**25,109**	24,167	24,183
Information Technology	**31,696**	28,231	25,558
Insurance Fund Premium	**90,561**	59,919	50,613
Travel and Entertainment	**21,583**	18,425	18,297
Farm Credit System Related	**14,736**	12,215	13,935
Occupancy and Equipment	**16,083**	16,220	8,847
Purchased Services	**14,775**	15,553	16,564
Total Operating Expenses	**$ 379,702**	$ 325,315	$ 303,800
Total Operating Expenses/ (Net Interest Income + Net Fee Income)	**25.9 %**	23.6 %	22.7 %
Operating Expenses, Excluding Insurance Fund Premium/ (Net Interest Income + Net Fee Income)	**19.7**	19.3	18.9

Total operating expenses increased 17 percent in 2016 to $379.7 million, compared to $325.3 million for 2015. Employee compensation expense, which includes salaries, incentive compensation and employee benefits, increased to $165.2 million in 2016 from $150.6 million in 2015 primarily due to an increase in the number of employees, a higher level of accrued incentive compensation reflective of strong business and financial performance as well as accrued separation payments for senior officers who left the Bank in 2016. As of December 31, 2016, we had 953 employees, compared to 883 and 839 at December 31, 2015 and 2014, respectively.

General and administrative expenses were $25.1 million in 2016, compared to $24.2 million in 2015. General and administrative expenses include contributions and other support provided to civic, charitable and other organizations that benefit the residents, communities and industries we serve in rural America, consistent with our overall corporate social responsibility program and the fulfillment of our mission.

Information technology expenses increased to $31.7 million in 2016 from $28.2 million in 2015 due to greater expenditures to enhance our service offerings and technology platforms.

Insurance Fund premium expenses increased to $90.6 million in 2016 from $59.9 million in 2015 due to an increase in premium rates and growth in our average loan volume. Insurance Fund premium rates are set by the Farm Credit System Insurance Corporation (Insurance Corporation) and were 16 basis points of average outstanding adjusted insured debt obligations in the first half of 2016 and 18 basis points for the second half of 2016, compared to 13 basis points for all of 2015. The increases in Insurance Fund premium rates resulted from growth in overall System assets and related debt obligations and the Insurance Corporation's projections for continued growth. The Insurance Corporation announced a premium rate of 15 basis points of average outstanding adjusted insured debt obligations for the first half of 2017.

Our travel and entertainment expenses increased to $21.6 million in 2016 from $18.4 million in 2015 due to a greater level of expenditures for customer-facing activities.

Farm Credit System related expenses increased to $14.7 million in 2016 compared to $12.2 million in 2015 due to changes in the level and timing of certain System initiatives. These expenses primarily represent our share of costs to fund the operations of the FCA and the Farm Credit Council (FCC), a national trade organization that represents System entities. Each System institution is assessed a pro rata share of the FCA's total expenses based primarily on each institution's average risk-adjusted assets. FCC costs are generally allocated based on the number of directors that represent each district (a System bank and its affiliated Associations) and the level of bank assets.

Occupancy and equipment expenses were $16.1 million in 2016, relatively unchanged from 2015. Occupancy and equipment expenses in both years include expenditures associated with our new corporate headquarters in Greenwood Village, Colorado, which was completed in late 2015. Upon completion, the building was sold and CoBank became the lessee. This arrangement is discussed further on page 79.

Purchased services expenses decreased to $14.8 million in 2016 from $15.6 million in 2015 primarily due to a lower level of consulting fees.

Total operating expenses as a percent of net interest income plus net fee income were 25.9 percent in 2016 compared to 23.6 percent in 2015 and 22.7 percent in 2014. Excluding the impact of Insurance Fund premium expense, operating expenses as a percent of net interest income plus net fee income were 19.7 percent in 2016, compared to 19.3 percent in 2015 and 18.9 percent in 2014.

The $21.5 million increase in total operating expenses in 2015 compared to 2014 included a $9.3 million increase in Insurance Fund premium expense driven by an increase in the premium rate, which was 13 basis points of adjusted insured debt obligations in 2015 compared to 12 basis points in 2014. CoBank's loan growth from 2014 to 2015 also contributed to the increase in premium expense. Occupancy and equipment expenses increased by $7.4 million in 2015 due to costs related to our new corporate headquarters. Employee compensation expense increased by $4.8 million in 2015 primarily due to higher benefits expense related to retirement and health plans and an increase in the number of employees, somewhat offset by a lower level of accrued incentive compensation. Information technology expenses increased by $2.7 million in 2015 due to greater expenditures to enhance our service offerings and costs associated with relocating our data center to the new corporate headquarters building. These factors were partially offset by the decreases in Farm Credit System related and purchased services expenses of $1.7 million and $1.0 million, respectively, in 2015.

Provision for Income Taxes

Our provision for income taxes decreased to $158.3 million in 2016 from $171.1 million in 2015. Our effective tax rate was 14.3 percent for 2016 compared to 15.4 percent for 2015. Our effective tax rates are less than the applicable federal and state statutory income tax rates primarily due to tax-deductible patronage distributions. In addition, as more fully discussed in Note 1 to the accompanying consolidated financial statements, a portion of CoBank's activities are statutorily exempt from income taxes. These tax-exempt activities primarily include wholesale lending to Farm Credit Associations. The decreases in tax expense and the effective tax rate were driven by higher levels of accrued patronage, which resulted from growth in average patronage-eligible loan volume, an increase in earnings attributable to non-taxable business activities and an increase in tax credits related to renewable energy transactions.

Our effective tax rate increased to 15.4 percent for 2015 compared to 15.3 percent for 2014. The slight increase in our effective tax rate in 2015 resulted from greater earnings in our taxable business activities in 2015. Our provision for income taxes was $162.9 million in 2014.

Operating Segment Financial Review

We conduct lending operations through three operating segments: Agribusiness, Strategic Relationships and Rural Infrastructure. All customer activity, including loans and leases and related income, is specifically assigned to the business units that make up the operating segments. Investment securities and federal funds sold and other overnight funds, which are primarily held as a liquidity reserve to support our banking operations, are not specifically assigned to operating segments; however, the income from investment securities and federal funds sold and other overnight funds is allocated to the operating segments.

In addition to the operating segments described below, our Banking Services Group (BSG) provides capital markets services, which support our lending divisions. BSG manages syndications and loan sales with approximately 116 financial institutions. In 2016, we syndicated or sold approximately $12.6 billion of loan commitments to System entities and other financial institutions to help meet customers' credit needs and to effectively diversify risk and manage capital. BSG also includes the Knowledge Exchange Division, which provides the Bank and our customers industry specific research and strategic insight to enhance understanding of emerging trends, business opportunities, and risks.

In addition, we offer non-credit products and services including cash management, online banking, mobile banking, commercial credit card and merchant card processing solutions. Revenues generated from non-credit products and services and by BSG, as well as all related operating expenses, are allocated to the operating segments.

Net income by operating segment is summarized in the table below and is more fully disclosed in Note 14 to the accompanying consolidated financial statements. The following tables also provide period-end and average loan amounts.

Net Income by Operating Segment ($ in Thousands)

Year Ended December 31,	2016	2015	2014
Operating Segment:			
Agribusiness	**$ 403,163**	$ 448,931	$ 385,529
Strategic Relationships	**244,786**	241,987	243,532
Rural Infrastructure	**307,980**	255,271	279,966
Total Operating Segments	**955,929**	946,189	909,027
Corporate/Other	**(10,253)**	(9,516)	(4,757)
Total	**$ 945,676**	$ 936,673	$ 904,270

Period-end Loan Portfolio by Operating Segment ($ in Millions)

December 31,	2016	2015	2014	2013	2012
Agribusiness	**$ 28,660**	$ 26,131	$ 24,359	$ 21,182	$ 21,394
Strategic Relationships	**45,994**	43,358	39,919	37,897	36,707
Rural Infrastructure	**20,604**	19,552	16,104	14,524	13,879
Total Loans	**$ 95,258**	$ 89,041	$ 80,382	$ 73,603	$ 71,980

Average Loan Portfolio by Operating Segment ($ in Millions)

Year Ended December 31,	2016	2015	2014	2013	2012
Agribusiness	**$ 27,563**	$ 24,872	$ 23,598	$ 21,077	$ 22,209
Strategic Relationships	**43,924**	40,414	37,804	36,565	34,976
Rural Infrastructure	**20,092**	17,770	15,192	14,215	13,086
Total Average Loans	**$ 91,579**	$ 83,056	$ 76,594	$ 71,857	$ 70,271

The following table presents activity in the allowance for credit losses by operating segment.

Analysis of the Allowance for Credit Losses ($ in Thousands)

	2016	2015	2014	2013	2012
Beginning of Year	**$ 601,588**	$ 596,836	$ 614,718	$ 595,079	$ 541,975
Charge-offs:					
Agribusiness	**(4,276)**	(2,668)	(1,599)	(1,622)	(29,069)
Strategic Relationships	**-**	-	-	-	-
Rural Infrastructure	**(324)**	(5,597)	(4,618)	(26)	(1,556)
Total Charge-offs	**(4,600)**	(8,265)	(6,217)	(1,648)	(30,625)
Recoveries:					
Agribusiness	**747**	1,977	2,040	20,199	11,022
Strategic Relationships	**-**	-	-	-	-
Rural Infrastructure	**1,735**	1,040	1,295	1,088	2,707
Total Recoveries	**2,482**	3,017	3,335	21,287	13,729
Net (Charge-offs) Recoveries	**(2,118)**	(5,248)	(2,882)	19,639	(16,896)
Provision (Reversal) Charged (Credited) to Earnings:					
Agribusiness	**71,000**	(30,800)	37,000	(6,000)	16,550
Strategic Relationships	**-**	-	-	-	-
Rural Infrastructure	**(8,000)**	40,800	(52,000)	6,000	53,450
Total Provision (Reversal) Charged (Credited) to Earnings	**63,000**	10,000	(15,000)	-	70,000
End of Year	**$ 662,470**	$ 601,588	$ 596,836	$ 614,718	$ 595,079
Components:					
Allowance for Loan Losses	**$ 558,974**	$ 486,144	$ 481,156	$ 447,126	$ 437,376
Reserve for Unfunded Commitments	**103,496**	115,444	115,680	167,592	157,703
Total Allowance for Credit Losses (ACL)	**$ 662,470**	$ 601,588	$ 596,836	$ 614,718	$ 595,079
ACL/Total Loans	**0.70 %**	0.68 %	0.74 %	0.84 %	0.83 %
ACL/Non-guaranteed Loans (Excluding Loans to Associations)	**1.37**	1.36	1.54	1.85	1.87
ACL/Impaired Loans	**264**	382	457	413	345
ACL/Nonaccrual Loans	**320**	384	458	416	350
Net (Charge-offs) Recoveries / Average Loans	**(0.00)**	(0.01)	(0.00)	0.03	(0.02)

Allowance for Credit Losses by Operating Segment ($ in Thousands)

December 31,	2016	2015	2014	2013	2012
Agribusiness	**$ 470,285**	$ 402,814	$ 434,305	$ 396,864	$ 384,287
Strategic Relationships	**-**	-	-	-	-
Rural Infrastructure	**192,185**	198,774	162,531	217,854	210,792
Total Allowance for Credit Losses	**$ 662,470**	$ 601,588	$ 596,836	$ 614,718	$ 595,079

Agribusiness

Overview

The Agribusiness operating segment includes loans and other financial services provided to a diverse market of cooperatives and other businesses in various agricultural sectors including grain handling and marketing, farm supply, fruits, nuts, vegetables, forest products, dairy, livestock, biofuels and food processing. Primary products and services include term loans, revolving lines of credit, trade finance, capital markets services, as well as risk management, cash management, and investment products. To enhance portfolio diversification, and to assist System partners in meeting the needs of their increasingly diverse customer base, we purchase participations in agribusiness loans from other System entities and participate in syndicated agribusiness loans with other financial institutions.

A portion of Agribusiness loan volume finances seasonal grain inventories, through the use of lines of credit, for cooperative customers. This seasonal loan volume is affected by a number of factors, including grain volume, commodity prices, producer selling patterns, transportation availability, and the relationship between cash and futures prices in the grain commodities markets. Agribusiness loan volume generally reaches a seasonal low in late summer or early fall. Harvest financing demands result in loan volume increases beginning in the late fall of each year. Peak loan volume typically occurs early in the year when our cooperative customers pay producers' deferred grain payables.

Our Agribusiness customers face challenges including widely fluctuating supplies of commodities in global markets and the attendant price volatility, changing domestic and global market demand, increasing regulation and the impact of currency fluctuations. These trends, along with the need to attract high-quality leadership, manage risk, and remain competitive, continue to lead some of our cooperative customers to consolidate and merge, enter into joint ventures, or form alliances to develop new markets. This consolidation trend has, in some cases, resulted in larger individual and attributed credit commitments, consistent with our mission. We meet our customers' financing needs by maintaining appropriate credit exposure to individual customers and partnering with System entities and commercial banks in loan syndications and participations. We also focus on serving mission-related entities, including small and start-up cooperatives, and supporting our Farm Credit partners in their lending to Young, Beginning and Small (YBS) farmers and ranchers.

The Agribusiness segment includes our Agricultural Export Finance Division (AEFD), which provides trade finance to support U.S. exporters of agricultural products. Obligors consist primarily of financial institutions in foreign countries (primarily emerging markets) who support our exporting customers in selling and shipping agricultural products to international markets. The AEFD utilizes the U.S. government-sponsored export loan guarantee General Sales Manager (GSM) program for a portion of its export financing. As of December 31, 2016, the AEFD had $4.9 billion in loans outstanding, 26 percent of which were guaranteed by the U.S. government under the GSM program, compared to $4.5 billion in loans outstanding as of December 31, 2015, 37 percent of which were guaranteed under the GSM program. The shift in mix toward a higher level of non-guaranteed volume in recent years reflects a decline in the competitiveness of the GSM program coupled with our ability to support an increasing level of non-guaranteed export transactions. Expanding the export of U.S. agricultural products is an important component of supporting the U.S. economy and balance of trade.

The Agribusiness segment also includes Farm Credit Leasing Services Corporation (FCL), a wholly-owned subsidiary which provides leases and lease-related products and financial services to agribusinesses, agricultural producers, Association partners, and rural infrastructure companies. As of December 31, 2016, FCL had $3.2 billion in leases outstanding compared to $3.0 billion in leases outstanding as of December 31, 2015.

2016 Performance

Agribusiness loans outstanding totaled $28.7 billion at December 31, 2016, compared to $26.1 billion at December 31, 2015. Average loan volume increased 11 percent to $27.6 billion in 2016 from $24.9 billion in 2015. The increase in outstanding and average Agribusiness volume resulted from higher levels of seasonal financing at many grain cooperatives, increased lending to food and agribusiness companies, increased participations in agricultural producer and processor loans purchased from other System entities and greater levels of leasing activity.

As previously mentioned, the level of seasonal lending within our Agribusiness operating segment can fluctuate significantly from period to period and is impacted by numerous factors, including commodity prices and inventory levels. The following table shows five-year price trends for certain grain commodities. Prices represent the yearly high and low "nearby" futures price per bushel for corn, soybeans and wheat. Nearby futures contracts represent those contracts with the nearest settlement date.

Year Ended December 31,	2016	2015	2014	2013	2012
Commodity					
Corn:					
High	**$ 4.39**	$ 4.43	$ 5.23	$ 7.41	$ 8.44
Low	**3.01**	3.47	3.18	4.12	5.51
Soybeans:					
High	**12.09**	10.62	15.37	16.13	17.89
Low	**8.52**	8.44	9.04	12.59	11.50
Wheat:					
High	**5.24**	6.15	7.44	7.91	9.47
Low	**3.60**	4.59	4.66	6.00	5.90

Our Agribusiness segment generated $403.2 million in net income for 2016, a 10 percent decrease from the $448.9 million in net income for 2015. The decrease in earnings was driven by the impact of the provision for loan losses and an increase in operating expenses, somewhat offset by increases in net interest income and noninterest income.

Net interest income in our Agribusiness segment increased $51.3 million in 2016 as compared to 2015 due to the impact of higher average loan volume and increased earnings on balance sheet positioning, somewhat offset by spread compression resulting from continued strong competition for the business of our customers, spread compression in our investment portfolio and a higher cost of System short-term debt.

We recorded a $71.0 million provision for loan losses in our Agribusiness operating segment in 2016, compared to a $30.8 million loan loss reversal in 2015. The 2016 provision for loan losses resulted from a higher level of lending activity, deterioration in overall credit quality and an increase in specific reserves associated with a small number of customers. The 2015 loan loss reversal included the impact of further enhancements made to our methodology for estimating credit losses inherent in our loan portfolio, which more than offset an increase in lending activity to food and agribusiness companies, increased leasing activity and slight deterioration in credit quality impacting a small number of agricultural customers in that period. The 2015 changes in methodology for estimating credit losses are discussed further on page 65.

While overall Agribusiness credit quality remains strong, we did experience some deterioration in loan quality in 2016 and we expect some further deterioration due to generally lower agricultural commodity prices and other factors impacting certain of our customers. Nonaccrual loans increased to $207.2 million at December 31, 2016 from $88.0 million at December 31, 2015 primarily due to credit quality deterioration impacting lending and leasing customers. Loan charge-offs, net of recoveries, were $3.5 million in 2016 compared to $0.7 million for 2015. Charge-offs in both periods related to a limited number of customers and were not reflective of any significant trend within the Agribusiness operating segment.

Noninterest income in our Agribusiness segment increased by $1.0 million in 2016 primarily due to an increased level of patronage income received from other System institutions on loan participations we sold to them as well as fewer impairments on investment securities, the latter of which are allocated to the operating segments. These items were somewhat offset by lower levels of fee income and gains recognized from the sale of investment securities, the latter of which are also allocated to the operating segments.

Operating expenses in our Agribusiness segment increased by $25.6 million in 2016 primarily due to the increase in Insurance Fund premiums and the increases in other operating expenses described previously. Income tax expense in the Agribusiness operating segment decreased $29.4 million in 2016 due to the decrease in pre-tax earnings driven by a higher provision for loan losses, higher levels of accrued patronage, which resulted from growth in average patronage-eligible loan volume, and an increase in tax credits related to renewable energy transactions.

Strategic Relationships

Overview

The Strategic Relationships operating segment includes wholesale loans from the direct funding relationships we have with our affiliated Association customer-owners and our wholesale funding relationships with other System institutions. Our affiliates include Associations operating in 23 states serving the Northwest, West, Southwest, Rocky Mountains, Mid-Plains, and Northeast regions of the United States.

Developing and maintaining strong relationships with Farm Credit Associations and other System institutions is an important strategic focus for the Bank. By working together, the Bank and Associations collectively provide credit and non-credit services to a more diverse set of customers. We maximize the value of these strategic relationships by combining the Associations' strong market presence and local relationship management with our complementary product suite and lending capacity. Our relationships with Associations provide an important competitive advantage in attracting and retaining customers and in fulfilling our collective mission to support agriculture, rural infrastructure and rural communities.

We have seen a number of mergers among affiliated Associations in recent years and expect this activity to continue as Associations look for ways to better fulfill their mission in a safe and sound manner, while more efficiently providing value-added products and services to their member owners.

2016 Performance

As of December 31, 2016, loans in the Strategic Relationships operating segment totaled $46.0 billion, compared to $43.4 billion at December 31, 2015. At year-end 2016 and 2015, these loans included $41.5 billion and $39.1 billion, respectively, in wholesale loans to our affiliated Associations and $4.5 billion and $4.3 billion, respectively, of participations in wholesale loans made by other System banks to certain of their affiliated Associations. Such participations included $3.9 billion as of December 31, 2016 and 2015 in loans made by the Farm Credit Bank of Texas. Strategic Relationships average loan volume increased 9 percent to $43.9 billion in 2016 compared to $40.4 billion in 2015. The increases in outstanding and average loan volume resulted from greater Association customer financing requirements from agricultural producers and processors, driven by lower cash reserves and reduced profitability resulting from generally lower agricultural commodity prices and by new customers at the Associations. An increase in participations in wholesale loans made by other System banks also contributed to the increase in Strategic Relationships average loan volume.

Strategic Relationships net income totaled $244.8 million in 2016, compared to $242.0 million for 2015. The increase resulted from higher noninterest income and net interest income, somewhat offset by an increase in operating expenses.

Strategic Relationships net interest income increased to $285.1 million for 2016, from $283.9 million for 2015 due to the impact of growth in loan volume, largely offset by lower merger-related accretion and earnings on investment securities.

Overall loan quality in Strategic Relationships continues to be very strong. As a wholesale lender to Associations, we benefit from the diversification of the Association loan portfolios and a strong collateral position. In addition, the earnings, capital and loan loss reserves of the Associations provide an additional layer of protection against losses in their respective loan portfolios. Lower spreads in the Strategic Relationships operating segment are commensurate with the lower risk profile and lower regulatory capital requirements. No provisions for loan losses or allowance for credit losses have been recorded related to any of our Association wholesale loans.

Strategic Relationships noninterest income increased to income of $0.9 million in 2016 compared to net expense of $3.8 million in 2015. The change was primarily due to the higher level of impairments recognized on investment securities in 2015, which were partially offset by a lower level of gains on the sale of investment securities in 2016, both of which are allocated to the operating segments.

Operating expenses increased to $41.3 million in 2016 from $38.1 million in 2015 due to the impact of increased Insurance Fund premiums on investment securities and the increases in other operating expenses described previously. Strategic Relationships has no income tax expense as the earnings on its business activities are statutorily tax-exempt.

Rural Infrastructure

Overview

The Rural Infrastructure operating segment includes loans and other financial services provided to cooperatives and other companies in the power and energy, communications, water and waste water industries as well as to community facilities in rural America. Primary products and services provided include term loans, revolving lines of credit, project financing, capital markets services, as well as risk management, cash management and investment products.

There are significant needs for investment in infrastructure to support businesses and residents in rural communities. Traditional sources of investment capital, including public sector financing, may not be available or sufficient to meet those needs. As a part of our congressionally-mandated mission, CoBank provides support for rural infrastructure needs, in partnership with other System entities, commercial banks and government entities. In addition, CoBank partners with the U.S. Department of Agriculture in the Rural Infrastructure Opportunity Fund (RIOF) initiative, which was launched in 2014 to serve as a new source of capital for rural infrastructure projects. Target investments for this initiative include rural water and wastewater systems, rural energy projects, rural broadband and agribusiness. CoBank provides loans to eligible borrowers as part of the RIOF initiative, subject to CoBank lending authorities and standard underwriting requirements. CoBank will continue to pursue additional opportunities to invest in rural infrastructure to allow rural businesses to compete in a global marketplace and to improve the quality of life in rural communities.

Power and energy industry customers include rural electric generation and transmission cooperatives, electric distribution cooperatives, renewable energy providers, independent power producers, regulated utilities and local distribution companies. While demand for electricity has grown at relatively low levels in recent years, our customers are making infrastructure enhancements to meet long-term system requirements, to transition to low-cost gas generation and to comply with environmental mandates, and thus continue to need access to debt capital. Growth in renewable energy projects and environmental mandates also contribute to loan demand from project finance customers. Loan growth has also resulted from opportunities to refinance borrowings from other lenders, particularly in the rural electric distribution cooperative sector.

Communications industry customers include rural local exchange carriers, wireless providers, data transport networks, cable television systems, telecommunications services and data centers. Telecommunications networks are, by their nature, globally interconnected. As a result, many of the larger communications providers are vitally important to bringing necessary products and services to rural America through their networks and partnerships with many of our rural customers. We focus on communications companies of varying sizes that are collectively positioned to provide the necessary range of services, including voice (both wireline and wireless), broadband and video, vital for rural industries and communities. Longer term, growth opportunities may arise from merger and acquisition activity, as consolidation often results from carriers seeking to improve operating efficiencies and gain market share in this highly competitive industry. Capital spending may provide additional growth opportunities as wireline carriers enhance their networks with fiber optics and wireless carriers continue to upgrade to fourth generation (4G) data technology.

Water industry customers include rural water and waste water companies. Capital expenditure growth in this industry continues primarily as a result of the need to replace aging infrastructure and to meet higher standards for water quality. While government programs have traditionally provided grants and financing, private lending opportunities for construction or interim financing have also emerged, often as a bridge to government grants or loans. With the continuing need for plant upgrades and expected limitations on the availability of government funds, we expect private lending to this industry to continue to grow.

In partnership with other System entities and community banks, we provide funding to rural community facilities including rural health care facilities.

2016 Performance

Rural Infrastructure loans outstanding totaled $20.6 billion at December 31, 2016 compared to $19.6 billion at December 31, 2015. Average loan volume increased 13 percent to $20.1 billion in 2016 compared to $17.8 billion in 2015. Growth in Rural Infrastructure outstanding and average loan volume resulted primarily from increased lending to electric distribution, power supply and communications customers.

Rural Infrastructure net income increased 21 percent to $308.0 million for 2016 from $255.3 million for 2015. The increase was due to a loan loss reversal recorded in 2016 as well as increases in net interest income and noninterest income, somewhat offset by an increase in operating expenses.

Net interest income increased $38.1 million in 2016 as compared to 2015, driven by the growth in average loan volume and increased earnings on balance sheet positioning. The impact of these items on net interest income was partially offset by spread compression due to continued strong competition for the business of our customers, spread compression in our investment portfolio and a higher cost of System short-term debt.

Rural Infrastructure recorded an $8.0 million loan loss reversal in 2016, compared to a $40.8 million provision for loan losses in 2015. The 2016 reversal is largely due to an improvement in credit quality in a small number of communications loans, which more than offset the impact of loan growth. The 2015 provision for loan losses was primarily the result of enhancements made to our methodology for estimating credit losses inherent in our loan portfolio. Excluding the impact of those changes, a lower level of specific reserves largely offset the impact of loan growth in our Rural Infrastructure operating segment during 2015. The changes in methodology for estimating credit losses are discussed further on page 65.

Overall credit quality in our Rural Infrastructure operating segment remains strong. At December 31, 2016, the Rural Infrastructure segment had no nonaccrual loans compared to three nonaccrual communications loans totaling $68.8 million at December 31, 2015. In 2016, one of these loans was returned to accruing status and the other two were paid off. Rural Infrastructure recorded loan recoveries, net of charge-offs, of $1.4 million in 2016 as compared to loan charge-offs, net of recoveries, of $4.6 million in 2015.

Noninterest income increased by $11.5 million in 2016 primarily due to an increased level of patronage income received from other System institutions, proceeds from the disposition of warrants obtained in lending transactions as well as a higher level of fee income. This increase was somewhat offset by the impact of a lower level of gains recognized from the sale of investment securities, which are allocated to the operating segments, as well as lower prepayment income, net of losses on early extinguishments of debt, in the 2016 period.

Rural Infrastructure operating expenses increased by $28.9 million in 2016 due to the increase in Insurance Fund premiums and the increases in other operating expenses described previously. Income tax expense in the Rural Infrastructure operating segment increased $16.9 million primarily due to the increase in pre-tax earnings driven by the significant change in loan loss reversal/provision for loan losses.

Enterprise Risk Profile

Managing and optimizing risk to our current and anticipated earnings, capital and enterprise value, within our Board approved risk appetite, are essential components of successfully operating the Bank. Our primary risk exposures are: credit, market, liquidity, operational, strategic and reputation, and regulatory and compliance. Credit risk is the risk arising from changes in a customer's or a counterparty's ability or willingness to repay funds borrowed, or otherwise meet agreed-upon obligations. Market risk is the risk arising from movements in interest rates, equity positioning, differences between the timing of contractual maturities, re-pricing characteristics, and prepayments on assets and their related liabilities. Liquidity risk is the risk arising from the Bank's inability to repay its obligations, or issue new obligations to fund borrowers. Operational risk is the risk arising from human errors or misconduct, inadequate enterprise information management, systems and technology or process failures. Strategic risk is the risk arising from adverse business decisions or lack of responsiveness to changes in the banking/operating environment. Reputation risk is the risk arising from negative external perception and loss of public confidence. Regulatory and compliance risk is the risk to current or anticipated earnings, capital, or reputation arising from failure to comply with laws or regulations.

Business segments and support units have the responsibility of identifying, monitoring and managing these risks. Our Risk Management Group provides oversight through measurement, monitoring and assessment processes addressing the Bank's primary risk exposures. The following is a discussion of these risks, and our approach to managing them.

Credit Risk Management

Credit risk exists in our lending, leasing, investing, cash management and derivatives activities. Credit risk in these activities arises from changes in a customer's or counterparty's ability or willingness to repay funds borrowed or to meet agreed-upon obligations. Credit risk may be further impacted by changes in collateral values, changes in the prevailing economic environment, fraud, defaults on mortgages or other obligations which collateralize mortgage- and asset-backed investment securities, changes in the credit-worthiness of investment obligors or counterparties who insure or guarantee certain investment securities, and declines in the value of underlying collateral securing investment securities, primarily residential real estate.

We actively manage credit risk through a well-defined, Board-approved loan portfolio strategy, a structured and centralized credit approval process, a disciplined risk management process, and a sound credit administration program, while considering our responsibility to fulfill our mission of service to rural America. We have established comprehensive credit guidelines and procedures to ensure consistency and integrity of information related to the credit risk in our loan, lease, investment and derivatives portfolios.

Various groups and committees within CoBank have a role in managing credit risk, as described below. Our Board of Directors establishes overall lending and leasing, investment, derivatives and allowance for credit losses policies. It also approves the portfolio strategy and capital adequacy plan and reviews loan volume, loan quality trends, significant high-concern or troubled loans, and the credit quality of our investment and derivatives portfolios.

The CoBank Loan Committee (CLC), which is appointed by the Chief Executive Officer (CEO), and includes the Chief Credit Officer and senior management of the Credit Management Group and the lending groups, holds ultimate credit authority as authorized by Board policy and provides oversight of all credit activities. The CLC delegates lending authorities to specific committees or groups of individuals based on size of exposure and risk rating. The CLC also approves certain limits for investment obligors and derivative counterparties. It acts on individual credit actions or administrative matters and approves exceptions to exposure limits if conditions warrant.

The Credit Management Group is led by the Chief Credit Officer, who reports to the CEO. The Credit Management Group manages the credit approval process within concentration limits established for the loan portfolio pursuant to Board policies. As part of the credit approval process for transactions exceeding certain delegated authority thresholds, the Credit Management Group reviews assigned risk ratings for accuracy and conformity with our established guidelines. It also approves limits with respect to investment obligors and derivative counterparties and manages significant high-risk or troubled loans.

The Risk Management Group is led by the Chief Risk Officer, who reports to the CEO. The Risk Management

Group oversees the establishment of concentration and portfolio limits, the development of the portfolio strategy, the analysis of the allowance for credit losses and other risk-based modeling and metrics. In addition, the Risk Management Group provides quarterly reporting on the Bank's risk appetite and exposures, as well as an annual risk assessment.

The heads of Internal Audit and Asset Review have a direct reporting responsibility to the Audit Committee of the Board of Directors. They provide independent reporting to the Board of Directors on the quality of the Bank's assets, the Bank's system of internal controls, and material audit and review findings.

The Asset and Liability Committee (ALCO), which includes the CEO, Chief Operating Officer, Chief Financial Officer, Chief Risk Officer, Chief Credit Officer, Treasurer, Strategic Relationships Division President and Executive Vice President of Infrastructure Banking, monitors credit risk within the investment portfolio and reviews counterparty credit risk arising from derivative transactions.

The Country Risk Committee (CRC) is appointed by the CEO, and includes the Chief Risk Officer and the Chief Credit Officer. It oversees the methodologies for setting country risk grades and establishing maximum country limits, as well as the approval of individual country risk grades and limits.

Credit Risk Related to Loans

The key elements of our credit risk management related to lending include our portfolio strategy, the credit approval process, and the use of exposure and concentration limits, each of which is explained below.

<u>Portfolio Strategy</u>

The portfolio strategy provides overall guidance on lending activities and strategies over the next three years, consistent with our strategic business objectives and Board-approved risk appetite. It articulates how we will fulfill our congressionally-mandated mission in a safe and sound manner by managing to the Board-established financial baselines, optimizing the allocation of our risk appetite and resources, and providing an appropriate return on our shareholders' equity by effectively balancing loan growth with profitability and credit risk. Our mission includes supporting our Associations' young, beginning and small farmers; small rural infrastructure entities; start-up cooperatives; local food programs; rural community development; and renewable energy projects. The portfolio strategy helps ensure that CoBank is inclusive in its outreach to all marketplace segments whether it be through lending or investment activities or our corporate social responsibility program.

As part of the annual business and financial planning process, the Board of Directors reviews and approves the Bank's portfolio strategy. Management analyzes performance with respect to the portfolio strategy quarterly and reports the results to the Board of Directors.

<u>Credit Approval</u>

The most critical element in managing and controlling credit risk is the initial decision to make a loan and the resulting structure and terms of the relationship with the borrower.

We place significant emphasis on the evaluation and understanding of a borrower's business and management in the initial credit analysis and the approval process. We emphasize cash flow and repayment capacity as primary sources for repayment of loans, including cash generated from the sale of agricultural commodities as it relates to seasonal lending. Collateral is normally considered a secondary source of repayment. In circumstances where the credit decision places substantial reliance on collateral to repay the loans, independent appraisals may be used to assist in the collateral valuation. Such appraisals are conducted in accordance with FCA regulations and professional appraisal standards.

For wholesale lending within our Strategic Relationships operating segment, the earnings, capital and loan loss reserves of Associations provide an additional layer of protection against losses in their respective loan portfolios. Loans to our affiliated Associations are governed by a General Financing Agreement, as described on page 126.

With the exception of certain small-dollar lease transactions, no individual has sole credit approval authority within CoBank. All approvals or credit actions are required to be formally documented.

Management assigns a risk rating to each borrower based on two measurements: probability of default (PD) risk rating and loss given default (LGD) risk rating. The PD rating system uses a 14-point scale of 1 (highest quality) to 14 (lowest quality). The PD rating is primarily determined by the financial characteristics of the borrower and reflects the probability of default driven by several factors, including business risk, industry risk, management capability and financial condition. The LGD rating is intended to approximate the degree of potential loss in the event the borrower defaults.

<u>Exposure and Concentration Limits</u>

We use exposure and concentration limits to manage risk and volatility in the loan portfolio. Exposure to individual borrowers and related entities is managed through a risk matrix that considers the dollar exposure, type of exposure and risk rating of the borrower. Individual borrower exposures are typically established at the time of loan origination or renewal, with risk ratings formally reviewed at least annually. The dollar exposure, risk rating and type of credit extended further determine the delegated level of authority required to approve the credit. These individual borrower exposures are then further subject to total portfolio limits on exposure to different industries and/or countries. Exposure limits for different industries are reviewed quarterly while exposure limits for different countries are reviewed annually. We allow for more frequent evaluation when appropriate. Exceptions to these exposure limits may be granted by the CLC or the CRC if conditions warrant.

We also manage credit exposures and concentrations in our loan portfolio by syndicating loans and by selling and purchasing loan participations. Our capabilities in syndicating loans and in selling and purchasing loan participations are critical to dynamically managing the portfolio, maintaining market discipline, meeting our customers' needs and fulfilling our mission.

While we believe these standards, processes and tools are appropriate to manage our credit risk, there is no assurance that significant deterioration in loan quality will not occur, which could reduce our future earnings.

We are limited to making loans and providing related financial services to eligible borrowers in certain specified industries, as mandated by the Farm Credit Act. As a result, we have a concentration of loans to the agricultural and rural infrastructure industries. The significant risk factors affecting credit conditions in these industries within each of our operating segments are described below.

Agribusiness

The relationship of demand for and supply of U.S. agricultural products in the global marketplace can significantly impact the volume, earnings and loan quality of our Agribusiness operating segment.

Volatility in the prices and supplies of agricultural commodities can impact the profitability and loan quality of our Agribusiness customers. Such volatility results from, among other factors, seasonal and cyclical weather conditions; domestic and global economic growth expectations; the availability of transportation; global production and supply levels; financial investment in the commodity futures markets by non-agricultural interests; and changing export markets and currency exchange rates. Market prices for food products also have a significant effect on a number of customers within our Agribusiness operating segment.

Extreme weather conditions, including drought, can substantially impact harvests and prices of agricultural products and, ultimately, impact the credit quality of some of our agribusiness borrowers and our Associations' borrowers as their earnings are reduced. Although certain crop losses resulting from weather conditions are mitigated for producers by multi-peril crop insurance, not all crops are covered by insurance. To the extent weather adversely impacts the agricultural sector, the risk of loss in our loan portfolio may increase, which could reduce our earnings.

Major international events, including military conflicts; terrorism; political, geopolitical, currency and global economic disruptions; and trade policies and agreements can affect, among other things, the price of commodities or products used or sold by our borrowers or their access to markets. Such events may also impact country risk or repayment ability of foreign counterparties in our AEFD portfolio. In addition, biological or disease risk in human, livestock or crop populations can impact the supply of and demand for agricultural products. Certain customers also have exposure to counterparties in the commodities exchange markets.

U.S. agriculture has historically received financial support from the U.S. government through direct payments, crop insurance and other benefits. However, the Agricultural Act of 2014 (the Farm Bill), which established the U.S. government's agricultural, rural development and nutrition policy over a five-year period, was signed into law in February 2014 and eliminated direct payments but expanded certain forms of crop insurance. Although most of our direct customers do not generally receive support payments from federal programs, a significant reduction or elimination of support in the future could have a negative impact on the loan quality of certain borrowers, including Associations, who derive a significant share of their earnings from farmers and other producers who could be affected by such a reduction. Other political, legislative and regulatory activities may also impact the level or existence of certain government programs that support agriculture.

Strategic Relationships

The risk factors previously discussed in the "Agribusiness" section can also affect loan quality at Associations; however, the impact of such factors on farmers and other producers served by Associations may not be the same as the impact on cooperatives and other customers served by our Agribusiness operating segment. The loan quality within our Strategic Relationships operating segment is enhanced by our strong collateral position and the earnings, capital and loan loss reserves of the Associations, which provide an additional layer of protection against losses they may have in their loan portfolios.

Rural Infrastructure

Prolonged stagnation in the general economy, and the rural economy in particular, can reduce commercial and residential demand for services and negatively affect customers in our Rural Infrastructure operating segment.

Fluctuating weather conditions, energy efficiency initiatives, the relative cost and price volatility of various fuel sources, the advent of distributed generation sources and other technological changes, the growth and integration of renewable power sources and protracted low levels of electricity demand can adversely affect our customers in the power industry. The pace and degree of the restructuring and optimization of the electric power industry in the United States may also impact future loan quality. Constraints on carbon emissions and other environmental standards could also adversely impact power customers.

The communications industry is affected by significant competition and changing customer demands. Regulatory, legislative and technological changes may impact the future competitive position and markets for the communications industry. These factors may place downward pressure on the loan quality of certain sectors of the communications industry. In addition, decreased cash flows and the resultant impact on asset valuation, the inability to successfully integrate merged or acquired companies, or the lack of availability of debt and equity capital could adversely affect certain communications customers.

The water industry faces high capital expenditure requirements due to environmental regulation, aging infrastructure and reduced levels of government support. Top-line revenue growth is also a concern for the water industry given the decline in per capita residential water usage resulting from conservation measures and increased use of water efficient appliances. The inability to adjust rate structures and address the misalignment of rising fixed costs and flat to declining variable revenues, without sacrificing affordability, could adversely affect certain water customers.

Credit Quality Conditions and Measurements in Our Loan Portfolio

The following table presents loans and accrued interest receivable classified by management pursuant to our regulator's Uniform Loan Classification System, as a percent of total loans and accrued interest.

Loan Quality Ratios

	December 31, 2016			December 31, 2015		
	Wholesale Loans [1]	Commercial Loans [2]	Total Bank	Wholesale Loans [1]	Commercial Loans [2]	Total Bank
Acceptable	**100.00 %**	**95.64 %**	**97.74 %**	100.00 %	96.49 %	98.18 %
Special Mention	**-**	**2.81**	**1.45**	-	2.16	1.12
Substandard	**-**	**1.54**	**0.80**	-	1.35	0.70
Doubtful	**-**	**0.01**	**0.01**	-	-	-
Loss	**-**	**-**	**-**	-	-	-
Total	**100.00 %**	**100.00 %**	**100.00 %**	100.00 %	100.00 %	100.00 %

[1] Represents loans in our Strategic Relationships operating segment

[2] Represents loans in our Agribusiness and Rural Infrastructure operating segments

While our overall loan quality remained strong at December 31, 2016, we did experience some deterioration in 2016. Special Mention loans increased to 1.45 percent of total loans and accrued interest in 2016 from 1.12 percent at December 31, 2015. The total amount of adversely classified loans ("Substandard", "Doubtful" and "Loss") and related accrued interest as a percent of total loans and accrued interest increased to 0.81 percent at December 31, 2016 compared to 0.70 percent at December 31, 2015. These increases were driven by deterioration in credit quality in our Agribusiness operating segment due, in part, to generally lower agricultural commodity prices.

Summary of High-Risk Assets ($ in Thousands)

December 31,	2016	2015	2014	2013	2012
Nonaccrual Loans	**$ 207,247**	$ 156,805	$ 130,340	$ 147,849	$ 170,207
Accruing Loans 90 Days or More Past Due	**804**	754	239	972	2,513
Accruing Restructured Loans	**42,575**	-	-	-	-
Total Impaired Loans	**250,626**	157,559	130,579	148,821	172,720
Other Property Owned	**19**	-	230	2,246	5
Total High-Risk Assets	**$ 250,645**	$ 157,559	$ 130,809	$ 151,067	$ 172,725

Total nonaccrual loans were $207.2 million at December 31, 2016 compared to $156.8 million at December 31, 2015. The increase in 2016 resulted from credit quality deterioration impacting customers in our Agribusiness operating segment, somewhat offset by three communications loans, of which one returned to accruing status and the others were paid off. Our nonaccrual loans are typically composed of a relatively small number of customers, and as such, the balances can fluctuate period to period based on a small number of transactions. Nonaccrual loans as a percent of our total loan portfolio were 0.22 percent as of December 31, 2016 compared to 0.18 percent at December 31, 2015. Over the past 10 years, nonaccrual loans have averaged 0.28 percent of the total loan portfolio.

Accruing restructured loans increased to $42.6 million as of December 31, 2016 as a result of a communications loan which returned to accruing status.

Total loan charge-offs, net of recoveries, were $2.1 million in 2016 compared to $5.2 million in 2015. Gross charge-offs in 2016 were $4.6 million compared to $8.3 million in 2015, and were primarily associated with a small number of lending and leasing customers in our Agribusiness operating segment. Charge-offs have historically resulted from a relatively small number of customers. Accordingly, charge-offs can fluctuate period to period based on a small number of loans and leases.

Our allowance for credit losses totaled $662.5 million and represented 0.70 percent of total outstanding loans at the end of 2016, compared to 0.68 percent at December 31, 2015. At December 31, 2016, our allowance for credit losses represented 1.37 percent of non-guaranteed loans outstanding, excluding wholesale loans to Associations, compared to 1.36 percent at December 31, 2015.

As part of our overall assessment of risk in the loan portfolio and the allowance for credit losses as of December 31, 2016, we have considered a wide variety of factors, including volatile commodity prices and supplies; global economic uncertainty; drought conditions that continue to affect portions of the United States; a significant level of industry, borrower and attributed concentration risk resulting from our defined mission of service to rural communities and agriculture; and the imprecision inherent in estimating losses within our loan portfolio.

See "Critical Accounting Estimates – Allowance for Credit Losses" on page 64 for a more complete description of our process to determine the adequacy of our allowance for credit losses.

Credit Risk Related to Investments and Derivatives

We minimize credit risk in our investment portfolio by investing primarily in securities issued or guaranteed by the U.S. government or one of its agencies. At year-end 2016, 50 percent of our $27.8 billion investment portfolio consisted of securities that carry a full faith and credit guarantee of the U.S. government. Such securities include MBS issued by the Government National Mortgage Association (Ginnie Mae), Export-Import Bank of the United States securities and U.S. Treasury and other debt securities, including loans backed by the Small Business Administration. Approximately 44 percent of our investment portfolio consisted of securities issued by government agencies that carry the implicit backing of the U.S. government, including MBS issued by the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac) and Farmer Mac. Another 3 percent of our investment portfolio is made up of short-term certificates of deposit with commercial banks.

Included within our U.S. agency MBS portfolio are FHA/VA wrapped "reperformer" MBS where residential mortgage loans serving as collateral were cured after a default. The underlying loans supporting the FHA/VA wrapped reperformer MBS are approximately 90 percent government guaranteed or insured, and are further supported by guarantees from either Fannie Mae or Freddie Mac. The Bank's investment portfolio also consisted of non-wrapped reperformer MBS where the underlying loans are also approximately 90 percent government guaranteed or insured but have no guarantees from Fannie Mae or Freddie Mac.

Credit risk in our investment portfolio primarily relates to the 3 percent of the portfolio composed of FHA/VA non-wrapped reperformer MBS, non-agency MBS, asset-backed securities (ABS) and corporate bonds. The portfolio of FHA/VA non-wrapped reperformer MBS carry unique credit risks, related to potential deficiencies in documentation or lack of compliance with servicing requirements on underlying loans that could make such loans ineligible for guarantees or insurance.

Credit risk in our investment portfolio could also arise 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.

We recorded $0.8 million of other-than-temporary impairment losses on investment securities in 2016 as compared to $11.1 million of impairment losses on investment securities in 2015. The credit quality of our investment portfolio as of December 31, 2016 and impairment losses on investment securities are more fully discussed in "Liquidity and Capital Resources" beginning on page 60.

The use of derivative instruments exposes us to counterparty credit risk. Our counterparty credit risk arising from derivative transactions is managed within credit methodologies and limits approved by the CLC. Credit risk associated with derivatives is measured based on the replacement cost that would be incurred should customers or counterparties with contracts in a net gain position with respect to CoBank fail to perform. Customer derivative transactions are typically secured through our loan agreements. For non-customer derivatives not cleared through a central clearinghouse, we minimize this risk by diversifying our derivative positions among various financial institution counterparties, using master netting agreements, and requiring collateral with zero thresholds and daily posting to support credit exposures with active counterparties. We evaluate the creditworthiness of each counterparty, establishing individual credit exposure limits, and deal exclusively with derivative counterparties that have an investment grade credit rating from a major credit rating agency. In addition, we monitor counterparty credit default swap spreads and other market-related information which may indicate reduced creditworthiness of a counterparty. Credit default swap spreads are taken into account in establishing counterparty limits.

We estimate that the amount of losses related to derivatives we could be exposed to in the event of nonperformance by dealer counterparties to our derivative positions, net of collateral held by us, was $1.1 million, $3.9 million and $3.6 million at December 31, 2016, 2015 and 2014, respectively.

We measure counterparty credit risk daily based on the current fair market values of our derivative positions. Employees who are independent of the derivative portfolio management function monitor the derivative exposures against approved limits. Exceptions to approved limits, along with a plan detailing actions to address limit overages, are reported to the CLC. Changes to the counterparty limits must be approved by the CLC.

We also perform stress tests on the derivative portfolio using asset/liability pricing models to analyze the potential effects of market rate changes on fair value, including extreme rate changes. The forward interest rate curves used to project the future expected cash flows for the derivative positions are modeled under potential scenarios which increase and decrease interest rates within a 99 percent confidence interval. These extreme rate scenarios are then used to further evaluate potential counterparty credit risk and to establish placement limits.

Notwithstanding our credit evaluation process and the maintenance of collateral agreements with our derivative counterparties, the failure of a counterparty to perform on its obligations could negatively impact our earnings. Furthermore, although our credit evaluations consider the possibility of default by a counterparty, our ultimate exposure to default by a counterparty could be greater than expected.

The Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") requires certain derivative transactions to be cleared through a central clearinghouse and traded on regulated swap execution facilities. The U.S. Commodity Futures Trading Commission has exempted certain qualifying swaps entered into by end-users and financial cooperatives from these new requirements. The exemptions do not cover all swaps executed by CoBank and are generally limited to swaps entered into in connection with loans and derivatives for customer-owners. CoBank has also voluntarily chosen to clear some swap transactions for economic and risk management purposes. As a result, certain of our derivative transactions are cleared through a futures commission merchant (FCM) with a clearinghouse or central counterparty (CCP). When these swaps are cleared, a single bilateral swap is divided into two separate swaps with the CCP becoming the counterparty to both of the initial parties to the swap. CCPs have several layers of protection against default including initial and variation margin that is required to be posted by participants. FCMs prequalify counterparties to all cleared swaps, set exposure limits for each counterparty and collect initial and variation margin daily for changes in the value of cleared derivatives. The margin collected from both parties to the swap protects against credit risk in the event of a counterparty default. Initial and variation margin requirements are set by and held for the benefit of the CCP. Additional initial margin may be required and held by the FCM in some instances.

The following table details the notional amount of our derivatives and related exposure to dealer counterparties, which excludes $7.1 billion of derivatives cleared through a central clearinghouse, classified by their Standard & Poor's Rating Services (S&P) credit rating as of December 31, 2016.

Derivative Counterparty Exposure ($ in Millions)

	AAA	AA	A	Below A
Exposure to Counterparties in Net Gain Position	$ -	$ 40	$ 41	$ -
Collateral Held	-	40	40	-
Exposure, Net of Collateral	$ -	$ -	$ 1	$ -
Total Notional Amount	$ -	$ 7,236	$ 6,201	$ 216
Total Number of Counterparties	-	4	10	3

The notional amount of our derivatives and related exposure to customer counterparties were $6.5 billion and $101.4 million, respectively, at December 31, 2016 compared to $5.8 billion and $140.7 million, respectively, at December 31, 2015. At December 31, 2016 and 2015, the notional amount of our cleared derivatives was $7.1 billion and $2.7 billion, respectively.

In 2015, the FCA and various other federal agencies, known as the Prudential Regulators under the Dodd-Frank Act, jointly adopted final rules which will subject many non-cleared swaps to minimum initial and variation margin requirements. Such requirements become effective over the next one to four years. The Prudential Regulators also issued an interim final rule excluding swaps that qualify for certain exemptions from the scope of the final margin rules. CoBank is eligible for certain regulatory exemptions related to, among other things, transactions with end users and with customer-owners. Accordingly, we do not currently anticipate that adoption of these rules will have a material impact on our use of derivatives or our overall financial position.

In January 2017, several CCPs, including our CCP the Chicago Mercantile Exchange, made certain amendments to their rule books that resulted in changes to the legal characterization of variation margin on centrally cleared derivatives. At December 31, 2016, the rules of the CCPs, legal agreements, and the legal framework governing the agreements cause posted variation margin to be considered collateral. In the event of default, the collateral posted would be available to offset amounts owed by the defaulting counterparty. The rule amendments are designed to change the legal nature of the variation margin so that it is considered a settlement payment, as opposed to the posting of collateral. Subsequent to December 31, 2016, the accounting treatment for variation margin will follow its legal characterization which will dictate how such derivative and collateral amounts are reported on the balance sheet. We are in the process of conducting a legal analysis. Once complete, it is possible that variation margin may be reclassified on the balance sheet in future periods. We do not anticipate this change will have a material effect on our consolidated financial position.

Market Risk Management

We are subject to market risk, defined as the risk to current or anticipated earnings or capital arising from movements in interest rates. This risk primarily arises from our equity positioning and differences in the timing between the contractual maturities, repricing characteristics, and prepayments of our assets and the liabilities funding these assets. This risk can also arise from embedded caps in certain of our investments and differences between the interest rate indices used to price and fund our assets. Our asset/liability management objective is to manage the mix of interest-earning assets and interest-bearing liabilities to reduce interest rate risk and stabilize our net interest income while optimizing profitability and insulating shareholders' equity from significant adverse fluctuations in market interest rates. While we actively manage our interest rate risk position within policy limits approved by the Board of Directors using strategies established by our ALCO, and within our risk appetite, there can be no assurance that changes in interest rates will not adversely impact our earnings and capital.

The following is a more detailed description of our primary interest rate risks and strategies used to mitigate those risks.

Equity Positioning Risk

Shareholders' equity serves as an interest-free source of funding for the balance sheet and thus requires that we make decisions about the maturity mix of the assets funded by it. Using equity to fund short-term assets results in increased volatility of net interest income, whereas using equity to fund long-term assets results in increased volatility in the market value of our equity. During 2014, we used our equity to fund intermediate-term assets (generally, maturing equally over the next five to seven years) to balance the risks to net interest income and market value of equity. In February 2015, the ALCO approved a strategy to change the positioning of equity from equally over seven years to equally over the period of two to seven years as a result of changes in interest rates and expectations thereof. There were no changes to this strategy in 2016.

Repricing Risk

Mismatches in interest rate repricing and maturities of assets and liabilities arise from the interaction of customer business needs, our investment portfolio composition and the mix of liabilities funding these assets. In addition, we may also undertake funding strategies designed to maximize earnings on our asset/liability position in certain interest rate environments, including using short-term liabilities to fund longer-term assets. However, funding longer-term assets with shorter-term liabilities exposes the Bank to changes in interest rates and spreads to market indices for debt issuances. If interest rates increase or spreads widen, income would be negatively impacted as higher cost funding is required to continue to fund the longer-term assets.

Exposure to changes in the level and direction of interest rates is managed by adjusting the Bank's mix of interest-sensitive assets and liabilities through various strategies and through the utilization of interest rate risk management products, including interest rate swaps and other financial instruments (derivatives). We do not use derivatives for speculative or trading purposes. Refer to page 54 for additional information related to derivatives.

Prepayment/Extension Risk

Prepayment risk in our loan portfolio exists in loans that are considered fully prepayable, which represents approximately 26 percent of total fixed-rate loans. Prepayment risk in this portfolio results when intermediate and longer-term fixed interest rates fall and prepayments increase as borrowers refinance to a lower rate. Prepayments can adversely impact loan portfolio income to the extent prepayments exceed the level of fixed-rate callable debt in the portfolio. This funding can be called in lower-rate environments, thus allowing liabilities to reprice to a lower rate. Approximately 66 percent of our fully prepayable loan portfolio is funded with callable debt, which lowers prepayment risk.

The remaining 74 percent of fixed-rate loans contain, at a minimum, make-whole prepayment penalties. These provisions require a borrower to compensate us for the cost we incur in retiring debt funding associated with loan prepayments. This allows us generally to fund our loan assets with debt of similar maturities to manage the risk of prepayments in the loan portfolio.

Extension risk in the loan portfolio occurs when long-term interest rates rise and prepayments decrease more than expected causing the underlying loans to pay down slower than expected. Loan portfolio income will be negatively impacted as additional higher-rate term funding is required to continue to fund extended loans.

Prepayment risk in the investment portfolio results when long-term interest rates fall and prepayments increase as underlying borrowers refinance their mortgages to a lower rate. Prepayments adversely affect investment portfolio income in a falling interest rate environment because investments are predominately funded with non-callable debt and any proceeds from prepaid investments will be reinvested at a lower interest rate. Prepayment risk in our investment portfolio is low based on the type and average life of securities. Purchases of MBS are currently subject to a price risk eligibility test based on a stressed interest rate environment. The test is designed to manage our exposure to prepayment risk at the time of investment purchase. In addition, our fixed-rate MBS (other than hybrid adjustable-rate mortgage securities), generally contain some embedded prepayment protection in the form of planned amortization class (PAC) bands. These PAC securities are structured so that principal payments are expected to follow a predetermined schedule as long as the prepayments of the underlying collateral fall within a prescribed band. Over time, these bands may erode resulting in an incremental increase in prepayment risk within the investment portfolio.

We also fund a portion of our fixed-rate prepayable investment portfolio with short-term liabilities and term fixed-rate callable debt that provide a partial hedge against prepayment risk in certain falling interest rate environments. The rate we pay on these liabilities reprices downward with a drop in short-term and intermediate-term interest rates. In addition, we are able to retire the short-term liabilities if prepayments increase on the funded assets independent of movements in interest rates.

Extension risk in the investment portfolio occurs when long-term interest rates rise and prepayments decrease more than expected causing the underlying investment securities to pay down at a slower rate than initially expected. In this scenario, investment portfolio income will be negatively impacted as additional higher-rate term funding is required to continue to fund extended securities. Extension risk in the investment portfolio is moderate based on the type and average life of securities purchased. In the same way PAC bands protect against prepayment risk, they also serve to limit extension risk as the amortization of these securities is defined as long as prepayments of the underlying collateral fall within a prescribed band.

Cap and Floor Risk

Cap risk is embedded in the floating-rate MBS in our investment portfolio and to a lesser extent floating-rate loans. When short-term interest rates rise, the interest rate paid by the floating-rate MBS or floating-rate loan may become capped and limit the amount of income earned on the asset while underlying funding costs are not capped. Exposure to cap risk is managed by monitoring the concentration of strike levels in our floating-rate MBS and floating-rate loans and related interest rate shock sensitivities. We also purchase interest rate caps and other derivatives to manage cap risk. Further, we have the ability to reduce cap risk by selling our floating-rate investment securities.

In addition, in a period of negative interest rates, the interest rate yields on our floating rate loans could decrease, while the interest rate costs on certain of our borrowings could be floored at a higher rate. These factors could lower our net interest income, particularly during periods of negative interest rates, which would adversely impact our financial condition, cash flows and results of operations.

Basis Risk

Basis risk arises due to the differences between the interest rate indices used to price our assets and the indices used to fund those assets. We manage our basis risk through match funding, when possible, and using derivatives (primarily interest rate swaps) and other funding strategies. However, basis risk will always exist as unanticipated loan volume changes cause an excess or shortage of some forms of funding.

Measurement and Monitoring of Market Risk

The Risk Management Group is responsible for independently measuring and monitoring market risk. We utilize several key risk measurement and monitoring tools to assist in the management of market risk. These include interest rate gap analysis, duration gap analysis, sensitivity analysis of net interest income and market value of equity, and net interest income forecasting, each of which is described in further detail in the following pages.

Interest Rate Gap Analysis

The interest rate gap analysis shown in the following table presents a comparison of interest-earning assets and interest-bearing liabilities in defined repricing timeframes as of December 31, 2016. The interest rate gap analysis is a static indicator that does not reflect future changes in repricing characteristics and may not necessarily indicate the sensitivity of net interest income in a changing interest rate environment.

Interest Rate Sensitivity Analysis at December 31, 2016 ($ in Millions)

	One Month or Less	Over One Month Through Six Months	Over Six Months Through One Year	Over One Year Through Five Years	Over Five Years and Not Rate Sensitive	Total
Interest-earning Assets:						
Floating-rate Loans:						
Adjustable-rate/Indexed-rate Loans	$ 30,690	$ 5,056	$ 81	$ 58	$ -	$ 35,885
Administered-rate Loans	21,195	-	-	-	-	21,195
Fixed-rate Loans:						
Fixed-rate Loans [(1)]	1,498	3,827	2,331	7,470	12,770	27,896
Fixed-rate Loans, Prepayable [(2)]	607	749	1,031	4,901	2,787	10,075
Nonaccrual Loans	-	-	-	-	207	207
Total Loans	53,990	9,632	3,443	12,429	15,764	95,258
Federal Funds Sold and Other Overnight Funds	750	-	-	-	-	750
Investment Securities	6,578	3,052	2,571	11,155	4,409	27,765
Total Interest-earning Assets [(3)]	$ 61,318	$ 12,684	$ 6,014	$ 23,584	$ 20,173	$ 123,773
Interest-bearing Liabilities:						
Callable Bonds and Notes	$ -	$ -	$ 216	$ 4,309	$ 2,487	$ 7,012
Noncallable Bonds and Notes [(4)]	50,230	10,237	11,670	21,098	13,545	106,780
Bonds, Medium Term Notes and Discount Notes [(4)]	50,230	10,237	11,886	25,407	16,032	113,792
Effect of Interest Rate Swaps, Forwards, Futures, etc.	9,493	368	(1,430)	(8,431)	-	-
Cash Investment Services Payable and Other Interest-bearing Liabilities	1,588	-	-	-	205	1,793
Total Interest-bearing Liabilities	$ 61,311	$ 10,605	$ 10,456	$ 16,976	$ 16,237	$ 115,585
Interest Rate Sensitivity Gap (Total Interest-earning Assets less Total Interest-bearing Liabilities)	$ 7	$ 2,079	$ (4,442)	$ 6,608	$ 3,936	$ 8,188
Cumulative Gap	$ 7	$ 2,086	$ (2,356)	$ 4,252	$ 8,188	
Cumulative Gap/Total Interest-earning Assets	0.01 %	1.69 %	(1.90) %	3.44 %	6.62 %	

(1) Prepayment penalties apply that compensate CoBank for economic losses.

(2) Freely prepayable or only minimal prepayment penalties apply.

(3) Does not include $1.7 billion in cash and cash equivalents as of December 31, 2016.

(4) Includes subordinated debt and certain other bonds and notes.

The preceding table excludes $1.7 billion of cash and cash equivalents as of December 31, 2016. Our interest rate sensitivity position at December 31, 2016 may be characterized as “asset sensitive” to net interest income risk. Our net interest income will generally be favorably impacted in the near term in rising interest rate environments.

We continually monitor interest rates and have the ability to reposition our balance sheet as a result of anticipated interest rate changes. If we expected a meaningful change to interest rates, we could shift our position in short order.

Duration Gap Analysis

The duration gap is the difference between the estimated durations of assets and liabilities, which is calculated using an asset/liability model. The duration gap summarizes the extent to which estimated cash flows for assets and liabilities are matched, on average, over time. A positive duration gap means there is increased market value exposure to rising interest rates over the long-term because it indicates that the duration of our assets exceeds the duration of our liabilities. A negative duration gap indicates increased exposure to declining interest rates over the long-term because the duration of our assets is less than the duration of our liabilities. We apply the same interest rate process, prepayment models, and volatility assumptions to generate the portfolio duration gap that we use in our sensitivity analysis, which is discussed below. The duration gap provides a relatively concise and simple measure of the interest rate risk inherent in our balance sheet, but it is not directly linked to expected future earnings performance. Our aggregate positive duration gap was 2.8 months at December 31, 2016 and 2015.

Sensitivity Analysis

We use asset/liability models to evaluate the dynamics of our balance sheet and to estimate earnings volatility under different interest rate scenarios. Our analysis includes calculating the impact of significant increases or decreases in interest rates on net interest income, over a 12 month period, and the estimated market value of equity. Our modeling practices have been consistently applied in each of the three years presented in this report.

Our analysis estimates the effect of immediate and sustained parallel shifts in the yield curve (called "shocks") of 100, 200 and 300 basis points. Pursuant to regulation and our Board policy, when the three-month Treasury rate is below 4 percent, as it was for each of the periods presented, we perform a shock equal to one-half the three-month Treasury rate. This resulted in downward shocks of -25 basis points, -8 basis points, and -2 basis points at December 31, 2016, 2015 and 2014, respectively. Due to extremely low short-term interest rates, these downward shock scenarios, while required by policy, are not considered meaningful. When analyzing net interest income at risk, we also estimate the effect of gradual upward or downward changes in market rates (called "ramps") over a one-year period of 100, 200 and 300 basis points, where possible.

The following tables summarize the impact of interest rate changes on net interest income and the market value of equity. Market value of equity is the net present value of all future cash flows discounted to a valuation date, using discounting factors derived from observed market rates on the same valuation date. In all cases, the underlying assumptions and hedging strategies are held constant so that results are comparable from scenario to scenario. However, actual results would differ to the extent changes in strategy were undertaken to mitigate the unfavorable impact of interest rate changes.

Net Interest Income at Risk

December 31,	**2016**	**2015**	**2014**
Scenario:			
- 300 bp shock	**n/a**	n/a	n/a
- 200 bp shock	**n/a**	n/a	n/a
- 100 bp shock	**n/a**	n/a	n/a
- 25 bp shock	**(0.7) %**	n/a	n/a
- 8 bp shock	**n/a**	(0.5) %	n/a
- 2 bp shock	**n/a**	n/a	(0.1) %
+ 100 bp shock	**2.1**	3.4	3.0
+ 200 bp shock	**4.2**	6.1	4.5
+ 300 bp shock	**5.7**	8.4	5.9
- 300 bp ramp	**n/a**	n/a	n/a
- 200 bp ramp	**n/a**	n/a	n/a
- 100 bp ramp	**n/a**	n/a	n/a
+ 100 bp ramp	**1.0**	1.6	1.7
+ 200 bp ramp	**1.8**	2.4	2.1
+ 300 bp ramp	**3.4**	3.2	2.5

Market Value of Equity at Risk

December 31,	**2016**	**2015**	**2014**
Scenario:			
- 300 bp shock	**n/a**	n/a	n/a
- 200 bp shock	**n/a**	n/a	n/a
- 100 bp shock	**n/a**	n/a	n/a
- 25 bp shock	**1.2 %**	n/a	n/a
- 8 bp shock	**n/a**	0.4 %	n/a
- 2 bp shock	**n/a**	n/a	0.1 %
+ 100 bp shock	**(4.9)**	(4.7)	(3.9)
+ 200 bp shock	**(9.9)**	(9.3)	(7.9)
+ 300 bp shock	**(14.8)**	(13.6)	(11.7)

Our net interest income is impacted favorably in the rising interest rate scenarios due to an asset sensitive balance sheet position over the next 12 months. The adverse impact of lower interest rate scenarios is somewhat limited by the current low level of rates. Our Board limits the amount of adverse change to net interest income and market value of equity under a 200 basis point rate shock. The limit for market value of equity was 15 percent and the limit for net interest income was 10 percent for all three years presented. At December 31, 2016, 2015 and 2014, we were within our policy limits as detailed in the preceding tables.

Forecasting

We update our asset/liability model monthly with information on loans, investment securities, borrowings and derivatives. This "current position" is the starting point for all analysis. The current position data is then combined with assumptions and independent interest rate forecasts, including market implied forward rates, to derive our estimates of future net interest income. Generally, we set assumptions on pricing, maturity characteristics and funding mix using trend analysis of actual asset and liability data.

Net interest income projections are derived utilizing different interest rate scenarios to assess the sensitivity of net interest income to changing interest rates. We obtain independent interest rate projections designed around economic forecasts that estimate the most likely path of interest rates for the planning horizon and alternate views of an expanding economy and a slowing economy. We also review the impact on net interest income of parallel and nonparallel shifts in the yield curve over different time horizons.

Use of Derivatives

We use derivatives as an integral part of our market risk management activities. To achieve risk management objectives and satisfy the financing needs of our borrowers, we execute various derivative transactions with other financial institutions. Derivatives (primarily interest rate swaps) are used to manage liquidity and the market risk arising from maturity and repricing mismatches between assets and liabilities. In addition, we execute foreign exchange spot and forward contracts to manage currency risk on our relatively nominal amount of loans denominated in foreign currencies. The notional amounts of derivatives, weighted average interest rates to be received and paid, and fair values at December 31, 2016, are shown in the following table. We also discuss derivatives in Note 11 to the accompanying consolidated financial statements.

Derivative Financial Instruments at December 31, 2016 ($ in Millions)

Derivative Product	Notional Amount	Weighted Average Receive Rate	Weighted Average Pay Rate	Fair Value
Receive Fixed Swaps	$ 14,253	1.56 %	0.74 %	$ (35)
Receive Fixed Amortizing Swaps	3,386	2.22	0.87	57
Pay Fixed Swaps	2,905	0.86	1.65	0
Pay Fixed Amortizing Swaps	3,387	0.87	2.00	(21)
Interest Rate Options	3,100	-	-	42
Foreign Currency Spots and Forwards	227	-	-	3
Total	$ 27,258	1.47 %	1.05 %	$ 46

The following section includes a summary of our derivatives portfolio by strategy and further explanation of each strategy.

Notional Amounts of Derivative Financial Instruments by Strategy ($ in Millions)

December 31,	2016	2015	2014
Liquidity Management	**$ 9,162**	$ 6,999	$ 7,750
Equity Positioning	**2,186**	2,551	2,216
Options Risk Management [1]	**2,657**	2,392	2,427
Customer Transactions	**13,067**	11,753	10,351
Foreign Currency Risk Management [2]	**186**	205	180
Total	**$ 27,258**	$ 23,900	$ 22,924

(1) Excludes $443 million, $424 million and $534 million of interest rate options at December 31, 2016, 2015 and 2014, respectively, which are classified as customer transactions.

(2) Excludes $41 million, $62 million and $28 million of foreign currency spot and forward contracts at December 31, 2016, 2015 and 2014, respectively, which are classified as customer transactions.

Liquidity Management

Interest rate swaps are executed to improve liquidity, primarily by effectively converting specific longer-term fixed-rate bonds and notes into floating-rate debt indexed to LIBOR or similar short-term rates. The fixed rate received on the swap largely offsets the fixed rate paid on the associated debt leaving a net floating rate payment on the swap. This allows us to issue longer-term fixed-rate debt and still match fund the predominantly short-term repricing nature of our interest-sensitive asset portfolio. Liquidity risk management is discussed further beginning on page 55.

Equity Positioning

We also use interest rate swaps to manage market risk as it relates to investment of our equity. If the cash flows of loans and investments on the balance sheet do not create the targeted maturity for the investment of our equity, we enter into receive-fixed interest rate swaps to produce the desired equity investment maturity profile.

Options Risk Management

In the course of managing risk in our investment portfolio, and to a lesser extent our loan portfolio, we periodically hedge cap risk embedded within our floating-rate investments and loans by entering into derivative transactions.

Customer Transactions

Derivatives are offered to customers as a service to enable them to modify or reduce their interest rate and foreign exchange risk by transferring such risk to us. We offset this risk transference by concurrently entering into offsetting agreements with counterparties.

Foreign Currency Risk Management

We enter into foreign exchange spot and forward contracts to manage currency risk on our relatively nominal amount of loans denominated in foreign currencies. Typically, foreign currency contracts are purchased to fund the principal cash flows of the loan and simultaneously sold to lock in the principal and interest cash flows upon the repricing or maturity date of the loan.

Liquidity Risk Management

Liquidity risk is the risk arising from an inability to repay or issue obligations to fund borrowers and operations on a timely basis. We must continually raise funds to provide credit and related services to customers, repay maturing debt obligations and meet other obligations. Our primary sources of liquidity are the ability to issue Systemwide Debt Securities and the use of available cash. As a result of the System's credit quality and standing in the capital markets as a GSE, we have traditionally maintained ready access to debt-funding, notwithstanding volatility in the credit markets. Additionally, if necessary, we could convert high credit quality liquid investments to cash.

We monitor our liquidity position by assuming no ability to issue debt and calculating the number of days into the future we could meet maturing debt obligations by using available cash and eligible investments. System banks are required by regulation to maintain a minimum of 90 days of liquidity (cash and readily marketable investments generally discounted by 5 to 10 percent of market value) on a continuous basis and to establish an incremental liquidity reserve. At December 31, 2016, our liquidity was 197 days, compared to 199 days at December 31, 2015. During 2016, we averaged 192 days of liquidity compared to an average of 181 days in 2015.

FCA regulations require each System bank to maintain a three-tiered liquidity reserve. The first tier consists of a sufficient amount of cash and cash-like instruments to cover each bank's maturing debt for 15 days. The second and third tiers contain highly liquid instruments sufficient to cover each bank's maturing debt for the next 15 and subsequent 60 days, respectively. In addition, the banks are required to establish an incremental liquidity reserve comprised of eligible investments, which can be drawn upon during an emergency and which is sufficient to cover each bank's liquidity needs beyond 90 days. CoBank has established a minimum liquidity standard of 150 days, which is 60 days greater than the 90 days resulting from the tier one through tier three regulatory standards.

Our liquidity management objectives are to provide a reliable source of funding to borrowers, meet maturing debt obligations, provide additional liquidity if market conditions deteriorate and to fund operations on a cost-effective basis. Approximately 65 percent of our interest-earning assets mature or reprice in one year or less with 50 percent maturing or repricing in one month or less. Match-funding these assets from a maturity perspective would create an unacceptable concentration of short-term liabilities. Instead, we manage this risk by issuing longer-term fixed-rate debt and swapping this debt from a fixed to floating rate using derivative transactions, as previously described, or by issuing term floating-rate debt. By so doing, we reduce the need to fund maturing liabilities on any given business day to a more manageable level. While we believe that sufficient resources are available to meet liquidity management objectives through our debt maturity structure, holdings of liquid assets and access to the capital markets via the Funding Corporation, the volatility of our loan volume and the cash flow requirements from our cash management program causes our liquidity needs to vary significantly from day to day.

The amounts and maturities of our debt obligations are set forth in the table below.

Debt Maturities as of December 31, 2016 ($ in Millions)

	Book	Par
1 Day [(1)]	$ 1,589	$ 1,589
2-7 Days	257	257
8-30 Days	3,275	3,270
31-90 Days	9,038	9,040
91-180 Days	12,001	12,007
181-365 Days	24,629	24,658
1-5 Years	47,662	47,686
Over 5 Years	17,134	17,093
Total	$ 115,585	$ 115,600

(1) Includes $85.9 million of cash collateral payable to derivative counterparties that does not have a stated maturity date.

See Notes 5 and 15 to the accompanying consolidated financial statements for information regarding interest rates and maturities of Systemwide Debt Securities, and contingencies.

Due to the often volatile funding needs of certain customers, in particular Agribusiness customers impacted by seasonal borrowing requirements and changing commodity prices and supplies, we provide a significant amount of revolving loan commitments. At December 31, 2016, commitments to extend credit and commercial letters of credit were $31.4 billion and $304.1 million, respectively. In addition, we provide standby letters of credit, which guarantee payment or performance of an obligation. As of December 31, 2016, the maximum amount of future payments that could potentially be required under standby letters of credit was $1.5 billion. Since many of these commitments may expire without being drawn, the total commitments do not necessarily represent future cash requirements. Our exposure to many of these commitments is mitigated by borrowing base requirements contained in loan agreements. See Note 10 to the accompanying consolidated financial statements for a full discussion of financial instruments with off-balance sheet risk.

Our liquidity plan covers certain contingencies in the event our access to normal funding sources is disrupted. We purchase only high credit quality investments to ensure our investment portfolio is readily marketable and available to serve as a source of contingent funding. Our investment portfolio may also be used as collateral to borrow funds to cover maturing liabilities. We are required by FCA regulations to exclude from our liquidity reserve certificates of deposit that no longer carry one of the two highest short-term credit ratings, non-agency MBS and ABS, which include our FHA/VA non-wrapped reperformer MBS, that are no longer rated triple-A by at least one major rating agency, corporate bonds that no longer carry one of the two highest ratings by at least one major rating agency or any investment whose market value is less than 80 percent of book value. As a result, as of December 31, 2016, $523.9 million of securities were not included in our liquidity reserve. Another $126.6 million of investment securities, primarily representing Farmer Mac MBS, are not included in our liquidity reserve as of December 31, 2016, pursuant to regulation.

We have identified certain portions of our loan portfolio that we believe could be sold or participated out in the event our access to normal funding mechanisms is disrupted. These loans serve as an additional source of contingent funding. We also maintain uncommitted lines of credit with various financial institutions that could provide liquidity during unanticipated short-term disruptions in funding. However, it is uncertain whether we would be able to sell or participate loans or fully utilize uncommitted lines of credit in the event of a systemic funding disruption.

An additional source of liquidity is cash provided by our operating activities (primarily generated from net interest income in excess of operating expenses), which totaled $1,042.6 million, $971.9 million and $911.0 million in 2016, 2015 and 2014, respectively.

The assets of the Insurance Fund would be used to repay maturing Systemwide Debt Securities, to the extent available, if no other sources existed to repay such debt. The Insurance Corporation has an agreement with the Federal Financing Bank, a federal instrumentality subject to the supervision and direction of the U.S. Treasury, pursuant to which the Federal Financing Bank would advance funds to the Insurance Corporation. Under its existing statutory authority, the Insurance Corporation may use these funds to provide assistance to the System banks in exigent market circumstances which threaten the banks' ability to pay maturing debt obligations. The agreement provides for advances of up to $10 billion and terminates on September 30, 2017, unless otherwise extended. The decision whether to seek funds from the Federal Financing Bank is in the discretion of the Insurance Corporation, and each funding obligation of the Federal Financing Bank is subject to various terms and conditions and, as a result, there can be no assurance that funding would be available if needed by the System.

Operational Risk Management

Operational risk is the risk arising from human errors or misconduct, inadequate enterprise information management, systems and technology or process failures. We utilize a risk management framework, business policies and processes, and employee training and disclosures to manage operational risk. Under this framework, business segments and support units have direct and primary responsibility and accountability for identifying, controlling and monitoring operational risk. Managers maintain controls with the objective of providing proper transaction authorization and execution, proper system operations, safeguarding of assets from misuse or theft, fraud monitoring and ensuring access, reliability and security of financial and other data. Employees receive regular training on business ethics, fraud identification and prevention, compliance with laws and regulations, and information security. Employees are also subject to standards of conduct requirements in the performance of their job responsibilities, including the periodic disclosure of potential conflicts of interest. We also mitigate operational risk through the use of insurance coverages.

Information security risk at financial institutions has increased in recent years as a result of the proliferation of new technologies and the increased activities of organized crime, hackers and other external parties. CoBank and its customers, like many other financial institutions and their customers, have been the target of cyber-attacks aimed at committing fraud. Various retail companies and financial institutions have reported being victims of cyber-attacks, resulting in, among other things, customer data being compromised, confidential material being disclosed and website service being disrupted. Cybersecurity and the continued development and enhancement of our controls, processes and systems to protect our information systems and data remain a priority for CoBank. To date, we have not experienced any material losses relating to cyber-attacks. Although we believe we have robust information security procedures and controls, our information systems, as well as those our customers use to access our services, may become the target of further cyber-attacks, which could result in material losses. Our risk and exposure to cyber-attacks remain high due to the evolving nature of such attacks.

Business continuity and disaster recovery planning are important mitigants to potential operational risks. Critical business units, including our Information Technology Division, are required to develop, maintain and test such plans at least annually to ensure that continuity and recovery activities, if needed, could sustain critical functions including systems and information supporting customers and business operations. While we believe that we have designed effective business continuity policies and procedures, there is no absolute assurance that business disruption or operational losses would not occur in the event of a disaster.

Our Risk Management Group is responsible for coordinating the completion of risk assessments and ensuring that operational risk management is integrated into business decision-making activities. Our internal audit function validates internal controls through risk-based, regular audits, and reports on the effectiveness of internal controls to executive management and the Audit Committee of the Board of Directors. In addition, the CEO reports annually to the Audit Committee of the Board of Directors on the current state of the Bank's risks and controls. The asset review function evaluates the adequacy and effectiveness of the Bank's internal control processes related to loan quality, collateral, credit administration and risk identification. The Audit Committee of the Board of Directors reviews, modifies as necessary, and approves the scope and level of review performed by the internal audit and asset review functions.

To enhance our governance and internal controls, we apply policies and procedures that mirror the material provisions of the Sarbanes-Oxley Act of 2002, including section 404, *Management Assessment of Internal Controls Over Financial Reporting.*

Strategic and Reputation Risk Management

Strategic risk is the risk to current or anticipated earnings, capital, or enterprise value arising from adverse business decisions or lack of responsiveness to changes in the banking/operating environment and is a function of the Bank's strategic goals and business strategies. Reputation risk is the risk arising from negative external perception and is inherent in all business activities. Like all businesses, the Bank is subject to a wide variety of reputation risks both within and outside its control, including credit difficulties with individual customers or industries, business disputes, lawsuits, credit market disruptions, regulatory events, public criticism by competitors, public allegations of misconduct and misunderstanding of our lending authorities or congressionally-mandated mission. As a member of the System, the Bank could be indirectly impacted by events that damage the reputation of another System entity. Competitors could engage in public criticism of the Bank and the System in an attempt to limit our market activities and lending authorities.

Effective Board governance, strong management, solid business plan execution and business practices ensuring conformity with laws and regulations and consistency with CoBank's mission are key controls in ensuring strategic alignment and managing and mitigating the Bank's reputation risk.

The Board has adopted leading industry practices in its governance of CoBank. Consistent with these practices, CoBank directors are required to meet prescribed qualifications standards prior to standing for election. Directors are required to complete initial training upon election and subsequent training during their tenure. The Board conducts an annual self-evaluation and a periodic peer evaluation. As part of its ongoing processes, the Board convenes a restructuring committee at least once every five years to review current governance practices and make recommendations for changes to those practices to ensure a strong and equitable governance structure is maintained. In 2014, a Board restructuring committee was convened to examine key aspects of governance at CoBank, including board size, director terms, voting methods, the number and geography of voting regions, and eligibility requirements for director candidates. In 2015, CoBank shareholders approved bylaw amendments implementing a plan to reduce the size of the Board of Directors. Pursuant to the plan, which began to take effect in 2016, a total of 10 Board seats will be eliminated by 2020, reducing the number of elected directors on the Board from 24 to 14. The Board will also have up to four appointed directors and will continue to have two outside directors with no customer or System affiliations.

CoBank's executive management team possesses the requisite banking skills and experience, financial expertise and sophistication to run the Bank. CoBank identifies and develops leaders from within the organization through talent management and development processes, and attracts high-quality talent from external sources.

The Bank has a variety of initiatives in place to ensure that customer-owners are communicated with openly and have access to the information they need to accurately evaluate the Bank's overall business and financial performance. Furthermore, customers, System partners and others have regular access to members of the Board of Directors and management through numerous customer and industry meetings and events held by the Bank throughout the year, which helps to ensure the Bank is aligned with the interests of its members.

The controls and processes surrounding credit risk, market risk, liquidity risk and operational risk mitigate reputation risk by lowering the likelihood of significant problems in each of those areas. In addition, the Bank has a formal crisis communications plan in place in order to help it manage communications with stakeholders if an unplanned, reputation-impacting event occurs.

We place considerable emphasis on ethical behavior and ensure that our directors and employees receive regular training related to business ethics, fraud identification and prevention, compliance with laws and regulations, and information security. In addition, as discussed on page 163, each year all employees certify their compliance with our Associate Responsibilities and Conduct Policy. Senior officers and other senior professionals with financial reporting or critical decision making responsibilities also annually certify compliance with the Bank's code of ethics.

As a mission-based lender, CoBank is committed to mission objectives that expand market penetration into an increasingly diverse customer base. Our Board-directed activities include supporting causes and programs that support the health and welfare of rural communities and the industries we serve across rural America. By strengthening relationships with key stakeholders and enriching service to agriculture, rural infrastructure and rural communities, CoBank's corporate social responsibility program aims to make a positive impact in our marketplace. The Bank also supports and participates in various committees which manage the System's reputation and business practices. These committees, which consist of representatives from Farm Credit banks and Associations, coordinate business and operational issues across System institutions.

Regulatory and Compliance Risk Management

Regulatory and compliance risk is the risk to current or anticipated earnings, capital, or reputation arising from failure to comply with laws or regulations. We are subject to a variety of regulatory and compliance risks. We actively manage and mitigate these risks through quarterly evaluation and monitoring within the Bank's Enterprise Risk Management framework. We have designated a Chief Regulatory, Legislative and Compliance Officer as an integrated second line of defense along with the Chief Risk Officer and Chief Credit Officer roles. As a second line of defense, we monitor and comment on emerging regulatory requirements, assist business lines with implementation of new requirements, and review the Bank's compliance with legal and regulatory requirements on an as-needed basis or to address complex compliance areas. Our risk management of regulatory and compliance risk is further closely coordinated with the General Counsel to address potential litigation risk that may arise from ongoing business activities. We also maintain a third line of defense with internal audit and asset review which, among other functions, performs reviews that include evaluation of compliance with regulatory requirements. We are also at times being reviewed by the FCA and other governmental authorities, which could lead to enforcement actions, fines and penalties or the assertion of private litigation claims and damages. While we believe that we have adopted appropriate risk management and compliance programs, legal and compliance risks will continue to exist and additional legal proceedings and other contingencies, the outcome of which cannot be predicted with certainty, will arise from time to time.

Other Risk Factors

Joint and Several Liability for the Debt of the Farm Credit System

Farm Credit System banks and Associations are not authorized to accept deposits and therefore cannot use deposits as a funding source. Instead, banks raise funds for their operations primarily through Systemwide Debt Securities issued on the banks' behalf by the Funding Corporation. Systemwide Debt Securities are the joint and several liabilities of the System banks and are not obligations of, nor are they guaranteed by, the U.S. government or any agency or instrumentality thereof, other than the System banks. Under the Farm Credit Act, each System bank is primarily liable for the portion of the Systemwide Debt Securities issued on its behalf. At December 31, 2016, we were primarily liable for $113.3 billion of Systemwide Debt Securities. Additionally, each System bank is contingently liable for Systemwide Debt Securities of the other System banks. At December 31, 2016, the total aggregate principal amount of the outstanding Systemwide Debt Securities was $257.8 billion.

Although the System banks have established mutual covenants and measures, which are monitored on a quarterly basis, there is no assurance that these would be sufficient to protect a System bank from liability should another System bank default and the Insurance Fund be insufficient to cure the default. See Note 5 to the accompanying consolidated financial statements for a more complete description of the interbank agreements among the System banks.

The Insurance Fund, which totaled $4.5 billion as of December 31, 2016, is available from the Insurance Corporation to ensure the timely payment by each System bank of its primary obligations on Systemwide Debt Securities and can also be used by the Insurance Corporation for its operating expenses and for other mandatory and permitted purposes. Under the Farm Credit Act, before joint and several liability can be invoked, available amounts in the Insurance Fund would first be exhausted. There is no assurance, however, that the Insurance Fund would have sufficient resources to fund a System bank's defaulted obligations. If the Insurance Fund was insufficient, then the remaining System banks would be required to pay the default amount in proportion to their respective available collateral positions. Available collateral approximates the amount of total shareholders' equity of the System banks. The Insurance Corporation does not insure any payments on our subordinated debt, certain other debt obligations, preferred stock or common stock. See Note 5 to the accompanying consolidated financial statements for more information about the Insurance Fund.

The System does not have a guaranteed line of credit from the U.S. Treasury or the Federal Reserve. However, the Insurance Corporation has an agreement with the Federal Financing Bank, a federal instrumentality subject to the supervision and direction of the U.S. Treasury, pursuant to which the Federal Financing Bank would advance funds to the Insurance Corporation. Under its existing statutory authority, the Insurance Corporation may use these funds to provide assistance to the System banks in exigent market circumstances which threaten the banks' ability to pay maturing debt obligations. The agreement provides for advances of up to $10 billion and terminates on September 30, 2017, unless otherwise extended. The decision whether to seek funds from the Federal Financing Bank is at the discretion of the Insurance Corporation, and each funding obligation of the Federal Financing Bank is subject to various terms and conditions and, as a result, there can be no assurance that funding would be available if needed by the System.

To the extent we must fund our allocated portion of another System bank's portion of the Systemwide Debt Securities due to a default, our earnings and total shareholders' equity would be reduced, possibly materially.

Reforms Impacting Government Sponsored Enterprises or Tax-Exempt Business Activities Could Have an Adverse Impact on our Business

The System is a GSE and, as a member of the System, CoBank benefits from ready access to debt funding and favorable debt-funding costs. Our individual credit ratings are also positively impacted by the GSE status of the System. In addition, as provided in our charter, portions of our business activities, including lending to Associations, are exempt from many forms of taxation, including federal income taxes.

As a direct result of the financial difficulties experienced by the housing-related GSEs, with both Fannie Mae and Freddie Mac having been placed into conservatorship by the U.S. government, GSE status has been and will continue to be a topic of debate and concern to various stakeholders, including the public and Congress. Congressional deliberations over structural reform of the housing-related GSEs began in 2011 and are likely to continue for a number of years. The Bank and the System are under the jurisdiction of the U.S. Senate and House of Representatives Committees on Agriculture and thus have not been the subject of this specific congressional scrutiny. However, there could be some risk that further efforts to reform GSEs would impact the System's status or erode some of the GSE-related benefits that it currently enjoys, including favorable funding costs and funding flexibility.

Finally, ongoing debate over federal income tax reform could ultimately lead to the elimination of the tax-exempt status of certain of our business activities, which would increase the amount of income tax we are required to pay. Potential changes in the tax laws related to cooperatives could also negatively impact System entities and/or their customers.

Our Funding Costs Could Be Negatively Impacted by Downgrades of the Long-Term U.S. Sovereign Credit Rating and the System's Long-Term Debt Rating

As a member of the System, we have historically benefited from the favorable funding costs and funding flexibility associated with the debt securities issued through the Funding Corporation. The credit ratings of GSEs, including the System, are influenced by the sovereign credit rating of the United States. S&P currently maintains the long-term sovereign credit rating of the United States of AA+, which continues to drive the AA+ long-term debt rating of the System. Both Moody's Investors Service (Moody's) and Fitch Ratings Inc. (Fitch) currently maintain the long-term sovereign credit rating for the United States and its agency securities of AAA, which continues to drive the AAA long-term debt rating of the System. Any future downgrades could negatively impact funding costs, earnings and funding flexibility for CoBank and other System institutions.

Our Funding is Dependent Upon the System's Ability to Access the Capital Markets

The primary source of liquidity for CoBank and the other System institutions is the ability to issue Systemwide Debt Securities. This access has provided the System with a dependable source of funding. The System's ability to continue to issue Systemwide Debt Securities depends, in part, on the conditions in the capital markets, which are outside the System's control. As a result, the System cannot make any assurances that it will be able to fund itself by issuing Systemwide Debt Securities. If the System cannot issue Systemwide Debt Securities or cannot access the capital markets, CoBank's funding would be negatively impacted, which would have a negative effect on our financial condition and results of operations, which could be material.

We are Subject to Liquidity Risk with Respect to Certain Investments and Derivatives

We are subject to liquidity risk in the course of our investing activities, particularly with respect to our investments in non-agency MBS and ABS, FHA/VA non-wrapped reperformer MBS and corporate bonds, which together represent approximately 3 percent of our investment securities held for liquidity as of December 31, 2016. In volatile market conditions, it could be difficult to sell such investments, if the need arises, and the discounts from face value would likely be significant. In addition, because of the inherent uncertainty of determining the fair value of investments that do not have a readily available market value, the fair value of our investments may differ significantly from the values that would have been used had a ready market existed for the investments.

Our 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 collateral exchanged between parties occurs daily with zero posting thresholds for all counterparties. Likewise, the Bank is required to pledge initial and variation margin related to our cleared derivative transactions. As a result of these derivative contracts, we are exposed to liquidity risk when changes in interest rates require us to post collateral to our counterparties, or pledge additional margin for changes in the fair value of cleared derivatives. As of December 31, 2016, our counterparties had posted $85.9 million in cash and $6.9 million in securities as collateral with us. Additionally, initial and variation margin totaling $22.4 million and $70.4 million, respectively, was pledged for our cleared derivatives as of December 31, 2016.

CoBank and Our Affiliated Associations Face Intense Competition

CoBank and our affiliated Associations face intense competition from commercial banks, thrift institutions, insurance companies, finance companies, mortgage banking companies, other GSEs, U.S. government agencies and the U.S. government. Future results may become increasingly sensitive to fluctuations in the volume and cost of lending activities. There can be no assurance that CoBank and our affiliated Associations will be able to continue to compete successfully in the markets we serve.

Relationship with the Federal Agricultural Mortgage Corporation

Farmer Mac is a federally chartered corporation that was established to create a secondary market for agricultural mortgages and other loans. Since its formation, Farmer Mac's business model has evolved such that it now retains on its balance sheet agricultural mortgages, rural electric loans and other loans similar to those made by System entities. Although Farmer Mac is statutorily defined as an institution of the System and is examined and regulated by the FCA, it is financially and operationally separate and distinct from the System, and any reference to "the System" herein does not include Farmer Mac. Neither CoBank nor any other System entity is liable for any debt or obligation of Farmer Mac. Further, the assets of the Insurance Fund do not support any debt or obligation of Farmer Mac nor do the System's independent credit ratings apply to Farmer Mac, which has not been rated by any NRSRO. Except for contractual obligations arising from business transactions between Farmer Mac and certain System institutions, Farmer Mac is not liable for any debt or obligation of any System entity, including Systemwide Debt Securities, either directly or on a joint and several basis.

We believe that if Farmer Mac, as an institution of the System, were to experience financial difficulty, it could create financial, reputational, political and regulatory risk to the System.

Our Ability to Attract and Retain Qualified Board Members, Senior Officers and Employees is Critical to Successfully Fulfilling Our Mission

The success of CoBank is dependent on the talents and efforts of our Board members, senior officers and employees, and the competition for individuals who possess the requisite knowledge of the banking, agricultural, finance and other relevant industries is intense. The failure to attract and retain qualified Board members, senior officers and employees could adversely affect our business performance, competitive position and the ability to fulfill our mission.

Liquidity and Capital Resources

Funding

We use our capital in addition to short-term and long-term debt to fund our assets. Our debt consists primarily of Systemwide Debt Securities issued on CoBank's behalf by the Funding Corporation. Refer to Notes 5 and 6 to the accompanying consolidated financial statements for additional information regarding our debt obligations.

As a member of the System, CoBank has traditionally maintained ready access to debt funding. As of December 31, 2016, Systemwide Debt Securities were rated AAA by Moody's and Fitch, and AA+ by S&P.

Investment Securities, Cash, Federal Funds Sold and Other Overnight Funds

We hold investment securities, cash, federal funds sold and other overnight funds primarily to maintain a liquidity reserve and to manage short-term surplus funds. In accordance with Board-approved policies, we purchase high credit quality investment securities with the aim of ensuring that the investment portfolio is readily marketable and available to serve as a source of liquidity in the event of disruption to our normal funding sources.

Our investment securities increased $3.3 billion to $27.8 billion at December 31, 2016 compared to $24.5 billion at December 31, 2015. The increase was driven by the purchase of U.S. Treasury securities to enhance our liquidity reserve in response to loan growth.

The following table summarizes our investment securities and related unrealized gains/losses by asset class.

Investment Securities ($ in Millions)

December 31, 2016	Amortized Cost	Fair Value	Unrealized Gains (Losses)
Certificates of Deposit	$ 775	$ 776	$ 1
U.S. Treasury Debt	11,189	11,141	(48)
U.S. Agency Debt	5,132	5,144	12
Residential Mortgage-Backed:			
Ginnie Mae	538	541	3
U.S. Agency	6,714	6,711	(3)
FHA/VA Non-Wrapped Reperformer	268	275	7
Non-Agency	63	71	8
Commercial Mortgage-Backed:			
U.S. Agency	2,649	2,641	(8)
Agricultural Mortgage-Backed:			
Farmer Mac	99	97	(2)
Corporate Bonds	40	40	-
Asset-Backed and Other	319	328	9
Total	$ 27,786	$ 27,765	$ (21)
December 31, 2015			
U.S. Treasury Debt	$ 7,174	$ 7,188	$ 14
U.S. Agency Debt	5,842	5,857	15
Residential Mortgage-Backed:			
Ginnie Mae	901	906	5
U.S. Agency	7,762	7,763	1
FHA/VA Non-Wrapped Reperformer	336	342	6
Non-Agency	118	129	11
Commercial Mortgage-Backed:			
U.S. Agency	1,986	1,982	(4)
Agricultural Mortgage-Backed:			
Farmer Mac	126	124	(2)
Corporate Bonds	166	166	-
Asset-Backed and Other	36	47	11
Total	$ 24,447	$ 24,504	$ 57

At each reporting period, we perform impairment assessments of our investment securities based on evaluations of both current and future market and credit conditions and expected cash flows of these securities. Subsequent changes in market and credit conditions or expected cash flows could change these evaluations.

As all of our investment securities are classified as "available for sale", we recognize changes in the fair value of our investment securities in accumulated other comprehensive income (loss), a component of shareholders' equity, unless losses are credit-related and considered other-than-temporary, in which case that portion of the loss is recorded in earnings. We recorded unrealized losses on our investment securities of $21.1 million in 2016 compared to gains of $57.4 million in 2015. The unrealized losses/gains recorded in both periods primarily related to the impact of changes in market interest rates on the valuations of fixed-rate securities.

Approximately 94 percent of our investment securities are composed of securities that carry an explicit or implicit government guarantee. Another 3 percent are certificates of deposit with commercial banks which carry the highest short-term credit rating. Credit risk in our investment portfolio primarily relates to our FHA/VA non-wrapped reperformer MBS (i.e., investment securities where residential mortgage loans serving as collateral were cured after a default), non-agency MBS, corporate bonds and ABS. These securities collectively total $714.2 million (fair value) or 3 percent of our total investment securities as of December 31, 2016. Credit risks associated with the portfolio of FHA/VA non-wrapped reperformer MBS and certain other investment securities are discussed on page 49. Credit risk in our investment portfolio also arises from the inability of guarantors and third-party providers of other credit enhancements to meet their contractual obligations to us.

We recorded $0.8 million of other-than-temporary impairment losses related to one investment security in 2016. In 2015, we recorded $11.1 million in impairment losses related to two FHA/VA non-wrapped reperformer MBS due to lower projected cash flows resulting from loan modification activity in the underlying collateral. One of these securities was subsequently sold during 2015 for total proceeds of $21.3 million, which resulted in a gain of $0.8 million. We recorded no impairment losses on investment securities in 2014.

In 2016, we sold six U.S. agency debt investment securities and a U.S. Treasury debt investment security with a combined book value of $751.5 million for total proceeds of $752.4 million for balance sheet positioning purposes. We also sold three FHA/VA non-wrapped reperformer MBS with a combined book value of $52.0 million for total proceeds of $54.9 million. These securities had been previously impaired and were excluded from our liquidity reserve, and were sold due to favorable market conditions. In addition, we sold six non-impaired corporate bonds with a combined book value of $76.0 million for total proceeds of $76.8 million. These corporate bonds were sold to manage credit exposure.

In 2015, we sold three non-agency ABS and one agency debt security with a combined book value of $127.8 million for total proceeds of $149.6 million. The three non-agency ABS had been previously impaired and were excluded from our liquidity reserve, and were sold due to favorable market conditions. For income tax purposes, the sale of these previously-impaired securities generated a capital loss. The sale of the agency debt security was consummated in order to generate capital gains and thereby utilize the substantial majority of this capital loss.

Derivatives

As described previously, we use derivatives in part to manage our liquidity position. Derivatives are recorded at fair value as assets or liabilities in the accompanying consolidated balance sheets. Changes in the fair value of these derivatives are accounted for as gains or losses through current period earnings or as a component of accumulated other comprehensive income (loss), depending on the use of the derivatives and whether they qualify for hedge accounting treatment. Net changes in the fair value of derivatives and hedged items recorded in the accompanying consolidated statements of income did not result in a net gain or loss for 2016 compared to total gains of $3.4 million for 2015. Changes in the fair value of derivatives recorded as other comprehensive income (loss) totaled gains of $2.0 million in 2016 and losses of $9.7 million in 2015.

Capital

We believe that a sound capital position is critical to our long-term financial success and future growth. Our shareholders' equity is primarily composed of common and preferred stock and retained earnings, and totaled $8.6 billion and $7.8 billion at December 31, 2016 and 2015, respectively. The increase in 2016 was primarily due to our earnings of $945.7 million and the issuance of preferred stock, as discussed below. These items were partially offset by $473.9 million in cash patronage, $77.2 million in preferred stock dividends and $59.9 million in other comprehensive loss. Other comprehensive loss for 2016 was driven by changes in the fair values of fixed-rate investment securities due to changes in market interest rates.

In December 2016, our shareholders approved an increase in the amount of preferred stock that CoBank may have outstanding at any time from $1.5 billion to $2.5 billion effective January 1, 2017, and provided authorization for the Bank to issue preferred stock up to the new limit through December 31, 2026. These measures allow us to access outside capital more quickly and efficiently in response to dynamic market conditions, without the necessity of obtaining shareholder approval for each issuance. However, any preferred stock issuances would still require approval from the Board of Directors and the FCA. As of December 31, 2016, we had $1.5 billion of preferred stock outstanding.

On October 1, 2014, we redeemed all of our outstanding Series D non-cumulative perpetual preferred stock totaling $136.8 million. We used available cash to effectuate this redemption. The dividend rate for our Series D preferred stock was 11.0 percent through the date of redemption.

On November 26, 2014, we issued $300 million of Series H non-cumulative perpetual preferred stock. We used the proceeds from the Series H preferred stock to increase our regulatory capital pursuant to FCA regulations and for general corporate purposes. Dividends on Series H preferred stock, if declared by the Board of Directors in its sole discretion, are non-cumulative and are payable quarterly at a fixed annual rate equal to 6.20 percent from the date of issuance up to, but excluding, January 1, 2025. Thereafter, dividends will accrue at an annual rate equal to 3-month USD LIBOR plus 3.744 percent.

On April 8, 2016, we issued $375 million of Series I non-cumulative perpetual preferred stock. We used the net proceeds from the Series I preferred stock issuance to increase our regulatory capital pursuant to FCA regulations and for general corporate purposes. Dividends on the Series I preferred stock, if declared by the Board of Directors in its sole discretion, are non-cumulative and are payable semi-annually in arrears beginning on October 1, 2016 and will accrue at a fixed annual rate of 6.25 percent from the date of issuance up to, but excluding, October 1, 2026. Thereafter, dividends will accrue at an annual rate equal to the 3-month USD LIBOR plus 4.66 percent and will be payable quarterly.

All of our outstanding preferred stock is included in permanent capital, total surplus, and core surplus for regulatory capital purposes. In addition, all of our outstanding preferred stock ranks equally, both as to dividends and upon liquidation, and senior to all of our outstanding common stock.

For regulatory capital purposes, subject to certain limitations, subordinated debt is included in permanent capital. Through December 31, 2016, subordinated debt was included as total surplus and excluded from total liabilities for purposes of calculating the net collateral ratio, also subject to certain limitations. We had $500.0 million of subordinated debt outstanding at December 31, 2016 compared to $904.7 million at December 31, 2015 and 2014, respectively. On April 15, 2016, we redeemed all of our outstanding 7.875 percent subordinated notes due in 2018 totaling $404.7 million. The redemption price was 100 percent of the principal amount, together with accrued and unpaid interest up to, but excluding, the date of redemption. For information relating to a complaint filed by a number of investors who had held the subordinated notes alleging CoBank impermissibly redeemed the subordinated notes, see Notes 6 and 15 to the accompanying consolidated financial statements.

We may from time to time seek to retire our outstanding debt or equity securities through calls, cash purchases and/or exchanges, in open market purchases, privately negotiated transactions or otherwise. Such calls, repurchases or exchanges, if any, will depend on prevailing market conditions, the Bank's capital position and liquidity requirements, contractual restrictions, changes to capital regulations and other factors.

FCA regulations as prescribed through December 31, 2016 include requirements to maintain regulatory capital at or above minimum levels for our permanent capital ratio, total surplus ratio, core surplus ratio, and net collateral ratio. The calculations of these ratios are summarized in Note 7 to the accompanying consolidated financial statements. Pursuant to FCA guidance, a portion of our common stock is included in core surplus, subject to certain conditions. Through December 31, 2016, the FCA required that we also calculate our core surplus ratio excluding common stock and had established a 3.0 percent minimum for such ratio. As of December 31, 2016, our core surplus ratio excluding common stock was 9.55 percent. As displayed in the following table, at December 31, 2016, 2015 and 2014, we exceeded the minimum regulatory capital requirements, which are noted parenthetically. If these capital standards are not met, the FCA can impose restrictions, including limiting our ability to pay patronage distributions, retire equities and pay preferred stock dividends.

Selected Capital Information ($ in Millions)

December 31,	2016	2015	2014
Total Shareholders' Equity	**$ 8,574**	$ 7,810	$ 7,370
Total Shareholders' Equity/Total Assets	**6.80 %**	6.65 %	6.86 %
Permanent Capital Ratio (7.0%)	**15.47**	14.95	15.70
Total Surplus Ratio (7.0%)	**14.52**	14.07	14.81
Core Surplus Ratio (5.59%)(1)	**11.02**	10.29	10.47
Net Collateral Ratio (104.0%)(2)	**106.94**	106.82	107.22

(1) The regulatory mnimum core surplus ratio is 3.5 percent, but the FCA requires the higher 5.59 percent during a period in which we include a portion of our common stock as core surplus.

(2) The regulatory minimum net collateral ratio is 103.0 percent, but the FCA requires the higher 104.0 percent during a period in which we have subordinated debt outstanding.

New Capital Regulations

Under the Dodd-Frank Act, which was signed into law in 2010, the federal banking agencies, the U.S. Securities and Exchange Commission, the Commodity Futures Trading Commission and a variety of other regulatory agencies are required to adopt a broad range of new rules and regulations that will significantly reform the supervision and regulation of the financial services industry. The Dodd-Frank Act largely preserves the authority of the FCA as the System's regulator by excluding System institutions from certain of the law's provisions.

Additionally, the Basel Committee on Banking Supervision (the Basel Committee) released consultative proposals in 2009 aimed at strengthening global capital and liquidity regulations. The Basel Committee adopted revised versions of the consultative proposals as definitive frameworks in 2010, and made further revisions in 2011. This framework is often referred to as "Basel III." In 2013, the U.S. banking agencies approved final changes that substantially amended their regulatory capital requirements to, among other things, implement Basel III in the United States effective January 1, 2014, with mandatory compliance deferred until January 1, 2015 for banks that are not "advanced approach" banks.

On March 10, 2016, the FCA adopted final rules (the New Capital Regulations) relating to regulatory capital requirements for System banks, including CoBank, and Associations. The New Capital Regulations took effect January 1, 2017. The stated objectives of the New Capital Regulations are as follows:

- To modernize capital requirements while ensuring that System institutions continue to hold sufficient regulatory capital to fulfill the System's mission as a government-sponsored enterprise;
- To ensure that the System's capital requirements are comparable to the Basel III framework and the standardized approach that the federal banking regulatory agencies have adopted, but also to ensure that the rules recognize the cooperative structure and the organization of the System;
- To make System regulatory capital requirements more transparent; and
- To meet certain requirements of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the Dodd-Frank Act).

The New Capital Regulations, among other things, replace existing core surplus and total surplus requirements with common equity tier 1 (CET1), tier 1 and total capital (tier 1 plus tier 2) risk-based capital ratio requirements. The New Capital Regulations also add a tier 1 leverage ratio for all System institutions, which replaces the existing net collateral ratio for System banks. In addition, the New Capital Regulations establish a capital conservation buffer and a leverage buffer; enhance the sensitivity of risk weightings; and, for System banks only, require additional public disclosures. The revisions to the risk weightings include alternatives to the use of credit ratings, as required by the Dodd-Frank Act.

The New Capital Regulations set the following minimum risk-based requirements:

- A CET1 capital ratio of 4.5 percent;
- A tier 1 capital ratio (CET1 capital plus additional tier 1 capital) of 6 percent; and
- A total capital ratio (tier 1 plus tier 2) of 8 percent.

The New Capital Regulations also set a minimum tier 1 leverage ratio (tier 1 capital divided by total assets) of 4 percent, of which at least 1.5 percent must consist of unallocated retained earnings (URE) and URE equivalents, which are nonqualified allocated equities with certain characteristics of URE.

The New Capital Regulations establish a capital cushion (capital conservation buffer) of 2.5 percent above the risk-based CET1, tier 1 and total capital requirements. In addition, the New Capital Regulations establish a leverage capital cushion (leverage buffer) of 1 percent above the tier 1 leverage ratio requirement. If capital ratios fall below the regulatory minimum plus buffer amounts, capital distributions (equity redemptions, cash dividend payments, and cash patronage payments) and discretionary senior executive bonuses are restricted or prohibited without prior FCA approval. The New Capital Regulations establish a three-year phase-in of the capital conservation buffer beginning January 1, 2017. There is no phase-in of the leverage buffer.

We were in compliance with the requirements of the New Capital Regulations on January 1, 2017.

Capital Adequacy and Business Planning

In conjunction with the annual business and financial planning process, the Board of Directors reviews and approves a capital adequacy plan which includes target levels for capital and capital ratio baselines. When reviewing the capital adequacy plan and setting an appropriate target equity level, the Board considers the following: the Bank's overall risk profile; capital composition; loan volume projections; anticipated future capital needs; and the Bank's capital levels in comparison to commercial banks and regulatory minimum capital standards. As of December 31, 2016, the Board-established capital ratio baselines were 11 percent for the permanent capital and total surplus ratios, 7 percent for the core surplus ratio, 6 percent for the core surplus ratio excluding common stock, and 106 percent for the net collateral ratio. The Board-established baselines under the New Capital Regulations, which became effective January 1, 2017, are 8 percent for the CET1 capital ratio, 9.5 percent for the tier 1 capital ratio, 11.5 percent for the total capital ratio and 5.5 percent for the tier 1 leverage ratio. We were in compliance with the new baselines on January 1, 2017.

The Board also balances the amount required to properly capitalize the Bank with the desire to distribute a level of patronage that provides appropriate returns to our customer-owners. The Board may increase or decrease these patronage levels (provided we remain within the regulatory capital minimums) based on its ongoing evaluation of the Bank's business. As a result, there is no assurance that patronage will remain at current levels.

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.

Capital Plans

In accordance with the Farm Credit Act, cooperatives and other eligible borrowers are required to purchase equity in CoBank as a condition of borrowing. Eligible borrowers that borrow on a patronage basis have voting rights while they are active borrowers. Generally, for borrowers other than affiliated Associations, the minimum initial borrower investment is equal to the lesser of one thousand dollars or 2 percent of the amount of the loan. The minimum initial investment is generally received by CoBank in cash at the time the borrower receives the loan proceeds. Affiliated Associations provide an initial and ongoing voting stock investment of 4 percent of their average outstanding loan balance. Collectively, the customer-owners that hold voting stock elect our Board of Directors. We operate on a cooperative basis and return a significant portion of our earnings to our customer-owners in the form of patronage distributions.

We have five capital plans that govern the level of capital investment required by customer-owners. These include a plan for cooperative customers, a plan for affiliated Associations, a plan for nonaffiliated entities, a plan for loan participations purchased from System entities and a plan for financial service members.

The targeted equity level for the cooperative capital plan is 8 percent of the 10-year historical average loan volume. Additionally, when a borrower's loans are paid in full, stock is retired over a 10-year loan base period beginning in the year following loan payoff, subject to Board approval and compliance with minimum regulatory capital requirements. The targeted patronage rate for the cooperative capital plan is 100 basis points of the current year average loan volume. The cash portion of patronage is 75 percent for all cooperative capital plan members with the remaining portion paid in common stock.

The capital plan for loan participations purchased from System entities is similar to the cooperative capital plan described above.

The targeted equity level for the affiliated Association capital plan is 4 percent of the one-year historical average loan volume. There is no stock retirement feature for this capital plan. The targeted patronage rate for the affiliated Association capital plan is 45 basis points of the current year average loan volume, with all patronage being paid in cash.

The targeted equity level for the nonaffiliated entity capital plan is 4 percent of the five-year historical average loan volume. Additionally, when these borrowers' loans are paid in full, stock is retired over a five-year loan base period beginning in the year following loan payoff, subject to Board approval and compliance with minimum regulatory capital requirements. The targeted patronage rate for the nonaffiliated entity capital plan is 45 basis points of the current year average loan volume. The cash portion of patronage is 20 percent for all nonaffiliated entity capital plan members, with the remaining portion paid in common stock.

In 2015, CoBank shareholders approved bylaw amendments recommended by the Board to authorize the issuance of a single share of $100 dollars par value Class A common stock to eligible customers receiving certain financial services from the Bank who are not otherwise shareholders. These members are not entitled to vote or receive patronage. When a financial service member's activity concludes, the stock requirement may be retired, subject to Board approval and compliance with minimum regulatory capital requirements. This new capital plan was effective as of January 1, 2016.

All patronage payments and retirements of equity require the prior approval of our Board of Directors, which may increase or decrease such payments based upon the Bank's current or projected business performance and capital levels. In addition, patronage payments can only be made if the Bank is in compliance with minimum regulatory capital requirements and preferred stock dividends for the immediately preceding period have been paid in full.

Patronage distributions are made in the form of cash and common stock, as shown in the following table. Eligible shareholders will receive patronage distributions from CoBank for 2016 in the first quarter of 2017. Patronage distributions for 2016 were higher than 2015 primarily as a result of loan growth in each of our operating segments.

Patronage Distributions ($ in Thousands)

Year Ended December 31,	2016	2015	2014
Common Stock	**$ 114,258**	$ 98,117	$ 88,745
Cash	**473,853**	415,982	378,735
Total Patronage Distributions	**$ 588,111**	$ 514,099	$ 467,480
Patronage Distributions/ Total Average Common Stock Owned by Active Borrowers	**21.32 %**	19.76 %	18.59 %

Critical Accounting Estimates

Management's discussion and analysis of the financial condition and results of operations are based on the Bank's consolidated financial statements, which we prepare in accordance with accounting principles generally accepted in the United States of America (GAAP). In preparing these financial statements, we make estimates and assumptions. Our financial position and results of operations are affected by these estimates and assumptions, which are integral to understanding reported results.

Note 1 to the accompanying consolidated financial statements contains a summary of our significant accounting policies. We consider certain of these policies to be critical to the presentation of our financial condition, as they require us to make complex or subjective judgments that affect the value of certain assets and liabilities. Some of these estimates relate to matters that are inherently uncertain. Most accounting policies are not, however, considered critical. Our critical accounting policies relate to determining the level of our allowance for credit losses and the valuation of financial instruments with no ready markets (primarily derivatives and certain investment securities). Management has reviewed these critical accounting policies with the Audit Committee of the Board of Directors.

Certain of the statements below contain forward-looking statements, which are more fully discussed on page 68.

Allowance for Credit Losses

Our allowance for loan losses is an adjustment to the value of our total loan and finance lease portfolio for inherent credit losses related to outstanding balances. We provide line of credit financing to customers to cover short-term and variable needs, the usage of which, particularly for farm supply and grain marketing customers, is influenced by a number of factors, including changing commodity prices and supplies. As a result, we have significant unfunded commitments for which we maintain a separate reserve. This reserve is reported as a liability on the Bank's consolidated balance sheet. We refer to the combined amounts of the allowance for loan losses and the reserve for unfunded commitments as the "allowance for credit losses."

Our allowance for credit losses reflects our assessment of the risk of probable and estimable loss related to outstanding balances and unfunded commitments in our loan and finance lease portfolio. The allowance for credit losses is maintained at a level consistent with this assessment, considering such factors as loss experience, portfolio quality, portfolio concentrations, production conditions, modeling imprecision, our mission, and economic and environmental factors specific to our business segments.

The allowance for credit losses is based on our regular evaluation of our loan and finance lease portfolio. We establish the allowance for credit losses via a process that begins with estimates of probable loss within the portfolio. Our methodology consists of analysis of specific individual credits and evaluation of the remaining portfolio. We evaluate significant individual credit exposures, including adversely classified loans, based upon the borrower's overall financial condition, resources, payment record and projected viability. We also evaluate the prospects for support from any financially viable guarantors and the estimated net realizable value of any collateral. Senior-level committees approve specific credit and reserve-related activities. The Audit and Risk Committees of the Board of Directors review the allowance for credit losses on a quarterly basis, and the Board of Directors approves the year-end allowance for credit losses.

In 2014, we enhanced our process for estimating the allowance for credit losses. These enhancements included updating the probability of default and loss given default factors applied to non-impaired commercial loans; using a statistical model to estimate losses related to concentration risk by comparing CoBank's portfolio characteristics to a more typical commercial loan portfolio; and adjusting certain factors used in estimating losses related to unfunded lending commitments to better reflect industry-specific risks. We made further modifications to our methodology related to non-impaired commercial loans in 2015. These enhancements included incorporating a view of probability of default over a longer period; aligning certain loss given default assumptions more closely with internal guidance; and modifying the loss emergence period assumption. While the changes in both 2014 and 2015 did not materially impact the overall level of the allowance for credit losses, they did impact the distribution of the allowance for credit losses between our Agribusiness and Rural Infrastructure operating segments. No significant changes were made to our methodology for estimating the allowance for credit losses in 2016.

Our determination of the allowance for credit losses for commercial loans is sensitive to the assigned risk ratings and probabilities of default, assumptions surrounding loss given default and loss emergence timing and the overall level of exposure within our loan portfolio. Changes in these components underlying this critical accounting estimate could increase or decrease our provision for loan losses. Such a change would increase or decrease net income and the related allowance for loan losses and reserve for unfunded commitments, which could have a material effect on the Bank's financial position and results of operations.

To analyze the impact of assumptions on our provision for loan losses and the related allowance for credit losses, we changed a critical assumption to reflect the impact of deterioration or improvement in loan quality. In the event that 10 percent of loans (calculated on a pro-rata basis across all risk ratings), excluding wholesale loans to Associations and guaranteed loans, experienced downgrades or upgrades of one risk rating category, the provision for loan losses and related allowance for credit losses would have increased or decreased by $38.2 million at December 31, 2016.

Valuation of Financial Instruments with No Ready Markets and Other-Than-Temporary Impairment Analyses

We use fair value measurements to record fair value adjustments to certain financial instruments and to determine fair value disclosures. All of our investment securities and derivative instruments are reported at their estimated fair value on the accompanying consolidated balance sheets. We also estimate the amount of other-than-temporary impairment for certain investment securities.

As discussed in Note 12 to the accompanying consolidated financial statements, we maximize the use of observable inputs when measuring fair value. Observable inputs reflect market-derived or market-based information obtained from independent sources, while unobservable inputs primarily reflect our estimates about market data.

The fair value of our derivative financial instruments is the estimated amount to be received to sell a derivative asset or paid to transfer or extinguish a derivative liability in active markets among willing participants at the reporting date. Estimated fair value is determined through internal market valuation models. These models use an income approach and incorporate benchmark interest rate curves, volatilities, counterparty credit quality, and other inputs that are observable directly or indirectly in the marketplace. For derivative transactions with dealers, we compare internally calculated derivative valuations to counterparty results. The fair value of collateral assets and liabilities related to derivative contracts is their face value, plus accrued interest, as these instruments are cash balances; therefore, fair value approximates face value.

The fair value of nearly our entire investment securities portfolio is determined by a third-party pricing service that uses valuation models to estimate current market prices. For a small portion of our investment securities, market value is calculated internally using third-party models. Inputs and assumptions related to all of these models are typically observable in the marketplace. Such models incorporate prepayment assumptions and underlying mortgage- or asset-backed collateral information to generate cash flows that are discounted using appropriate benchmark interest rate curves and volatilities. These third-party valuation models also incorporate information regarding non-binding broker/dealer quotes, available trade information, historical cash flows, credit ratings, and other market information. Such valuations represent an estimated exit price, or price to be received by a seller in active markets to sell the investment securities to a willing participant.

Credit risk in our portfolio of investment securities is primarily limited to the 3 percent of securities that are certificates of deposit with commercial banks, with which the counterparties carry the highest short-term credit rating, and the 3 percent of securities that do not carry an explicit or implied government guarantee. In instances where the fair value of investment securities is less than the carrying value, we estimate the component of unrealized losses attributable to credit losses. In 2015, we enhanced our process for estimating such losses. These enhancements primarily included using third-party credit and cash flow models which utilize loan level data to project future performance. These improvements did not materially impact the overall level of expected losses. Model projections are influenced by such factors as interest rates, economic conditions, including housing prices, and the performance, type and age of collateral. The model considers projected prepayment rates, current and historical loan level performance information and loss severity estimates. Loss severity results are derived using model-estimated home price assumptions at the time of default.

All models used for these financial statement estimates or for independent risk monitoring purposes are periodically reviewed and validated in accordance with our policies.

The degree of management judgment involved in determining the fair value and impairment of a financial instrument is dependent upon the availability of observable market inputs. For financial instruments that trade actively and have observable market prices and inputs, there is minimal subjectivity involved. When observable market prices and inputs are not fully available, management judgment is necessary to estimate fair value and impairment. Changes in market conditions may reduce the availability of market prices or observable data. For example, reduced liquidity in the capital markets or changes in secondary market activities could result in observable market inputs becoming unavailable. When market data is not available, we use valuation techniques requiring more management judgment to estimate the appropriate fair value measurement and level of impairment, if any. Changes in assumptions could affect these estimates.

At December 31, 2016, approximately 23 percent of total assets, or $28.9 billion, consisted of financial instruments recorded at fair value. Over 99 percent of these financial instruments used valuation methodologies involving market-based or market-derived information to measure fair value. The remaining financial instruments were measured using model-based techniques, consisting of our Farmer Mac MBS and a small portion of our ABS. At December 31, 2016, less than 1 percent of total liabilities, or $0.3 billion, consisted of financial instruments recorded at fair value, the substantial majority of which are valued using methodologies involving market-based or market-derived information. The fair value of investment securities with previously recorded other-than-temporary impairment losses was $35.0 million at December 31, 2016.

Recent Accounting Pronouncements

In August 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU), "Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments." The ASU is intended to reduce diversity in practice in how certain transactions are classified in the statement of cash flows. The guidance addresses, among other issues, the presentation of debt prepayment or extinguishment costs and settlement of zero-coupon debt instruments in the statement of cash flows. For public business entities, the ASU becomes effective for financial statements issued for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early application is permitted, provided that all of the amendments are adopted in the same period. We are reviewing the guidance to determine the effect on our consolidated statement of cash flows.

In June 2016, the FASB issued ASU, "Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments." The ASU introduces a new model for recognizing credit losses on financial instruments based on an estimate of current expected credit losses. The new model will apply to: (1) loans, accounts receivable, trade receivables, and other financial assets measured at amortized cost; (2) loan commitments and certain other off-balance sheet credit exposures; (3) debt securities and other financial assets measured at fair value through other comprehensive income/(loss); and (4) beneficial interests in securitized financial assets. For public business entities that are not U.S. Securities and Exchange Commission filers the ASU becomes effective in fiscal years beginning after December 15, 2020, including interim periods within those fiscal years, and early application is permitted. We are reviewing the guidance to determine the effect on our consolidated financial position and results of operations.

In February 2016, the FASB issued ASU, "Leases." This guidance is intended to improve financial reporting about leasing transactions and affects all organizations that lease assets. The ASU will require organizations that lease assets, referred to as lessees, to recognize on the balance sheet the assets and liabilities for the rights and obligations created by those leases. The accounting for organizations that own the assets leased by the lessee, also known as lessor accounting, will remain largely unchanged from current GAAP. This guidance becomes effective for interim and annual periods beginning after December 15, 2018, and early application is permitted. Based on our preliminary review and analysis, the new lease accounting guidance will have an insignificant impact on our consolidated financial condition and results of operations, and will have no impact on our cash flows.

In January 2016, the FASB issued ASU, "Financial Instruments – Overall: Recognition and Measurement of Financial Assets and Financial Liabilities." The guidance affects, among other things, the presentation and disclosure requirements for financial instruments. For public entities, the ASU eliminates the requirement to disclose the methods and significant assumptions used to estimate the fair value of financial instruments carried at amortized cost. The guidance becomes effective for the first interim reporting period within the annual reporting periods after December 15, 2017. Early adoption is permitted. We do not anticipate this guidance to have a material effect, if any, on our consolidated financial position, results of operations or cash flows.

In May 2014, the FASB issued guidance entitled "Revenue from Contracts with Customers." The guidance governs revenue recognition from contracts with customers and requires an entity to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Financial instruments and other contractual rights within the scope of other guidance issued by the FASB are excluded from the scope of this new revenue recognition guidance. As such, a substantial majority of our contracts would be excluded from the scope of this new guidance. The guidance becomes effective for the first interim reporting period within the annual reporting periods after December 15, 2017. We do not anticipate this guidance to have a material impact, if any, on our consolidated financial position, results of operations or cash flows.

Business Outlook

Notwithstanding our strong financial performance in 2016, we continue to face market conditions that could make the business and earnings environment less favorable for CoBank in the future. Growth in the U.S. economy remains modest. Growth in global markets has slowed and economic conditions are volatile, particularly given heightened geopolitical risks and weakening markets outside the United States. Although interest rates increased subsequent to the U.S. presidential election, rates remain low by historical standards and continue to negatively impact the returns on capital and investment securities. Monetary policy as established by the Federal Reserve and the policies of other central banks around the world could create further uncertainty regarding interest rates and asset valuations. The change in the U.S. presidential administration and congressional representation has also created uncertainty surrounding tax, trade, immigration and foreign policy. Competition for the business of our customers across most of the industries we serve continues to be intense. Agricultural commodity prices have remained relatively low compared to recent periods and are subject to volatility driven by weather conditions and other factors. Customers in many of the industries we serve are impacted by unpredictable commodity prices and agricultural yields, fluctuations in the value of the U.S. dollar, weather and ongoing political and regulatory uncertainty. Many of our power customers are impacted by energy efficiency initiatives, price volatility of various fuel sources including coal and natural gas, emerging regulation of carbon dioxide emissions, renewable energy standards and customer demand for distributed generation. The lower level of oil prices has had and could continue to have a negative impact on some rural communities. Rapidly changing technology and customer demands create uncertainty in the communications industry. These challenges could reduce the credit quality and/or influence the level of loan demand in certain sectors of our loan portfolio.

We continue to focus on delivering the credit and financial services our customers need to compete, grow and achieve business success, enhancing our enterprise risk management capabilities and maintaining our financial strength. We believe that our strong earnings, liquidity and capital will continue to provide the capacity to support customers in all market conditions and to effectively lower the net cost of borrowing for our customer-owners through consistent and reliable patronage payments. We continue our disciplined approach to managing risk and closely monitoring asset quality. We also continue to maintain prudent discipline over expenses. Nevertheless, we will make investments in our people, processes, data infrastructure and technology, including our digital banking capabilities, to strengthen the value and improve the experience we provide to our customers, and as we strive to better fulfill our mission in rural America in a safe and sound manner.

In June 2016, Robert B. Engel, then CEO of CoBank, announced that he will leave the Bank upon completion of his employment agreement on June 30, 2017. The Board of Directors appointed Thomas E. Halverson, previously the Bank's Chief Banking Officer, to succeed Mr. Engel as the CEO. On January 1, 2017, Mr. Engel moved into a senior strategic advisory role and Mr. Halverson became the CEO.

In August 2016, CoBank announced that Mary E. McBride, who served as President through August 31, 2016, and Lori L. O'Flaherty, who served as Chief Risk Officer through August 31, 2016, would be leaving the Bank. Mrs. McBride and Mrs. O'Flaherty served as strategic advisors through December 31, 2016. In July 2016, CoBank also announced that the Bank's Chief Credit Officer, Daniel L. Key, will retire on March 31, 2017. F. William Davis will succeed Mr. Key as the Bank's new Chief Credit Officer effective April 1, 2017.

Under the guidance of our Board of Directors and through the focus of an experienced executive management team, we expect to achieve continued success through execution of our business strategies and by creating mutually beneficial partnerships with other System institutions, maintaining effective access to the agency debt capital markets, educating policy makers and other key stakeholders of the critical mission of CoBank and the System, prudently optimizing current lending authorities and maintaining compliance with laws and regulations. We continue to explore strategic alliances and other opportunities with other System institutions, financial service providers and other entities, including agencies of the U.S. government under our public/private partnership initiative.

Forward Looking Statements

Certain of the statements contained in this annual report that are not historical facts are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Our actual results may differ materially from those included in the forward-looking statements that relate to our plans, projections, expectations and intentions. Forward-looking statements are typically identified by words such as "believe," "expect," "anticipate," "intend," "estimate," "plan," "project," "may," "will," "should," "would," "could" or similar expressions. Although we believe that the information expressed or implied in such forward-looking statements is reasonable, we can give no assurance that such projections and expectations will be realized or the extent to which a particular plan, projection or expectation may be realized. These forward-looking statements are based on current knowledge and are subject to various risks and uncertainties, including, but not limited to:

- Changes that negatively impact the agricultural, power, communications, water and leasing industries;
- The level of interest rates and relationships between various interest rate indices and actions taken by the Federal Reserve to manage the monetary policy of the United States;
- Currency fluctuations that impact the value of the U.S. dollar in global markets;
- Adverse food safety and weather events, disease, and other unfavorable conditions that periodically occur and impact agricultural productivity and income;
- Changes in levels of global crop production, exports, usage and inventories;
- Credit performance of the loan portfolio;
- Performance of underlying collateral, including farmland values and specialized property that secures rural infrastructure credits;
- Loan portfolio growth and seasonal factors;
- Weak U.S. economic conditions;
- Weaknesses in other developed and emerging economies;
- Government policies and political developments in the United States and other countries in which we do business;
- Geopolitical uncertainties throughout the world that may impact the industries we lend to, or, economic, fiscal or monetary conditions;
- Changes in the U.S. government's support of the System, the agricultural industry, agricultural exports, rural infrastructure and rural economies;
- Legislative or regulatory actions that affect current and ongoing operations of the System or the banking, financial services, agricultural, power, communications, water and leasing industries;
- Legislative or regulatory actions that affect our relationships with our employees;
- Actions taken by the U.S. Congress relative to other Government Sponsored Enterprises, including the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac), the Federal Home Loan Banks and the Farmer Mac;
- Actions taken by the U.S. government to manage U.S. trade, immigration or fiscal policies, including tax reform;
- A decrease in the credit outlook or ratings of U.S. government debt and agency debt, including Systemwide Debt Securities;
- Cybersecurity risks, including a failure or breach of our operational or security systems or infrastructure, that could adversely affect our business, financial performance and reputation;
- Changes in assumptions underlying the valuations of financial instruments;
- Changes in the bases for our estimates underlying the allowance for credit losses;
- Failure of our investment portfolio to perform as expected or deterioration in the credit quality of such investments;
- The resolution of legal proceedings and related matters;
- Environmental-related conditions or laws impacting our lending activities;
- Nonperformance by counterparties under our derivative and vendor contracts; and
- Our ability to continue to partner with various System and other entities in light of ongoing consolidation within the System and the industries we serve.

We expressly disclaim any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

Report of Independent Auditors

To the Board of Directors of CoBank, ACB:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income, of comprehensive income, of changes in shareholders' equity and of cash flows present fairly, in all material respects, the financial position of CoBank, ACB (the Company) and its subsidiaries at December 31, 2016, 2015, and 2014, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016 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, 2016, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). 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 Management's Report on Internal Control over Financial Reporting appearing on page 129 of the CoBank 2016 Annual Report to Shareholders. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the auditing standards of the Public Company Accounting Oversight Board (United States) 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 and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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

Denver, CO
March 7, 2017

Consolidated Statements of Income
CoBank, ACB

($ in Thousands)

Year Ended December 31,	2016	2015	2014
Interest Income			
Loans	$ **2,173,387**	$ 1,849,946	$ 1,724,406
Investment Securities, Federal Funds Sold and Other Overnight Funds	**436,226**	359,834	350,205
Total Interest Income	**2,609,613**	2,209,780	2,074,611
Interest Expense	**1,247,835**	936,445	842,844
Net Interest Income	**1,361,778**	1,273,335	1,231,767
Provision for Loan Losses (Loan Loss Reversal)	**63,000**	10,000	(15,000)
Net Interest Income After Provision for Loan Losses (Loan Loss Reversal)	**1,298,778**	1,263,335	1,246,767
Noninterest Income			
Net Fee Income	**103,365**	104,441	108,584
Prepayment Income	**34,142**	31,946	25,079
Losses on Early Extinguishments of Debt	**(34,197)**	(37,455)	(58,316)
Gains on Sale of Investment Securities	**4,617**	22,603	4,206
Other-Than-Temporary Impairment Losses on Investment Securities	**(750)**	(11,100)	-
Other, Net	**77,708**	59,338	44,618
Total Noninterest Income	**184,885**	169,773	124,171
Operating Expenses			
Employee Compensation	**165,159**	150,585	145,803
General and Administrative	**25,109**	24,167	24,183
Information Technology	**31,696**	28,231	25,558
Insurance Fund Premium	**90,561**	59,919	50,613
Travel and Entertainment	**21,583**	18,425	18,297
Farm Credit System Related	**14,736**	12,215	13,935
Occupancy and Equipment	**16,083**	16,220	8,847
Purchased Services	**14,775**	15,553	16,564
Total Operating Expenses	**379,702**	325,315	303,800
Income Before Income Taxes	**1,103,961**	1,107,793	1,067,138
Provision for Income Taxes	**158,285**	171,120	162,868
Net Income	$ **945,676**	$ 936,673	$ 904,270

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

Consolidated Statements of Comprehensive Income
CoBank, ACB

($ in Thousands)

Year Ended December 31,	2016	2015	2014
Net Income	**$ 945,676**	$ 936,673	$ 904,270
Other Comprehensive (Loss) Income, Net of Tax:			
Net Change in Unrealized (Losses) Gains on Investment Securities Not Other-Than-Temporarily Impaired	**(58,215)**	(34,271)	44,975
Net Change in Unrealized (Losses) Gains on Other-Than-Temporarily Impaired Investment Securities	**(2,904)**	(10,176)	49,695
Net Change in Unrealized Gains (Losses) on Interest Rate Swaps and Other Financial Instruments	**2,450**	(6,697)	(31,214)
Net Pension Adjustment	**(1,227)**	(2,581)	(31,173)
Other Comprehensive (Loss) Income	**(59,896)**	(53,725)	32,283
Comprehensive Income	**$ 885,780**	$ 882,948	$ 936,553

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

Consolidated Balance Sheets

CoBank, ACB

($ in Thousands)

As of December 31,	2016	2015	2014
Assets			
Total Loans	**$ 95,258,281**	$ 89,040,580	$ 80,382,497
Less: Allowance for Loan Losses	**558,974**	486,144	481,156
Net Loans	**94,699,307**	88,554,436	79,901,341
Cash and Cash Equivalents	**1,660,517**	3,113,101	1,855,634
Federal Funds Sold and Other Overnight Funds	**750,000**	-	-
Investment Securities	**27,765,188**	24,504,448	24,319,943
Accrued Interest Receivable	**348,652**	331,448	348,405
Interest Rate Swaps and Other Financial Instruments	**208,434**	295,989	455,656
Other Assets	**698,528**	671,144	500,110
Total Assets	**$ 126,130,626**	$ 117,470,566	$ 107,381,089
Liabilities			
Bonds and Notes	**$ 115,085,880**	$ 106,970,066	$ 97,535,474
Subordinated Debt	**498,820**	902,685	902,205
Accrued Interest Payable	**281,154**	289,718	271,070
Interest Rate Swaps and Other Financial Instruments	**162,724**	113,397	111,620
Reserve for Unfunded Commitments	**103,496**	115,444	115,680
Other Liabilities	**1,424,794**	1,268,787	1,075,377
Total Liabilities	**117,556,868**	109,660,097	100,011,426
Commitments and Contingent Liabilities (Note 15)			
Shareholders' Equity			
Preferred Stock	**1,500,000**	1,125,000	1,125,000
Common Stock	**3,072,232**	2,899,728	2,768,546
Unallocated Retained Earnings	**4,121,409**	3,845,728	3,482,379
Accumulated Other Comprehensive Loss	**(119,883)**	(59,987)	(6,262)
Total Shareholders' Equity	**8,573,758**	7,810,469	7,369,663
Total Liabilities and Shareholders' Equity	**$ 126,130,626**	$ 117,470,566	$ 107,381,089

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

Consolidated Statements of Cash Flows
CoBank, ACB

($ in Thousands)

Year Ended December 31,	2016	2015	2014
Cash Flows Provided by Operating Activities			
Net Income	**$ 945,676**	$ 936,673	$ 904,270
Adjustments to Reconcile Net Income to Net Cash Provided by Operating Activities:			
Provision for Loan Losses (Loan Loss Reversal)	**63,000**	10,000	(15,000)
Deferred Income Taxes	**26,934**	63,443	63,363
Depreciation and Amortization/Accretion, Net	**90,591**	54,563	89,974
Net Gains on Sale of Investment Securities	**(4,617)**	(22,603)	(4,206)
Losses on Impairment of Available-for-Sale Investments	**750**	11,100	-
(Increase) Decrease in Accrued Interest Receivable	**(17,204)**	16,957	20,616
Increase in Other Assets	**(105,043)**	(131,608)	(83,607)
(Decrease) Increase in Accrued Interest Payable	**(8,565)**	18,648	(19,833)
Increase (Decrease) in Other Liabilities	**58,168**	21,643	(7,536)
Net Losses (Gains) on Interest Rate Swaps and Other Financial Instruments	**1,127**	(2,890)	(7,193)
Proceeds from Termination of Interest Rate Swaps	**1,911**	6,909	1,518
Purchase of Interest Rate Caps	**(9,327)**	(9,636)	(28,486)
Other	**(810)**	(1,273)	(2,893)
Net Cash Provided by Operating Activities	**1,042,591**	971,926	910,987
Cash Flows Used in Investing Activities			
Net Increase in Loans	**(6,254,420)**	(8,709,222)	(6,852,202)
Investment Securities:			
Purchases	**(23,312,600)**	(9,346,942)	(8,861,038)
Proceeds from Maturities and Prepayments	**19,195,177**	8,928,325	6,209,275
Proceeds from Sales	**869,565**	167,831	27,293
Net Increase in Federal Funds Sold and Other Overnight Funds	**(750,000)**	-	-
Construction of Corporate Headquarters	**(2,989)**	(48,163)	(27,900)
Proceeds from Sale-Leaseback of Corporate Headquarters	**7,653**	-	-
Net Cash Used in Investing Activities	**(10,247,614)**	(9,008,171)	(9,504,572)
Cash Flows Provided by Financing Activities			
Bonds and Notes Proceeds	**69,707,578**	63,856,174	72,019,124
Bonds and Notes Retired	**(61,164,794)**	(53,460,058)	(62,750,106)
Net (Decrease) Increase in Notes Payable and Other Interest-bearing Liabilities	**(327,754)**	(786,131)	86,099
Subordinated Debt Redemption	**(404,685)**	-	-
Proceeds from Corporate Headquarters Transaction	**-**	83,417	-
Preferred Stock Issued, Net	**370,348**	-	295,214
Preferred Stock Redemptions	**-**	-	(136,750)
Preferred Stock Dividends Paid	**(71,086)**	(56,291)	(55,523)
Common Stock Issued	**87,355**	65,615	35,755
Common Stock Retired	**(29,109)**	(32,550)	(33,426)
Cash Patronage Distribution Paid	**(415,414)**	(376,464)	(346,192)
Net Cash Provided by Financing Activities	**7,752,439**	9,293,712	9,114,195
Net (Decrease) Increase in Cash and Cash Equivalents	**(1,452,584)**	1,257,467	520,610
Cash and Cash Equivalents at Beginning of Year	**3,113,101**	1,855,634	1,335,024
Cash and Cash Equivalents at End of Year	**$ 1,660,517**	$ 3,113,101	$ 1,855,634

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

Supplemental Consolidated Statements of Cash Flows Information
CoBank, ACB

($ in Thousands)

Year Ended December 31,	2016	2015	2014
Supplemental Noncash Investing and Financing Activities			
Net Change in Accrued Purchases of Securities	**$ (99,247)**	$ -	$ 48,595
Change in Unrealized (Losses) Gains on Investment Securities, Before Taxes	**(78,613)**	(57,903)	109,870
Patronage in Common Stock	**114,258**	98,117	88,745
Removal of Corporate Headquarters from Balance Sheet in Sale-Leaseback Accounting	**(76,063)**	-	-
Supplemental Noncash Fair Value Changes Related to Hedging Activities			
Decrease in Interest Rate Swaps and Other Financial Instrument Assets	**$ 87,555**	$ 159,667	$ 218,366
Decrease in Bonds and Notes Related to Hedging Activities	**(148,256)**	(162,016)	(209,211)
Increase (Decrease) in Interest Rate Swaps and Other Financial Instrument Liabilities	**49,327**	1,777	(9,687)
Supplemental Disclosure of Cash Flow Information			
Interest Paid	**$ 1,234,540**	$ 885,197	$ 857,828
Income Taxes Paid	**141,952**	137,436	134,133

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

Consolidated Statements of Changes in Shareholders' Equity
CoBank, ACB

($ in Thousands)

	Preferred Stock	Common Stock	Unallocated Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Shareholders' Equity
Balance at December 31, 2013	$ 961,750	$ 2,677,485	$ 3,103,926	$ (38,545)	$ 6,704,616
Comprehensive Income			904,270	32,283	936,553
Preferred Stock:					
Dividends			(53,564)		(53,564)
Issuance	300,000		(4,786)		295,214
Redemption	(136,750)				(136,750)
Common Stock:					
Issuances		35,755			35,755
Redemptions		(33,426)			(33,426)
Patronage Distribution:					
Cash			(378,735)		(378,735)
Common Stock		88,745	(88,745)		-
Other		(13)	13		-
Balance at December 31, 2014	$ 1,125,000	$ 2,768,546	$ 3,482,379	$ (6,262)	$ 7,369,663
Comprehensive Income (Loss)			936,673	(53,725)	882,948
Preferred Stock:					
Dividends			(59,179)		(59,179)
Common Stock:					
Issuances		65,615			65,615
Redemptions		(32,550)			(32,550)
Patronage Distribution:					
Cash			(415,982)		(415,982)
Common Stock		98,117	(98,117)		-
Other			(46)		(46)
Balance at December 31, 2015	$ 1,125,000	$ 2,899,728	$ 3,845,728	$ (59,987)	$ 7,810,469
Comprehensive Income (Loss)			**945,676**	**(59,896)**	**885,780**
Preferred Stock:					
Dividends			**(77,232)**		**(77,232)**
Issuance	**375,000**		**(4,652)**		**370,348**
Common Stock:					
Issuances		**87,355**			**87,355**
Redemptions		**(29,109)**			**(29,109)**
Patronage Distribution:					
Cash			**(473,853)**		**(473,853)**
Common Stock		**114,258**	**(114,258)**		**-**
Balance at December 31, 2016	**$ 1,500,000**	**$ 3,072,232**	**$ 4,121,409**	**$ (119,883)**	**$ 8,573,758**

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

Note 1 – Description of Business and Summary of Significant Accounting Policies

Description of Business

CoBank, ACB (CoBank or the Bank) is one of the four banks of the Farm Credit System (System). CoBank provides loans, leases and other financial services to support agriculture, rural infrastructure and rural communities across the United States. The System is a federally chartered network of borrower-owned lending institutions composed of cooperatives and related service organizations. The System was established in 1916 by the U.S. Congress and is a Government Sponsored Enterprise (GSE). We are federally chartered under the Farm Credit Act of 1971, as amended (the Farm Credit Act), and are subject to supervision, examination and safety and soundness regulation by an independent federal agency, the Farm Credit Administration (FCA).

We are cooperatively owned by our U.S. customers. Our customers consist of agricultural cooperatives; other food and agribusiness companies; rural power, communications and water cooperatives and companies; rural community facilities; farmer-owned financial institutions including Agricultural Credit Associations and Federal Land Credit Associations (Associations); and other businesses that serve agriculture and rural communities. We are the primary funding source for certain Associations serving specified geographic regions in the United States (which are regulated financial institutions and members of the System). We collectively refer to these entities as our affiliated Associations.

Our wholly-owned leasing subsidiary, Farm Credit Leasing Services Corporation (FCL), specializes in lease financing and related services for a broad range of equipment, machinery, vehicles and facilities.

In conjunction with other System entities, the Bank jointly owns three service organizations: the Federal Farm Credit Banks Funding Corporation (Funding Corporation), the FCS Building Association and the Farm Credit Association Captive Insurance Corporation. The Funding Corporation issues, markets and processes Federal Farm Credit Banks Consolidated Systemwide bonds, medium term notes and discount notes (collectively referred to as Systemwide Debt Securities) and also provides financial management and reporting services for the combined entities of the System. The FCS Building Association leases premises and equipment to the FCA as required by the Farm Credit Act. The Farm Credit Association Captive Insurance Company is a reciprocal insurer that provides insurance services such as directors and officers liability, fiduciary liability and a bankers bond to System organizations.

We have a minority ownership interest in AgVantis, Inc., which is chartered under the Farm Credit Act as a service organization to provide a range of support and technology services to certain Associations. We also have small equity interests in certain other System banks and Associations as required in connection with the purchase and sale of participation loans.

Copies of CoBank's financial reports are available on request by calling or visiting one of our banking center locations and through our website at www.cobank.com. Copies of financial reports of our affiliated Associations and the System are available on their respective websites.

Summary of Significant Accounting Policies

<u>Basis of Presentation and Principles of Consolidation</u>

The consolidated financial statements include the accounts of CoBank, CoBank, FCB and FCL. All significant intercompany accounts and transactions have been eliminated.

The accompanying consolidated financial statements exclude financial information of our affiliated Associations. CoBank and our affiliated Associations are collectively referred to as the "District." We separately publish certain unaudited combined financial information of the CoBank District, including a condensed statement of condition and statement of income, which can be found on our website at www.cobank.com. Such information is not incorporated by reference into, and should not be considered part of, this annual report.

We prepare our financial statements in conformity with accounting principles generally accepted in the United States of America (GAAP) and prevailing practices within the financial services industry. These principles require us to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results may differ from those estimates. Significant estimates are discussed in these notes to the consolidated financial statements, as applicable. Certain reclassifications have been made to amounts reported in previous years to conform to the 2016 presentation.

<u>Loans</u>

We report loans, excluding leases, at their principal amount outstanding and accrue interest income based upon the daily principal amount outstanding. For loans purchased at a discount, we amortize unearned income using the straight-line method, which approximates the interest method. We defer loan origination fees and costs, and amortize them over the life of the related loan as an adjustment to yield.

Except as otherwise noted, leases are included with loans in the consolidated financial statements and related notes. We record leases as either direct financing or operating leases. Under direct financing leases, unearned finance income from lease contracts represents the excess of gross lease receivables over the cost of leased equipment, net of estimated residual values. Residual values, which are reviewed at least annually, represent the estimated amount to be received at lease termination from the disposition of leased assets. We amortize net unearned finance income to interest income using the interest method. Under operating leases, property is recorded at cost and depreciated on a straight-line basis over the lease term to an estimated residual or salvage value. We recognize revenue as earned ratably over the term of the operating lease.

In the normal course of business, we manage lending credit exposures by selling or syndicating loans to System entities and other financial institutions. Such transactions include the transfer of participating interests, as defined pursuant to GAAP. We account for these transactions as sales and, accordingly, the assets transferred are not recognized in our consolidated balance sheets.

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 loans. Impaired loans include loans that are in nonaccrual status, accruing restructured, or past due 90 days or more and still accruing interest.

We do not accrue interest income on impaired loans unless they are adequately secured and in the process of collection. When interest accruals are suspended, accrued and unpaid interest income is reversed with current year accruals charged to earnings and prior year amounts charged off against the allowance for loan losses.

For nonaccrual loans, we primarily apply cash receipts against the outstanding principal balance. If collectability of the loan balance is fully expected and certain other criteria are met, we recognize interest payments as interest income. We may return such loans to accrual status when the borrower is current, has demonstrated payment performance, collection of future payments is fully expected and there are no unrecovered charge-offs.

Generally, troubled debt restructurings (TDRs) are reported as either performing or nonperforming loans. Accruing restructured loans, which represent performing TDRs, are those for which the contractual terms and conditions have been amended or otherwise revised to incorporate certain monetary concessions because the borrower was experiencing financial difficulty at the time of restructuring. Such a loan that is subsequently refinanced at a current market rate with no concessionary terms is accounted for as a new loan and is no longer reported as a TDR. We place the loan in nonaccrual status if the borrower's ability to meet the revised contractual terms is uncertain.

We establish an impairment reserve if the fair value of assets held for operating leases decreases to below book value and such difference is not recoverable.

Allowance for Loan Losses and Reserve for Unfunded Commitments

Our allowance for loan losses is an adjustment to the value of our total loan and finance lease portfolio for inherent credit losses related to outstanding balances. We also maintain a separate reserve for unfunded commitments which is reported as a liability on the Bank's consolidated balance sheet. The reserve for unfunded commitments represents an additional reserve for binding commitments to extend credit and for commercial letters of credit. We had $31.4 billion and $304.1 million of commitments to extend credit and commercial letters of credit, respectively, at December 31, 2016. The amount of our allowance for loan losses and reserve for unfunded commitments can fluctuate based on the seasonal nature of borrowings in the agriculture industry, which is impacted by various factors including changing commodity prices and supplies. We refer to the combined amounts of the allowance for loan losses and the reserve for unfunded commitments as the "allowance for credit losses." At December 31, 2016, our allowance for credit losses totaled $662.5 million, of which $559.0 million related to the allowance for loan losses and $103.5 million related to the reserve for unfunded commitments.

The allowance for credit losses is maintained at a level we consider sufficient to absorb losses inherent in the loan and finance lease portfolio and in unfunded commitments. We base the allowance for credit losses on our regular evaluation of these portfolios.

To determine our allowance for credit losses, we divide our loans and finance leases into two broad categories: those that are impaired and those that are not. A loan or finance lease is impaired when, based on current information and events, it is probable that we will not collect all amounts due under the contractual terms. Impairment of loans and finance leases is measured based on the fair value of the collateral, if the loan or finance lease is collateral dependent, or the present value of expected future cash flows discounted at the effective interest rate of the contract. In limited cases, we base the impairment on observable market prices. Changes in the financial condition of our borrowers and in the general economy will cause these estimates, appraisals and evaluations to change.

For loans and finance leases that are not individually assessed for impairment, we establish an allowance for credit losses for losses that are both probable and estimable as of the balance sheet date. The evaluation of this portion of our portfolio generally considers default rates from industry data, internal risk ratings, loss given default assumptions, loss timing, historical recovery rates, specific industry conditions, weather conditions, general economic and political conditions, and changes in the character, composition and performance of the portfolio, among other factors. We also consider overall portfolio indicators, including trends in internally risk-rated exposures, classified exposures, and historical charge-offs and recoveries. Additionally, we consider borrower, industry, geographic and portfolio concentrations, including current developments within operating segments, and modeling imprecision. Changes in these factors, or our assumptions and estimates thereof, could result in a change in the allowance for credit losses and could have a direct and material impact on the provision for loan losses and our results of operations. The total allowance for credit losses is available to absorb probable and estimable credit losses within our entire portfolio.

We increase or decrease the allowance for credit losses by recording a provision or reversal for loan losses in the statement of income. We record loan losses against the allowance for loan losses when management determines that any portion of the loan or finance lease is uncollectible. We add subsequent recoveries, if any, to the allowance for loan losses. Transfers between the allowance for loan losses and the reserve for unfunded commitments can occur in conjunction with funding a seasonal line of credit or other loan and decreasing a related unfunded commitment or, conversely, receiving a loan payment and increasing a related unfunded commitment. Newly-executed loan commitments will also increase this liability.

We also assess the credit risk associated with off-balance sheet loan commitments and letters of credit and determine the appropriate level of reserve for unfunded commitments that should be recorded.

In 2014, we enhanced our process for estimating the allowance for credit losses. These enhancements included updating the probability of default and loss given default factors applied to non-impaired commercial loans; using a statistical model to estimate losses related to concentration risk by comparing CoBank's portfolio characteristics to a more typical commercial loan portfolio; and adjusting certain factors used in estimating losses related to unfunded lending commitments to better reflect industry specific risks. We made further modifications to our methodology related to non-impaired commercial loans in 2015. These enhancements included incorporating a view of probability of default over a longer period; aligning certain loss given default assumptions more closely with internal guidance; and modifying the loss emergence period assumption. While the changes in both 2014 and 2015 did not materially impact the overall level of the allowance for credit losses, they did impact the distribution of the allowance for credit losses between our Agribusiness and Rural Infrastructure operating segments. No significant changes were made to our methodology for estimating the allowance for credit losses in 2016.

Cash and Cash Equivalents

For purposes of these financial statements, cash represents demand deposits at banks and deposits in the process of clearing, which are used for operating or liquidity purposes.

Federal Funds Sold and Other Overnight Funds

Federal funds sold transactions involve lending excess reserve balances on a short-term basis, generally overnight. The Bank also places deposits with commercial banks, which earn interest overnight. Such investments are reported at their estimated fair value.

Investment Securities

We classify investment securities as available-for-sale and report them at their estimated fair value. We have no trading or held-to-maturity securities. We amortize or accrete purchased premiums and discounts using the constant yield method, which approximates the interest method, over the terms of the respective securities. We report unrealized gains and losses, net of applicable income taxes and credit losses, in the accumulated other comprehensive income (loss) component of shareholders' equity on the consolidated balance sheets. We use the specific identification method for determining cost in computing realized gains and losses on sales of investment securities.

We evaluate investments in a loss position to determine if such a loss is other-than-temporary. If losses are deemed to be other-than-temporary, we record the portion related to credit losses in earnings and the portion related to all other factors in other comprehensive income (loss). For additional information, refer to Note 4.

Premises and Equipment

We carry premises and equipment at cost less accumulated depreciation and amortization. We provide for depreciation and amortization on the straight-line method over the estimated useful lives of the assets. We record gains and losses on dispositions in current operating results. We record maintenance and repairs to operating expenses when incurred and capitalize improvements.

We capitalize leased property and equipment meeting certain criteria and depreciate such assets using the straight-line method over the terms of the respective leases.

During 2014, CoBank entered into a build-to-suit arrangement for the construction of a new corporate headquarters in Greenwood Village, Colorado. CoBank moved into the new headquarters building in late 2015 and commenced a lease agreement at that time. Rental payments associated with the lease total approximately $103.0 million over a 15-year term. The lease also contains three 5-year options to extend.

In 2015, the building and lease were sold to an investor. However, for accounting purposes, the sale transaction was not recognized until all construction contingencies were finalized, which did not occur until 2016. As a result, as of December 31, 2015, the $76.1 million in funding provided for the construction of the building was classified as an 'Other Asset' and the $83.4 million in proceeds received to date for the sale of the building were classified as an 'Other Liability' in the accompanying consolidated balance sheet. Upon resolution of all construction contingencies in 2016, the building asset was removed from the balance sheet and sale-leaseback accounting treatment was applied to this transaction.

Mineral Rights

As a result of our 2012 merger with U.S. AgBank, FCB (AgBank), we own mineral rights in Arizona, California, Colorado, Kansas, Nevada, New Mexico, Oklahoma and Utah. As required by the merger agreement, the net earnings from these mineral rights are passed on directly to certain Associations. Mineral income is primarily generated from royalties on natural gas and crude oil production, leasing bonuses and rental payments. This income may vary from year to year based on fluctuations in energy demand, prices and production. In 2016, net mineral income passed directly to these Associations totaled $7.5 million compared to $13.9 million in 2015 and $17.2 million in 2014. As a result of the agreement to pass the net earnings from mineral rights to certain Associations, these mineral rights have no carrying value in our consolidated balance sheet.

Derivative Financial Instruments and Hedging Activities

We record derivatives as assets or liabilities at their fair value on the consolidated balance sheets. We record changes in the fair value of a derivative in current period earnings or accumulated other comprehensive income (loss), depending on the use of the derivative and whether it qualifies for fair value or cash flow hedge accounting. For derivatives not designated as hedging instruments, we record the related change in fair value in current period earnings.

We formally document all relationships between derivatives and hedged items, as well as risk management objectives and strategies for undertaking various hedge transactions. This process includes linking all derivatives that are designated as fair value or cash flow hedges to assets and liabilities on the consolidated balance sheet or to forecasted transactions.

We also formally assess (both at the hedge's inception and on an ongoing basis) whether the derivatives that are used in hedging transactions have been effective in offsetting changes in the fair value or cash flows of hedged items and whether those derivatives are expected to remain effective in future periods. We typically use regression analyses or other statistical analyses to assess the effectiveness of hedges. Hedge accounting is discontinued prospectively if: (i) it is determined that the derivative is no longer effective in offsetting changes in the fair value or cash flows of a hedged item; (ii) the derivative expires or is sold, terminated or exercised; or (iii) management determines that the fair value or cash flow hedge designation is no longer appropriate.

If we determine that a derivative no longer qualifies as an effective fair value or cash flow hedge, or if management removes the hedge designation, we continue to carry the derivative on the balance sheet at fair value, with changes in fair value recognized in current period earnings as part of noninterest income. For discontinued cash flow hedges, we amortize the component of other comprehensive income (loss) to net interest income over the original term of the hedge contract. For additional information, refer to Note 11.

Fair Value Measurements

Our fair value measurements represent the estimated amount to be received to sell an asset or paid to transfer or extinguish a liability (an exit price) in active markets among willing participants at the reporting date. We maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The classification of assets and liabilities measured at fair value within the disclosure hierarchy is based on three levels of inputs to the fair value measurement process, which are described in Note 12.

Fair Value of Guarantor's Obligations

We provide standby letters of credit, which are irrevocable undertakings to guarantee payment of a specified financial obligation. As a guarantor, we recognize a liability for the fair value of the obligation undertaken in issuing the guarantee. Our liability for the fair value of these obligations is determined by applying a risk-adjusted spread percentage to those obligations.

Employee Benefit Plans

Our employee benefit plans are described in Note 8. The net expense for employee benefit plans is recorded as employee compensation expense. For defined benefit pension plans, we use the "Projected Unit Credit" actuarial method for financial reporting and funding purposes.

The anticipated costs of benefits related to postretirement health care and life insurance are accrued during the period of the employees' active service and are classified as employee compensation expense.

Income Taxes

CoBank operates as a non-exempt cooperative, which qualifies for tax treatment under Subchapter T of the Internal Revenue Code. Accordingly, amounts distributed as qualified patronage distributions to borrowers in the form of cash or stock may be deducted from taxable income and are generally included in the recipients' taxable income. We base provisions for income taxes for financial reporting purposes only on those taxable earnings that will not be distributed as qualified patronage distributions. Substantially all of the Bank's statutorily tax-exempt activities reside in CoBank, FCB, a wholly-owned subsidiary of CoBank.

We record deferred tax assets and liabilities for temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases except for our nontaxable entity. We measure these deferred amounts using the current marginal statutory tax rate on the taxable portion of our business activities. Calculating deferred tax assets and liabilities involves various management estimates and assumptions as to future taxable earnings. We expect to fully realize deferred tax assets based on the projected level of future taxable income and other factors.

See Note 9 for further information regarding income taxes.

Subsequent Events

We have evaluated subsequent events through March 7, 2017, which is the date the financial statements were issued.

Note 2 – Recently Issued or Adopted Accounting Pronouncements

In August 2014, the Financial Accounting Standards Board (FASB) issued guidance entitled "Presentation of Financial Statements — Going Concern." The guidance governs management's responsibility to evaluate whether there is substantial doubt about an entity's ability to continue as a going concern. This guidance requires management to perform interim and annual assessments of an entity's ability to continue as a going concern within one year after the date the financial statements are issued. Substantial doubt exists if it is probable that the entity will be unable to meet its obligations for the assessed period. This guidance became effective for interim and annual periods ending after December 15, 2016. Management completed its initial assessment as of December 31, 2016. No matters were identified with regard to our ability to continue as a going concern in adopting this standard.

In May 2015, the FASB issued Accounting Standards Update (ASU), "Fair Value Measurement (Topic 820): Disclosures for Investments in Certain Entities that Calculate Net Asset Value per Share (or Its Equivalent)." The amendments apply to reporting entities that elect to measure the fair value of an investment using the net asset value (NAV) per share (or its equivalent) practical expedient. The amendments remove the requirement to categorize within the fair value hierarchy all investments for which fair value is measured using the NAV per share practical expedient. The amendments also remove the requirement to make certain disclosures for all investments that are eligible to be measured at fair value using the NAV per share practical expedient. Rather, those disclosures are limited to investments for which the entity has elected to measure the fair value using that practical expedient. We adopted this standard in 2016. The adoption did not impact our consolidated financial condition, results of operations or cash flows. Our qualified defined benefit plans assets contain certain investments which are valued using the NAV per share practical expedient. Adoption of this guidance had a minimal impact on our disclosures, which are contained in Note 8.

In April 2015, the FASB issued guidance entitled "Simplifying the Presentation of Debt Issuance Costs." The guidance requires debt issuance costs to be presented in the balance sheet as a direct deduction from the carrying value of the associated debt liability, consistent with the presentation of a debt discount. We adopted this standard in 2015. The adoption of this guidance resulted in the presentation of $53.9 million and $47.3 million of debt issuance costs, previously recorded as Other Assets, as a direct deduction from the carrying value of the associated Bonds, Notes and Subordinated Debt balances at December 31, 2015 and 2014, respectively. The adoption did not impact our results of operations or overall financial condition.

In February 2013, the FASB issued guidance requiring an entity to measure obligations resulting from joint and several liability arrangements as the sum of the amount the reporting entity agreed to pay on the basis of its arrangement among its co-obligors and any additional amount the reporting entity expects to pay on behalf of its co-obligors. The guidance also requires an entity to disclose the nature and amount of the obligation as well as other information about those obligations.

As described in Note 5 to the consolidated financial statements, all Systemwide Debt Securities are the joint and several liabilities of the System banks. CoBank adopted the new standard in 2014 and accounts for its joint and several liabilities for all Systemwide Debt Securities as a contingent liability. We do not record a liability unless it is probable that we will be required to pay an amount and that amount can be reasonably estimated. Given the current financial condition of System banks, the adoption of this new guidance did not have an effect on our consolidated financial position, results of operations or cash flows.

Note 3 – Loans, Loan Quality and Allowance for Credit Losses

Loans Outstanding

Loans outstanding by operating segment are shown below.

($ in Millions)

December 31,	2016		2015		2014	
	Amount	%	Amount	%	Amount	%
Agribusiness	**$ 28,660**	**30 %**	$ 26,131	29 %	$ 24,359	30 %
Strategic Relationships	**45,994**	**48**	43,358	49	39,919	50
Rural Infrastructure	**20,604**	**22**	19,552	22	16,104	20
Total	**$ 95,258**	**100 %**	$ 89,041	100 %	$ 80,382	100 %
Loans Purchased	**$ 17,883**		$ 14,614		$ 13,493	
Loans Sold	**18,485**		16,928		14,274	

We have loans outstanding in all 50 states as well as 30 foreign countries and a limited number of U.S. territories. Our agricultural export finance loan portfolio, which is part of our Agribusiness operating segment, includes U.S. government-sponsored trade financing programs which guarantee payment in the event of default by the borrower of generally 98 percent of loan principal outstanding and varying percentages of interest due. Of the $4.9 billion in agricultural export finance loans outstanding as of December 31, 2016, 26 percent were guaranteed by the U.S. government under one of these trade financing programs, primarily the General Sales Manager program of the U.S. Department of Agriculture's Commodity Credit Corporation.

We make loans to customers in various industries. For the years ended December 31, 2016, 2015 and 2014, total loans outstanding (excluding wholesale loans to Associations) did not exceed 10% for any specific industry.

Wholesale loans to our affiliated Associations represented 43 percent, 44 percent and 45 percent of total loans outstanding at December 31, 2016, 2015 and 2014, respectively. As of December 31, 2016, our affiliated Associations provided financing and other financial services to farmer-owners for rural real estate, equipment, working capital, agricultural production and operating purposes in the Northwest, West, Southwest, Rocky Mountains, Mid-Plains and Northeast regions of the United States. Participations in loans made by other System banks to their affiliated Associations represented 5 percent of our total loans outstanding at December 31, 2016, 2015 and 2014.

Unamortized loan premiums and discounts, and unamortized deferred loan fees and costs totaled $70.9 million, $66.1 million and $55.8 million as of December 31, 2016, 2015 and 2014, respectively.

Allowance for Credit Losses

The following tables present the changes in the components of our allowance for credit losses and the details of the ending balances. The allowance for credit losses includes the allowance for loan losses and the reserve for unfunded commitments. The elements of our allowance for credit losses are presented by operating segment.

	Agribusiness	Strategic Relationships[(1)]	Rural Infrastructure	Total
December 31, 2016				
Allowance for Loan Losses				
Beginning Balance	$ 313,204	$ -	$ 172,940	$ 486,144
Charge-offs	(4,276)	-	(324)	(4,600)
Recoveries	747	-	1,735	2,482
Provision for Loan Losses (Loan Loss Reversal)	71,000	-	(8,000)	63,000
Transfers from (to) Reserve for Unfunded Commitments[(2)]	12,873	-	(925)	11,948
Ending Balance	393,548	-	165,426	558,974
Reserve for Unfunded Commitments				
Beginning Balance	89,610	-	25,834	115,444
Transfers (to) from Allowance for Loan Losses[(2)]	(12,873)	-	925	(11,948)
Ending Balance	76,737	-	26,759	103,496
Allowance for Credit Losses	$ 470,285	$ -	$ 192,185	$ 662,470
Allowance for Credit Losses				
Ending Balance, Allowance for Credit Losses Related to Loans:				
Individually Evaluated for Impairment	$ 31,551	$ -	$ -	$ 31,551
Collectively Evaluated for Impairment	438,734	-	192,185	630,919
Total	$ 470,285	$ -	$ 192,185	$ 662,470
Loans				
Ending Balance for Loans and Related Accrued Interest:				
Individually Evaluated for Impairment	$ 207,247	$ 46,060,386	$ -	$ 46,267,633
Collectively Evaluated for Impairment	28,539,237	-	20,692,216	49,231,453
Total	$ 28,746,484	$ 46,060,386	$ 20,692,216	$ 95,499,086

(1) As a result of our strong collateral position with respect to loans to Associations, along with the earnings, capital and loss reserves of Associations that serve as an additional layer of protection against losses, no allowance for credit losses is recorded in our Strategic Relationships operating segment.

(2) These transfers generally occur as a result of advances on or repayments of seasonal lines of credit or other loans.

	Agribusiness	Strategic Relationships[1]	Rural Infrastructure	Total
December 31, 2015				
Allowance for Loan Losses				
Beginning Balance	$ 329,633	$ -	$ 151,523	$ 481,156
Charge-offs	(2,668)	-	(5,597)	(8,265)
Recoveries	1,977	-	1,040	3,017
(Loan Loss Reversal) Provision for Loan Losses	(30,800)	-	40,800	10,000
Transfers from (to) Reserve for Unfunded Commitments[2]	15,062	-	(14,826)	236
Ending Balance	313,204	-	172,940	486,144
Reserve for Unfunded Commitments				
Beginning Balance	104,672	-	11,008	115,680
Transfers (to) from Allowance for Loan Losses[2]	(15,062)	-	14,826	(236)
Ending Balance	89,610	-	25,834	115,444
Allowance for Credit Losses	$ 402,814	$ -	$ 198,774	$ 601,588
Allowance for Credit Losses				
Ending Balance, Allowance for Credit Losses Related to Loans:				
Individually Evaluated for Impairment	$ 15,085	$ -	$ 3,930	$ 19,015
Collectively Evaluated for Impairment	387,729	-	194,844	582,573
Total	$ 402,814	$ -	$ 198,774	$ 601,588
Loans				
Ending Balance for Loans and Related Accrued Interest:				
Individually Evaluated for Impairment	$ 87,998	$ 43,421,344	$ 68,807	$ 43,578,149
Collectively Evaluated for Impairment	26,107,889	-	19,562,084	45,669,973
Total	$ 26,195,887	$ 43,421,344	$ 19,630,891	$ 89,248,122
December 31, 2014				
Allowance for Loan Losses				
Beginning Balance	$ 284,967	$ -	$ 162,159	$ 447,126
Charge-offs	(1,599)	-	(4,618)	(6,217)
Recoveries	2,040	-	1,295	3,335
Provision for Loan Losses (Loan Loss Reversal)	37,000	-	(52,000)	(15,000)
Transfers from Reserve for Unfunded Commitments[2]	7,225	-	44,687	51,912
Ending Balance	329,633	-	151,523	481,156
Reserve for Unfunded Commitments				
Beginning Balance	111,897	-	55,695	167,592
Transfers to Allowance for Loan Losses[2]	(7,225)	-	(44,687)	(51,912)
Ending Balance	104,672	-	11,008	115,680
Allowance for Credit Losses	$ 434,305	$ -	$ 162,531	$ 596,836
Allowance for Credit Losses				
Ending Balance, Allowance for Credit Losses Related to Loans:				
Individually Evaluated for Impairment	$ 13,100	$ -	$ 18,462	$ 31,562
Collectively Evaluated for Impairment	421,205	-	144,069	565,274
Total	$ 434,305	$ -	$ 162,531	$ 596,836
Loans				
Ending Balance for Loans and Related Accrued Interest:				
Individually Evaluated for Impairment	$ 48,905	$ 40,014,387	$ 81,436	$ 40,144,728
Collectively Evaluated for Impairment	24,367,561	-	16,088,110	40,455,671
Total	$ 24,416,466	$ 40,014,387	$ 16,169,546	$ 80,600,399

(1) As a result of our strong collateral position with respect to loans to Associations, along with the earnings, capital and loss reserves of Associations that serve as an additional layer of protection against losses, no allowance for credit losses is recorded in our Strategic Relationships operating segment.

(2) These transfers generally occur as a result of advances on or repayments of seasonal lines of credit or other loans.

The information in the tables under the Credit Quality, Aging Analysis and Impaired Loans captions is presented by operating segment, with guaranteed and non-guaranteed loans in our Agribusiness segment separately identified.

Credit Quality

The following table presents our loans and accrued interest classified, by management, pursuant to our regulator's Uniform Loan Classification System.

December 31, 2016	Agribusiness Non-Guaranteed	Agribusiness Guaranteed	Strategic Relationships	Rural Infrastructure	Total
Acceptable	$ 25,785,154	$ 1,258,464	$ 46,060,386	$ 20,236,049	$ 93,340,053
Special Mention	1,007,981	-	-	380,218	1,388,199
Substandard	687,781	-	-	75,949	763,730
Doubtful	7,104	-	-	-	7,104
Loss	-	-	-	-	-
Total	$ 27,488,020	$ 1,258,464	$ 46,060,386	$ 20,692,216	$ 95,499,086
December 31, 2015					
Acceptable	$ 23,311,424	$ 1,689,855	$ 43,421,344	$ 19,195,561	$ 87,618,184
Special Mention	748,701	19	-	252,984	1,001,704
Substandard	445,300	-	-	181,489	626,789
Doubtful	588	-	-	857	1,445
Loss	-	-	-	-	-
Total	$ 24,506,013	$ 1,689,874	$ 43,421,344	$ 19,630,891	$ 89,248,122
December 31, 2014					
Acceptable	$ 21,593,972	$ 1,827,260	$ 39,123,062	$ 15,796,112	$ 78,340,406
Special Mention	614,017	-	-	163,413	777,430
Substandard	379,622	-	891,325 (1)	180,848	1,451,795
Doubtful	1,595	-	-	29,173	30,768
Loss	-	-	-	-	-
Total	$ 22,589,206	$ 1,827,260	$ 40,014,387	$ 16,169,546	$ 80,600,399

(1) Represents the total wholesale loan balance to one of our affiliated Associations, as discussed in Note 17.

Aging Analysis

The following tables present an aging of past due loans and accrued interest.

December 31, 2016	Agribusiness Non-Guaranteed	Agribusiness Guaranteed	Strategic Relationships	Rural Infrastructure	Total
30-89 Days Past Due	$ 17,353	$ -	$ -	$ -	$ 17,353
90 Days Past Due	41,625	-	-	-	41,625
Total Past Due	$ 58,978	$ -	$ -	$ -	$ 58,978
Current	27,429,042	1,258,464	46,060,386	20,692,216	95,440,108
Total	$ 27,488,020	$ 1,258,464	$ 46,060,386	$ 20,692,216	$ 95,499,086
Accruing Loans 90 Days or More Past Due	$ 804	$ -	$ -	$ -	$ 804
December 31, 2015					
30-89 Days Past Due	$ 10,644	$ -	$ -	$ -	$ 10,644
90 Days Past Due	2,977	-	-	24,914	27,891
Total Past Due	$ 13,621	$ -	$ -	$ 24,914	$ 38,535
Current	24,492,392	1,689,874	43,421,344	19,605,977	89,209,587
Total	$ 24,506,013	$ 1,689,874	$ 43,421,344	$ 19,630,891	$ 89,248,122
Accruing Loans 90 Days or More Past Due	$ 754	$ -	$ -	$ -	$ 754

December 31, 2014		Agribusiness Non-Guaranteed		Agribusiness Guaranteed		Strategic Relationships		Rural Infrastructure		Total
30-89 Days Past Due	$	14,459	$	-	$	-	$	-	$	14,459
90 Days Past Due		3,016		-		-		22,176		25,192
Total Past Due	$	17,475	$	-	$	-	$	22,176	$	39,651
Current		22,571,731		1,827,260		40,014,387		16,147,370		80,560,748
Total	$	22,589,206	$	1,827,260	$	40,014,387	$	16,169,546	$	80,600,399
Accruing Loans 90 Days or More Past Due	$	239	$	-	$	-	$	-	$	239

Impaired Loans

Impaired loan information is shown in the following table. Loans past due 90 days or more and still accruing interest are adequately secured and in the process of collection.

December 31, 2016		Agribusiness Non-Guaranteed		Agribusiness Guaranteed[(1)]		Strategic Relationships[(1)]		Rural Infrastructure		Total
Nonaccrual Loans[(2)]	**$**	**207,247**	**$**	**-**	**$**	**-**	**$**	**-**	**$**	**207,247**
Accruing Loans 90 Days or More Past Due		**804**		**-**		**-**		**-**		**804**
Accruing Restructured Loans		**-**		**-**		**-**		**42,575**		**42,575**
Total Impaired Loans	**$**	**208,051**	**$**	**-**	**$**	**-**	**$**	**42,575**	**$**	**250,626**
December 31, 2015										
Nonaccrual Loans[(2)]	$	87,998	$	-	$	-	$	68,807	$	156,805
Accruing Loans 90 Days or More Past Due		754		-		-		-		754
Accruing Restructured Loans		-		-		-		-		-
Total Impaired Loans	$	88,752	$	-	$	-	$	68,807	$	157,559
December 31, 2014										
Nonaccrual Loans[(2)]	$	48,904	$	-	$	-	$	81,436	$	130,340
Accruing Loans 90 Days or More Past Due		239		-		-		-		239
Accruing Restructured Loans		-		-		-		-		-
Total Impaired Loans	$	49,143	$	-	$	-	$	81,436	$	130,579

(1) There were no impaired loans in our Agribusiness Guaranteed or Strategic Relationships portfolios for any of the periods presented.

(2) Included in nonaccrual loans at December 31, 2016, 2015 and 2014 are $34.8 million, $58.3 million and $61.9 million, respectively, of loans that qualify as troubled debt restructurings.

The following tables present information on impaired loans and amounts in the allowance for loan losses.

December 31, 2016	Agribusiness Non-Guaranteed	Agribusiness Guaranteed[1]	Strategic Relationships[1]	Rural Infrastructure	Total
Impaired Loans With No Related Allowance for Loan Losses					
Carrying Amount	$ 79,908	$ -	$ -	$ 42,575	$ 122,483
Unpaid Principal	88,820	-	-	53,940	142,760
Average Balance	45,536	-	-	42,560	88,096
Interest Income Recognized	2,292	-	-	4,050	6,342
Impaired Loans With Related Allowance for Loan Losses					
Carrying Amount	128,143	-	-	-	128,143
Unpaid Principal	139,028	-	-	-	139,028
Allowance for Loan Losses	31,551	-	-	-	31,551
Average Balance	89,156	-	-	12,888	102,044
Interest Income Recognized	3	-	-	-	3
Total Impaired Loans					
Carrying Amount	208,051	-	-	42,575	250,626
Unpaid Principal	227,848	-	-	53,940	281,788
Allowance for Loan Losses	31,551	-	-	-	31,551
Average Balance	134,692	-	-	55,448	190,140
Interest Income Recognized	2,295	-	-	4,050	6,345
December 31, 2015					
Impaired Loans With No Related Allowance for Loan Losses					
Carrying Amount	$ 20,739	$ -	$ -	$ 43,893	$ 64,632
Unpaid Principal	29,757	-	-	56,131	85,888
Average Balance	18,062	-	-	55,351	73,413
Interest Income Recognized	2,142	-	-	1,285	3,427
Impaired Loans With Related Allowance for Loan Losses					
Carrying Amount	68,013	-	-	24,914	92,927
Unpaid Principal	76,594	-	-	28,810	105,404
Allowance for Loan Losses	15,085	-	-	3,930	19,015
Average Balance	51,656	-	-	15,896	67,552
Interest Income Recognized	12	-	-	-	12
Total Impaired Loans					
Carrying Amount	88,752	-	-	68,807	157,559
Unpaid Principal	106,351	-	-	84,941	191,292
Allowance for Loan Losses	15,085	-	-	3,930	19,015
Average Balance	69,718	-	-	71,247	140,965
Interest Income Recognized	2,154	-	-	1,285	3,439

(1) There were no impaired loans in our Agribusiness Guaranteed or Strategic Relationships portfolios for any of the periods presented.

December 31, 2014	Agribusiness Non-Guaranteed	Agribusiness Guaranteed[1]	Strategic Relationships[1]	Rural Infrastructure	Total
Impaired Loans With No Related Allowance for Loan Losses					
Carrying Amount	$ 14,080	$ -	$ -	$ 47,064	$ 61,144
Unpaid Principal	21,267	-	-	54,397	75,664
Average Balance	16,019	-	-	48,725	64,744
Interest Income Recognized	3,956	-	-	2,317	6,273
Impaired Loans With Related Allowance for Loan Losses					
Carrying Amount	35,063	-	-	34,372	69,435
Unpaid Principal	41,704	-	-	40,740	82,444
Allowance for Loan Losses	13,100	-	-	18,462	31,562
Average Balance	25,976	-	-	24,703	50,679
Interest Income Recognized	-	-	-	-	-
Total Impaired Loans					
Carrying Amount	49,143	-	-	81,436	130,579
Unpaid Principal	62,971	-	-	95,137	158,108
Allowance for Loan Losses	13,100	-	-	18,462	31,562
Average Balance	41,995	-	-	73,428	115,423
Interest Income Recognized	3,956	-	-	2,317	6,273

[1] There were no impaired loans in our Agribusiness Guaranteed or Strategic Relationships portfolios for any of the periods presented.

Interest income forgone on nonaccrual and accruing restructured loans is as follows:

Year Ended December 31, 2016	
Interest Income Which Would Have Been Recognized Per Original Terms	$ 12,379
Less: Interest Income Recognized	(6,344)
Forgone Interest Income	$ 6,035

Commitments on Impaired Loans

There were $23.2 million in commitments available to be drawn by borrowers whose loans were classified as impaired at December 31, 2016.

Troubled Debt Restructurings

Troubled debt restructurings (TDRs) are loans in which we have granted a concession because the borrower is experiencing financial difficulty. Concessions may include payment deferrals, term extensions and/or interest rate reductions. TDRs classified as nonaccrual loans, along with other impaired loans, may be returned to accruing status upon meeting specific criteria, as more fully described in Note 1. A summary of the number of modifications that qualified as TDRs and the dollar amounts before and after modification is as follows:

December 31,	2016	2015	2014
Number of Loan Modifications that Qualified as a TDR	**1**	-	-
Total Loan Amount Before Modification	**$ 24,214**	$ -	$ -
Total Loan Amount After Modification	**24,214**	-	-

Subsequent to their restructuring, there have been no payment defaults on our TDR-classified loans.

Leases Outstanding

A summary of the components of FCL's net investment in direct financing leases and property on operating leases is as follows:

($ in Millions)

December 31,	2016	2015	2014
Net Investment in Direct Financing Leases:			
Minimum Lease Payments to be Received, Net of Participation Interests	**$ 2,074**	$ 2,038	$ 1,744
Estimated Residual Values of Leased Property (Unguaranteed)	**925**	783	641
Initial Direct Costs	**28**	25	21
Less: Unearned Finance Income	**(297)**	(286)	(251)
Net Investment in Direct Financing Leases	**$ 2,730**	$ 2,560	$ 2,155
Property on Operating Leases:			
Vehicles and Other Equipment	**$ 823**	$ 852	$ 854
Initial Direct Costs	**(1)**	5	5
Total	**822**	857	859
Less: Accumulated Depreciation	**(380)**	(374)	(362)
Net Property on Operating Leases	**$ 442**	$ 483	$ 497
Year Ended December 31,	**2016**	**2015**	**2014**
Depreciation Expense	**$ 150**	$ 157	$ 158

At December 31, 2016, gross minimum lease payments to be received for direct financing leases and minimum future rental revenue for noncancelable operating leases are as follows:

($ in Millions)

Year	Minimum Lease Payments	Minimum Future Rental Revenue
2017	$ 633	$ 76
2018	524	52
2019	347	20
2020	228	15
2021	126	9
Subsequent Years	216	13

Note 4 – Investment Securities

A summary of investment securities available-for-sale follows. See Note 12 for disclosures about estimated fair values of financial instruments, including investments.

($ in Millions)

December 31, 2016	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Certificates of Deposit	**$ 775**	**$ 1**	**$ -**	**$ 776**
U.S. Treasury Debt	**11,189**	**38**	**(86)**	**11,141**
U.S. Agency Debt	**5,132**	**32**	**(20)**	**5,144**
Residential Mortgage-Backed Securities (MBS):				
Ginnie Mae	**538**	**3**	**-**	**541**
U.S. Agency	**6,714**	**44**	**(47)**	**6,711**
FHA/VA Non-Wrapped Reperformer	**268**	**9**	**(2)**	**275**
Non-Agency	**63**	**8**	**-**	**71**
Commercial MBS:				
U.S. Agency	**2,649**	**4**	**(12)**	**2,641**
Agricultural MBS:				
Farmer Mac	**99**	**-**	**(2)**	**97**
Corporate Bonds	**40**	**-**	**-**	**40**
Asset-Backed and Other	**319**	**10**	**(1)**	**328**
Total	**$ 27,786**	**$ 149**	**$ (170)**	**$ 27,765**

($ in Millions)

December 31, 2015	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. Treasury Debt	$ 7,174	$ 36	$ (22)	$ 7,188
U.S. Agency Debt	5,842	41	(26)	5,857
Residential MBS:				
Ginnie Mae	901	5	-	906
U.S. Agency	7,762	55	(54)	7,763
FHA/VA Non-Wrapped Reperformer	336	9	(3)	342
Non-Agency	118	12	(1)	129
Commercial MBS:				
U.S. Agency	1,986	1	(5)	1,982
Agricultural MBS:				
Farmer Mac	126	-	(2)	124
Corporate Bonds	166	-	-	166
Asset-Backed and Other	36	12	(1)	47
Total	$ 24,447	$ 171	$ (114)	$ 24,504

($ in Millions)

December 31, 2014	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. Treasury Debt	$ 7,587	$ 39	$ (1)	$ 7,625
U.S. Agency Debt	5,649	61	(30)	5,680
Residential MBS:				
Ginnie Mae	1,460	12	-	1,472
U.S. Agency	7,581	67	(61)	7,587
FHA/VA Non-Wrapped Reperformer	403	2	(14)	391
Non-Agency	149	18	(1)	166
Commercial MBS:				
U.S. Agency	1,007	1	(1)	1,007
Agricultural MBS:				
Farmer Mac	153	-	(3)	150
Corporate Bonds	145	1	-	146
Asset-Backed and Other	71	26	(1)	96
Total	$ 24,205	$ 227	$ (112)	$ 24,320

A summary of the contractual maturity, amortized cost, fair value and weighted average yield of investment securities by type at December 31, 2016 is as follows:

Certificates of Deposit

($ in Millions)

Contractual Maturity	Amortized Cost	Fair Value	Weighted Average Yield
In One Year or Less	$ 775	$ 776	1.21 %
One to Five Years	-	-	-
Five to Ten Years	-	-	-
After Ten Years	-	-	-
Total	$ 775	$ 776	1.21

U.S. Treasury Debt Securities

($ in Millions)

Contractual Maturity	Amortized Cost	Fair Value	Weighted Average Yield
In One Year or Less	$ 2,152	$ 2,152	0.70 %
One to Five Years	6,175	6,187	1.60
Five to Ten Years	2,862	2,802	1.80
After Ten Years	-	-	-
Total	$ 11,189	$ 11,141	1.48

U.S. Agency Debt Securities

($ in Millions)

Contractual Maturity	Amortized Cost	Fair Value	Weighted Average Yield
In One Year or Less	$ 1,556	$ 1,558	0.97 %
One to Five Years	1,568	1,592	2.32
Five to Ten Years	2,008	1,994	1.58
After Ten Years	-	-	-
Total	$ 5,132	$ 5,144	1.62

Ginnie Mae Residential MBS

($ in Millions)

Contractual Maturity	Amortized Cost	Fair Value	Weighted Average Yield
In One Year or Less	$ -	$ -	- %
One to Five Years	2	2	2.30
Five to Ten Years	12	12	2.58
After Ten Years	524	527	1.74
Total	$ 538	$ 541	1.76

U.S. Agency Residential MBS

($ in Millions)

Contractual Maturity	Amortized Cost	Fair Value	Weighted Average Yield
In One Year or Less	$ -	$ -	- %
One to Five Years	23	23	1.71
Five to Ten Years	43	43	1.08
After Ten Years	6,648	6,645	2.14
Total	$ 6,714	$ 6,711	2.13

FHA/VA Non-Wrapped Reperformer Residential MBS

($ in Millions)

Contractual Maturity	Amortized Cost	Fair Value	Weighted Average Yield
In One Year or Less	$ -	$ -	- %
One to Five Years	-	-	-
Five to Ten Years	-	-	-
After Ten Years	268	275	3.84
Total	$ 268	$ 275	3.84

Non-Agency Residential MBS

($ in Millions)

Contractual Maturity		Amortized Cost		Fair Value	Weighted Average Yield	
In One Year or Less	$	-	$	-	-	%
One to Five Years		1		1	0.93	
Five to Ten Years		-		-	-	
After Ten Years		62		70	8.74	
Total	$	63	$	71	8.55	

U.S. Agency Commercial MBS

($ in Millions)

Contractual Maturity		Amortized Cost		Fair Value	Weighted Average Yield	
In One Year or Less	$	5	$	5	0.85	%
One to Five Years		1,022		1,019	1.17	
Five to Ten Years		1,622		1,617	1.30	
After Ten Years		-		-	-	
Total	$	2,649	$	2,641	1.25	

Farmer Mac Agricultural MBS

($ in Millions)

Contractual Maturity		Amortized Cost		Fair Value	Weighted Average Yield	
In One Year or Less	$	-	$	-	-	%
One to Five Years		-		-	-	
Five to Ten Years		-		-	-	
After Ten Years		99		97	2.70	
Total	$	99	$	97	2.70	

Corporate Bonds

($ in Millions)

Contractual Maturity		Amortized Cost		Fair Value	Weighted Average Yield	
In One Year or Less	$	-	$	-	-	%
One to Five Years		40		40	1.78	
Five to Ten Years		-		-	-	
After Ten Years		-		-	-	
Total	$	40	$	40	1.78	

Asset-Backed Securities and Other

($ in Millions)

Contractual Maturity		Amortized Cost		Fair Value	Weighted Average Yield	
In One Year or Less	$	-	$	-	-	%
One to Five Years		292		291	1.09	
Five to Ten Years		-		-	-	
After Ten Years		27		37	14.27	
Total	$	319	$	328	2.23	

While the substantial majority of our residential mortgage-backed securities (MBS) and a portion of our asset-backed securities (ABS) have contractual maturities in excess of 10 years, expected maturities for these securities are shorter than contractual maturities because of structured cash flow features and because borrowers have the right to call or prepay obligations.

The following tables show the fair value and gross unrealized losses for investments in a loss position aggregated by security type, and the length of time the securities have been in a continuous unrealized loss position at December 31, 2016, 2015 and 2014, respectively. The continuous loss position is based on the date the impairment first occurred.

($ in Millions)	Less Than 12 Months		Greater Than 12 Months	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
December 31, 2016				
Certificates of Deposit	$ -	$ -	$ -	$ -
U.S. Treasury Debt	5,441	(86)	-	-
U.S. Agency Debt	1,165	(14)	491	(6)
Residential MBS:				
Ginnie Mae	84	-	21	-
U.S. Agency	1,403	(10)	1,492	(37)
FHA/VA Non-Wrapped Reperformer	9	-	21	(2)
Non-Agency	-	-	11	-
Commercial MBS:				
U.S. Agency	1,245	(11)	333	(1)
Agricultural MBS:				
Farmer Mac	31	-	66	(2)
Corporate Bonds	10	-	-	-
Asset-Backed and Other	294	-	5	(1)
Total	$ 9,682	$ (121)	$ 2,440	$ (49)

($ in Millions)	Less Than 12 Months		Greater Than 12 Months	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
December 31, 2015				
U.S. Treasury Debt	$ 4,429	$ (22)	$ -	$ -
U.S. Agency Debt	2,200	(12)	826	(14)
Residential MBS:				
Ginnie Mae	23	-	12	-
U.S. Agency	739	(5)	1,866	(49)
FHA/VA Non-Wrapped Reperformer	65	-	62	(3)
Non-Agency	24	-	16	(1)
Commercial MBS:				
U.S. Agency	1,368	(5)	179	-
Agricultural MBS:				
Farmer Mac	-	-	124	(2)
Corporate Bonds	106	-	-	-
Asset-Backed and Other	-	-	7	(1)
Total	$ 8,954	$ (44)	$ 3,092	$ (70)
December 31, 2014				
U.S. Treasury Debt	$ 495	$ (1)	$ -	$ -
U.S. Agency Debt	1,753	(4)	1,334	(26)
Residential MBS:				
Ginnie Mae	16	-	84	-
U.S. Agency	541	(2)	2,428	(60)
FHA/VA Non-Wrapped Reperformer	-	-	223	(14)
Non-Agency	7	-	18	(1)
Commercial MBS:				
U.S. Agency	640	(1)	-	-
Agricultural MBS:				
Farmer Mac	-	-	150	(3)
Corporate Bonds	10	-	20	-
Asset-Backed and Other	1	-	9	(1)
Total	$ 3,463	$ (8)	$ 4,266	$ (105)

As of December 31, 2016, with the exception of the securities in the following table, we expect to collect all principal and interest payments on our investment securities. We do not intend to sell the securities in unrealized loss positions, and it is not likely that we will be required to sell such securities, for regulatory, liquidity or other purposes before an anticipated recovery of our cost basis occurs.

The following table summarizes other-than-temporary impairment (OTTI) losses recorded in earnings by security type for the periods presented.

($ in Millions)	Number of Securities	OTTI
Year Ended December 31, 2016		
FHA/VA Non-Wrapped Reperformer Residential MBS	**1**	**$ 1**
Total	**1**	**$ 1**
Year Ended December 31, 2015		
FHA/VA Non-Wrapped Reperformer Residential MBS	2	$ 11
Total	2	$ 11
Year Ended December 31, 2014		
Investment Securities Available-for-Sale	-	$ -
Total	-	$ -

The fair value of our securities with previously recorded OTTI losses was $35.0 million, $104.0 million and $175.0 million at December 31, 2016, 2015 and 2014, respectively.

The following table details the activity related to the credit loss component of investment securities that have been written down for OTTI.

Credit Losses on Impaired Investments ($ in Millions)

	2016	2015	2014
Beginning of Year	**$ 29**	$ 57	$ 65
Additional Credit Impairments Related to Securities Previously Impaired	**-**	10	-
Initial Credit Impairments Related to Securities Not Previously Impaired	**1**	1	-
Sales of Investments with Credit Impairments	**(18)**	(37)	(7)
Subsequent Accretion for Increases in Cash Flows Expected to be Collected	**(2)**	(2)	(1)
End of Year	**$ 10**	$ 29	$ 57

In 2015, we enhanced our process for estimating the component of unrealized losses attributable to credit losses for impaired investment securities. These enhancements primarily included using third-party credit and cash flow models which utilize loan level data to project future performance of MBS and ABS. These improvements did not materially impact the overall level of expected losses. Model projections are influenced by factors such as interest rates, economic conditions, including housing prices, and the performance, type and age of collateral. Projected prepayment rates ranged from 10 percent to 49 percent (conditional prepayment rate) for impaired investment securities at December 31, 2016. The model considers current and historical loan level performance information and the factors listed above to estimate future defaults. Default rates ranged from 6 percent to 19 percent for impaired investment securities at December 31, 2016. Loss severity results are derived using model estimated home price assumptions at the time of default and ranged from 8 percent to 80 percent for impaired investment securities at December 31, 2016.

Acquired Investments

Included in our investment portfolio are certain credit-impaired investment securities acquired in our 2012 merger with AgBank. The carrying amount of these investment securities was $350.7 million, $439.7 million and $509.9 million at December 31, 2016, 2015 and 2014, respectively. These investments are subject to the provisions of Accounting Standards Codification (ASC) 310-30, Accounting for Certain Loans or Debt Securities Acquired in a Transfer, pursuant to which the difference between contractually required payments and the cash flows expected to be collected at acquisition is considered a “non-accretable” amount. This difference is neither accreted into income nor recorded on our consolidated balance sheets.

At the end of each reporting period, we evaluate estimated cash flows expected to be collected from acquired credit-impaired investment securities. Increases in expected cash flows will generally result in an increase in interest income over the remaining life of the investment. Decreases in expected cash flows due to credit deterioration will generally result in other-than-temporary impairment charges recognized against earnings. We recorded $0.8 million of other-than-temporary impairment losses on one acquired credit-impaired investment security in 2016. During 2015, we recorded $11.1 million in impairment losses on two of our acquired credit-impaired FHA/VA non-wrapped reperformer residential MBS due to lower repayment cash flows resulting from loan modification activity in the underlying collateral. One of these securities was subsequently sold in 2015 for total proceeds of $21.3 million, which resulted in a gain of $0.8 million. We recorded no impairment losses on investment securities in 2014.

Any excess of cash flows expected to be collected over fair value is referred to as an “accretable amount” and is recognized in interest income over the remaining life of the investment using the effective yield method.

($ in Millions)

Changes in Accretable Amounts of Acquired Credit-Impaired Investment Securities

	2016	2015	2014
Balance at January 1	**$ (96)**	$ (133)	$ (165)
Interest Recognized in Earnings	**21**	26	32
Reclassifications from Nonaccretable Amount for Investments with Improvements in Expected Cash Flows	**-**	-	-
Total Other-Than-Temporary Impairment Losses Included in Earnings	**1**	11	-
Balance at December 31	**$ (74)**	$ (96)	$ (133)

Sale of Investment Securities

In 2016, we sold six U.S. agency debt investment securities and a U.S. Treasury debt investment security with a combined book value of $751.5 million for total proceeds of $752.4 million for balance sheet positioning purposes. We also sold three FHA/VA non-wrapped reperformer MBS with a combined book value of $52.0 million for total proceeds of $54.9 million. These three securities had been previously impaired and were excluded from our liquidity reserve, and were sold due to favorable market conditions. In addition, we sold six non-impaired corporate bonds with a combined book value of $76.0 million for total proceeds of $76.8 million. These corporate bonds were sold to manage credit exposure. The resulting gains from all 2016 sales of $4.6 million are recorded in Noninterest Income in our consolidated statement of income for the year ended December 31, 2016.

During 2015, in addition to the sale of the credit-impaired security discussed above, we also sold three non-agency ABS and one agency debt security with a combined book value of $127.8 million for total proceeds of $149.6 million. The three non-agency ABS had been previously impaired and were excluded from our liquidity reserve, and were sold due to favorable market conditions. For income tax purposes, the sale of these previously-impaired securities generated a capital loss. The sale of the agency debt security was consummated in order to generate capital gains and thereby utilize the substantial majority of this capital loss. In 2014, we sold one ABS and two non-agency MBS with a combined book value of $23.1 million for total proceeds of $28.0 million.

Note 5 – Bonds and Notes

We are primarily liable for the following bonds and notes:

($ in Millions)

December 31,	2016	2015	2014
Bonds	**$ 100,987**	$ 89,677	$ 79,530
Medium-term Notes	**95**	118	135
Discount Notes	**12,210**	15,019	15,075
Total Systemwide Debt Securities	**113,292**	104,814	94,740
Cash Investment Services Payable	**1,501**	1,833	2,526
Other	**293**	323	269
Total Bonds and Notes	**$ 115,086**	$ 106,970	$ 97,535

Systemwide Debt Securities

We, along with the other System banks, obtain funds for lending activities and operations primarily from the sale of debt securities issued by System banks through the Funding Corporation. These debt securities are composed of bonds, medium-term notes and discount notes and are collectively referred to as Systemwide Debt Securities. Pursuant to the Farm Credit Act, Systemwide Debt Securities are the general unsecured joint and several obligations of the System banks. Systemwide Debt Securities are not obligations of, and are not guaranteed by, the U.S. government or any agency or instrumentality thereof, other than the System banks. Bonds and medium-term notes are issued at fixed or floating interest rates. Bonds have original maturities of three months to 30 years, while medium-term notes have original maturities ranging from one to 30 years. Discount notes are issued with maturities ranging from one to 365 days. The weighted average remaining maturity of CoBank's discount notes outstanding at December 31, 2016 was 172 days.

Other Bonds and Notes

Cash investment services payable mature within one year. Other bonds and notes include cash collateral payable to derivative counterparties that have posted collateral to us.

Other bonds and notes also includes $205.0 million at December 31, 2016 and 2015 and $20.0 million at December 31, 2014 in funding pursuant to a bond guarantee program offered by the Rural Utilities Service (RUS) agency of the United States Department of Agriculture. At December 31, 2016, CoBank could borrow an additional $670.0 million to fund rural electric and telecommunications infrastructure loans under the program. This funding is provided under a bond purchase agreement with the Federal Financing Bank (FFB) and a bond guarantee agreement with RUS, which provides guarantees to the FFB. As part of the bond guarantee agreement with RUS, we are required to pledge collateral in an amount at least equal to the principal balance of the notes outstanding. These bonds mature in 7-9 years.

Maturities and Rates

The aggregate maturities and the weighted average interest rates of CoBank's Systemwide Debt Securities at December 31, 2016 are shown in the following table. Weighted average interest rates include the effect of related derivative financial instruments.

($ in Millions)

Maturities and Rates of Systemwide Debt Securities

	Bonds		Medium-term Notes		Discount Notes		Total	
Year of Maturity	Amount	Weighted Average Interest Rate	Amount	Weighted Average Interest Rate	Amount	Weighted Average Interest Rate	Amount	Weighted Average Interest Rate
2017	$ 36,990	0.83 %	$ -	- %	$ 12,210	0.65 %	$ 49,200	0.79 %
2018	26,030	0.93	-	-	-	-	26,030	0.93
2019	11,966	1.14	1	6.67	-	-	11,967	1.14
2020	5,229	1.59	-	-	-	-	5,229	1.59
2021	4,432	1.59	4	7.35	-	-	4,436	1.59
2022 and thereafter	16,340	2.88	90	5.77	-	-	16,430	2.89
Total	$ 100,987	1.30	$ 95	5.85	$ 12,210	0.65	$ 113,292	1.23

Certain Systemwide Debt Securities include debt which may be called on the first call date and, subsequently, called daily or on each interest payment date thereafter. At December 31, 2016, callable debt was $7.0 billion, with the range of first call dates being from January 2017 through December 2021.

Conditions for Issuing Systemwide Debt

Certain conditions must be met before we can participate in the issuance of Systemwide Debt Securities. One such condition of participation, required by the Farm Credit Act and FCA regulations, is that we must maintain specified, eligible, unencumbered assets at least equal in value to the total amount of debt obligations outstanding for which we are primarily liable. Such assets exceeded applicable debt by $9.4 billion at December 31, 2016. This requirement does not provide holders of Systemwide Debt Securities with a security interest in any of our assets.

In addition, because System banks are contingently liable for Systemwide Debt Securities of the other System banks, the banks have entered into agreements to provide for mutual protection. The System banks and the Funding Corporation operate under a Third Amended and Restated Market Access Agreement (MAA) designed to address certain Funding Corporation statutory responsibilities. The MAA financial conditions establish mechanisms for monitoring, limiting and ultimately denying a troubled System bank's access to and participation in Systemwide debt issuances, thereby limiting other System banks' exposure to statutory joint and several liabilities. The MAA promotes the identification and resolution of financial problems of individual System banks in a timely manner. As required by the MAA, the System banks and the Funding Corporation undertake a periodic formal review of the MAA to consider whether any amendments are appropriate. A review of the MAA was undertaken in 2016 and modifications were made to adapt to the FCA's new capital regulations discussed in Note 7. These changes became effective on January 1, 2017.

The System banks and the Funding Corporation have also entered into an Amended and Restated Contractual Interbank Performance Agreement (CIPA). The CIPA establishes an agreed-upon standard of financial condition and performance for the System banks and their affiliated Associations (the Districts). The CIPA measures various ratios taking into account the capital, asset quality, earnings, interest rate risk and liquidity of the Districts and System banks. At December 31, 2016, 2015 and 2014, all System banks, including CoBank, were in compliance with all of the conditions of participation for the issuance of Systemwide Debt Securities. Periodically, the ratios in the CIPA model are reviewed to take into consideration current performance standards in the financial services industry. A review was conducted during 2016 and no adjustments to the CIPA model were warranted.

Insurance Fund

The Farm Credit Act established the Farm Credit System Insurance Corporation (Insurance Corporation) to administer the Farm Credit Insurance Fund (Insurance Fund). The Insurance Corporation insures the timely payment of principal and interest on Systemwide Debt Securities and carries out various other responsibilities.

The primary sources of funds for the Insurance Fund are premiums paid by the System banks and earnings on the Insurance Corporation assets. Premiums are determined and assessed to System banks semi-annually by the Insurance Corporation.

Each System bank is required to pay premiums into the Insurance Fund until the assets in the Insurance Fund reach the "secure base amount" (SBA), which is defined in the Farm Credit Act as 2 percent of the aggregate outstanding insured Systemwide Debt Securities (adjusted to reflect the reduced risk on loans or investments guaranteed by the U.S. or state governments) or such other percentage of the aggregate outstanding insured Systemwide Debt Securities as the Insurance Corporation in its sole discretion determines to be actuarially sound. When the amount in the Insurance Fund exceeds the SBA, the Insurance Corporation is required to reduce premiums, and, in some instances, may refund excess amounts, but must still ensure that premiums are sufficient to maintain the level of the Insurance Fund at the SBA. There were no premium refunds from the Insurance Corporation in the years ended December 31, 2016, 2015 and 2014.

The Insurance Corporation premium rates were 16 basis points of adjusted insured debt obligations in the first half of 2016 and 18 basis points in the second half of 2016. For the years ended December 31, 2015 and 2014, the Insurance Corporation premium rates were 13 basis points and 12 basis points, respectively, of adjusted insured debt obligations.

The Insurance Fund is available to assist with the timely payment of principal and interest on Systemwide Debt Securities, in the event of a default by a System bank, to the extent that net assets are available in the Insurance Fund. No other liabilities reflected in our financial statements are insured by the Insurance Corporation.

In addition, the Insurance Fund could be used to ensure the retirement of System entities' protected borrower equity at par or stated value and for other specified purposes. The Insurance Fund is also available for discretionary uses of providing assistance to certain troubled System institutions and to cover the operating expenses of the Insurance Corporation. The Insurance Fund does not insure the obligations of Farmer Mac.

At December 31, 2016, the assets of the Insurance Fund aggregated $4.5 billion. However, due to the other authorized uses of the Insurance Fund, there is no assurance that any available amount in the Insurance Fund will be sufficient to fund the timely payment of principal or interest on Systemwide Debt Securities in the event of a default by any System bank having primary liability thereon.

The Insurance Corporation has an agreement with the Federal Financing Bank, a federal instrumentality subject to the supervision and direction of the U.S. Treasury, pursuant to which the Federal Financing Bank would advance funds to the Insurance Corporation. Under its existing statutory authority, the Insurance Corporation may use these funds to provide assistance to the System banks in exigent market circumstances which threaten the banks' ability to pay maturing debt obligations. The agreement provides for advances of up to $10 billion and terminates on September 30, 2017 unless otherwise extended. The decision whether to seek funds from the Federal Financing Bank is in the discretion of the Insurance Corporation, and each funding obligation of the Federal Financing Bank is subject to various terms and conditions and, as a result, there can be no assurance that funding would be available if needed by the System.

Early Extinguishment of Debt

During 2016, we recorded losses of $34.2 million on the early extinguishment of $2.1 billion of Systemwide Debt Securities, which included $1.8 billion in Systemwide Debt Securities sold at market value to other Farm Credit Banks. During 2015 and 2014, we recorded losses of $37.5 million and $58.3 million, respectively, on the early extinguishment of $5.8 billion and $615.1 million of Systemwide Debt Securities, respectively. The $5.8 billion in Systemwide Debt Securities extinguished in 2015 included $5.4 billion in Systemwide Debt Securities sold at market value to other Farm Credit Banks. All losses on early extinguishment of debt are reported as a component of noninterest income.

Note 6 – Subordinated Debt

We had subordinated debt outstanding of $500.0 million at December 31, 2016 compared to $904.7 million at December 31, 2015 and 2014. Our subordinated debt outstanding at December 31, 2016 was issued in June 2007, and is summarized in the table below.

Subordinated Debt as of December 31, 2016

	Series 2007A
Type	Unsecured subordinated notes
Issue Date	June 2007
Maturity Date	June 2022
Amount Outstanding (000)	$500,000
Interest Rate (%)	3-month USD LIBOR + 0.60% (1.563% at December 31, 2016)
Interest Payment Date	Quarterly in cash on 15th day of March, June, September and December

Our subordinated debt may be redeemed, in whole or in part, at our option, on June 15, 2017. It may also be redeemed, in whole, at our option at any time upon the occurrence of a regulatory event, whereby through a change in law or regulation the subordinated debt is no longer eligible for (i) inclusion in our permanent capital or total surplus or (ii) exclusion from total liabilities for purposes of calculating our net collateral ratio. Any redemption of subordinated debt will be at a redemption price of 100 percent of the principal amount, plus any accrued but unpaid interest to the date of redemption, provided we have made payment in full of all amounts then due in respect of our senior indebtedness.

Our subordinated debt is unsecured and junior to all other categories of creditors, including general creditors, and senior to all classes of shareholders. Interest on subordinated debt will be deferred if, as of the fifth business day prior to an interest payment date, any applicable minimum regulatory capital ratios are not satisfied. A deferral period may not last for more than the shorter of five consecutive years or the maturity date of the subordinated debt. We may not declare or pay any dividends or patronage distributions until interest payments are resumed and all deferred interest has been paid.

Our subordinated debt is not considered Systemwide debt and is not an obligation of, or guaranteed by, the Farm Credit System or any banks in the System, other than CoBank. Payments on our subordinated debt are not insured by the Insurance Corporation.

On April 15, 2016, we redeemed all of our outstanding 7.875 percent subordinated notes due in 2018 totaling $404.7 million. The redemption price was 100 percent of the principal amount, together with accrued and unpaid interest up to, but excluding, the date of redemption. For information relating to a complaint filed by a number of investors who had held the subordinated notes alleging CoBank impermissibly redeemed the subordinated notes, see Note 15.

Note 7 – Shareholders' Equity

Description of Equities

As of December 31, 2016, we had $1.5 billion of preferred stock and $3.1 billion in common stock outstanding, as summarized in the table below.

Preferred and Common Stock

	Stock		
	Preferred	Class A	Class A
Shares Authorized (000)	n/a [1]	Unlimited	Unlimited
Shares Outstanding (000)	9,600	1,260	29,462
Voting or Nonvoting	Nonvoting	Nonvoting	Voting
Par / Face Value (per share)	n/a [1]	$ 100	$ 100

[1] Shares authorized and par/face value varies by issuance. Refer to the table on the following page.

Pursuant to our bylaws, we have a single class of common equity – Class A common stock; however, only Class A shareholders that are directly eligible to borrow from CoBank, that borrow on a patronage basis and that are active borrowers, have voting rights. No other class of shareholders has voting rights.

The changes in the number of shares of common stock outstanding during 2016, 2015 and 2014 are summarized in the following table.

Shares of Common Stock (in Thousands)

	2016	2015	2014
Beginning of the Year	**28,997**	27,685	26,775
Issuances	**2,016**	1,638	1,245
Retirements	**(291)**	(326)	(335)
End of the Year	**30,722**	28,997	27,685

In December 2016, our shareholders approved an increase in the amount of preferred stock that CoBank may have outstanding at any time from $1.5 billion to $2.5 billion effective January 1, 2017, and provided authorization for the Bank to issue preferred stock up to the new limit through December 31, 2026. These measures allow us to access third party capital more quickly and efficiently in response to dynamic market conditions, without the necessity of obtaining shareholder approval for each issuance. However, any preferred stock issuances would still require approval from the Board of Directors and the FCA.

Holders of common equities may not pledge, hypothecate or otherwise grant a security interest in such equities except as consented to by the Bank under FCA regulations. We have a statutory first lien on CoBank common stock. We pay dividends only on preferred stock.

In case of liquidation or dissolution, preferred stock, common stock and unallocated retained earnings would be distributed to shareholders, after the payment of all liabilities pursuant to FCA regulations, in the following order: (1) retirement of all Series E, Series F, Series G, Series H and Series I preferred stock at par plus all accrued but unpaid dividends for the then current dividend period; (2) retirement of all common stock at par; (3) retirement of all patronage surplus (a component of unallocated retained earnings) in amounts equal to the face amount of the applicable nonqualified written notices of allocation or such other notice; and (4) remaining unallocated retained earnings and reserves shall be paid to the holders of common stock in proportion to patronage to the extent possible.

Preferred Stock

The following table summarizes our outstanding preferred stock as of December 31, 2016.

Preferred Stock as of December 31, 2016

	Series E	Series F	Series G	Series H	Series I
Type	Non-Cumulative Perpetual	Non-Cumulative Perpetual	Non-Cumulative Perpetual	Non-Cumulative Perpetual	Non-Cumulative Perpetual
Issue Date	January 2012	October 2012	April 2013	November 2014	April 2016
Shares Outstanding (000)	225	4,000	2,000	3,000	375
Amount Outstanding (000)	$225,000	$400,000	$200,000	$300,000	$375,000
Par Value (per share)	$1,000	$100	$100	$100	$1,000
Current Dividend Rate (%)	3-month USD LIBOR + 1.18 (2.05% at December 31, 2016)	6.25%	6.125%	6.20%	6.25%
Next Change in Dividend Rate (% and dates)	n/a	3-month USD LIBOR + 4.557% beginning on October 1, 2022	n/a	3-month USD LIBOR + 3.744% beginning on January 1, 2025	3-month USD LIBOR + 4.66% beginning on October 1, 2026
Dividend Frequency	Quarterly	Quarterly	Quarterly	Quarterly	Semi-Annual
Optional Redemption Begins (date)	July 2012 and each five year anniversary thereafter at par plus accrued dividends	Quarterly calls on or after October 1, 2022 at par plus accrued dividends	Quarterly calls on or after July 1, 2018 at par plus accrued dividends	Quarterly calls on or after January 1, 2025 at par plus accrued dividends	Quarterly calls on or after October 1, 2026 at par plus accrued dividends

On October 1, 2014, we redeemed all of our outstanding Series D non-cumulative perpetual preferred stock totaling $136.8 million. We used available cash to effectuate this redemption. The dividend rate for our Series D preferred stock was 11.0 percent through the date of redemption.

On November 26, 2014, we issued $300 million of Series H non-cumulative perpetual preferred stock. We used the proceeds from the Series H preferred stock to increase our regulatory capital pursuant to current FCA regulations and for general corporate purposes. Dividends on Series H preferred stock, if declared by the Board of Directors in its sole discretion, are non-cumulative and are payable quarterly at a fixed annual rate equal to 6.20 percent from the date of issuance up to, but excluding, January 1, 2025. Thereafter, dividends will accrue at an annual rate equal to 3-month USD LIBOR plus 3.744 percent.

On April 8, 2016, we issued $375 million of Series I non-cumulative perpetual preferred stock. We used the net proceeds from the Series I preferred stock issuance to increase our regulatory capital pursuant to current FCA regulations and for general corporate purposes. Dividends on the Series I preferred stock, if declared by the Board of Directors in its sole discretion, are non-cumulative and are payable semi-annually in arrears beginning on October 1, 2016 and will accrue at a fixed annual rate of 6.25 percent from the date of issuance up to, but excluding, October 1, 2026. Thereafter, dividends will accrue at an annual rate equal to the 3-month USD LIBOR plus 4.66 percent and will be payable quarterly.

All of our outstanding preferred stock is included in permanent capital, total surplus, and core surplus for regulatory capital purposes. In addition, all of our outstanding preferred stock ranks equally, both as to dividends and upon liquidation, and senior to all of our outstanding common stock.

If preferred stock dividends are not paid for 18 consecutive months on any of our preferred stock, holders of all outstanding preferred stock, voting as a single class, will have the right to appoint two non-voting observers to attend our Board of Directors meetings until full dividends for a one-year period are paid. In addition, other than pursuant to an order issued by our regulator, we may not enter into agreements restricting our ability to declare or pay preferred stock dividends.

All stock retirements, including preferred stock redemptions, require the approval of our Board of Directors. Payments of preferred stock dividends also require the approval of our Board of Directors.

Capitalization Requirements

In accordance with the Farm Credit Act, eligible commercial borrowers are required to purchase common stock in CoBank as a condition of borrowing. The minimum initial borrower investment is equal to the lesser of one thousand dollars or 2 percent of the amount of the loan. The minimum initial investment is generally received in cash at the time the borrower receives the loan proceeds.

Association customers are also required to invest in our common stock, as discussed on page 126. Additionally, effective January 1, 2016, eligible financial service members who are not otherwise shareholders have a one hundred dollar capitalization requirement and do not participate in patronage distributions.

Most agricultural export finance customers, customers of FCL and certain other borrowers are not required to purchase, nor do they own, common stock in CoBank. Likewise, they do not participate in patronage distributions.

Retirements of common stock, if any, are determined annually after the Board of Directors sets the target equity level. Net cash retirements are made at the sole discretion of the Board of Directors and are at book value not to exceed par or face value.

Patronage

As a cooperative bank, we return a portion of our earnings to eligible common shareholders in the form of patronage distributions. Eligible common shareholders will receive total patronage for 2016 of $588.1 million, of which $473.9 million will be paid in cash in 2017 and the balance will be paid in common stock. For 2015 and 2014, total patronage was $514.1 million and $467.5 million, respectively, of which $416.0 million and $378.7 million, respectively, was paid in cash in the subsequent year. All patronage distributions require the approval of our Board of Directors.

Regulatory Capitalization Requirements and Restrictions

The FCA's capital adequacy regulations require us to maintain certain minimum capital requirements and collateral standards.

We are prohibited from reducing permanent capital by retiring stock or making certain other distributions to shareholders unless prescribed capital standards are met. All such minimum regulatory capital requirements and collateral standards were met as of December 31, 2016.

At December 31, 2016, our permanent capital, total surplus, core surplus and net collateral ratios exceeded the regulatory minimums as noted in the following table.

Capital Ratios as of December 31,

	Regulatory Minimums	2016	2015	2014
Permanent Capital Ratio	7.0 %	**15.47 %**	14.95 %	15.70 %
Total Surplus Ratio	7.0	**14.52**	14.07	14.81
Core Surplus Ratio	5.59 (1)	**11.02**	10.29	10.47
Net Collateral Ratio	104.0 (2)	**106.94**	106.82	107.22

(1) The regulatory minimum core surplus ratio is 3.5 percent, but the FCA requires the higher 5.59 percent during a period in which we include a portion of our common stock as core surplus.

(2) The regulatory minimum net collateral ratio is 103.0 percent, but the FCA requires the higher 104.0 percent during a period in which we have subordinated debt outstanding.

Our capital and collateral ratios are calculated in accordance with FCA regulations, as summarized below.

- The permanent capital ratio is quarterly average permanent capital (generally shareholders' equity and subordinated debt subject to certain limitations, excluding accumulated other comprehensive income (loss) and other deductions) as a percentage of quarterly average risk-adjusted assets.
- The total surplus ratio is quarterly average total surplus (quarterly average permanent capital, net of purchased stock) as a percentage of quarterly average risk-adjusted assets.
- The core surplus ratio is quarterly average core surplus (generally unallocated retained earnings, non-cumulative preferred stock and a portion of common stock) as a percentage of quarterly average risk-adjusted assets.
- The net collateral ratio is net collateral (generally net loans, cash and investments) divided by total liabilities, as adjusted to exclude subordinated debt (subject to certain limitations) and the fair value of certain derivatives.

Pursuant to FCA guidance through December 31, 2016, a portion of our common stock was included in core surplus, subject to certain conditions. The FCA required that we also calculated our core surplus ratio excluding common stock and established a 3.0 percent minimum for such ratio. As of December 31, 2016, our core surplus ratio excluding common stock was 9.55 percent.

On March 10, 2016, the FCA adopted final rules (the New Capital Regulations) relating to regulatory capital requirements for System banks, including CoBank, and Associations. The New Capital Regulations took effect January 1, 2017. The stated objectives of the New Capital Regulations are as follows:

- To modernize capital requirements while ensuring that System institutions continue to hold sufficient regulatory capital to fulfill the System's mission as a government-sponsored enterprise;
- To ensure that the System's capital requirements are comparable to the Basel III framework and the standardized approach that the federal banking regulatory agencies have adopted, but also to ensure that the rules recognize the cooperative structure and the organization of the System;
- To make System regulatory capital requirements more transparent; and
- To meet certain requirements of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the Dodd-Frank Act).

The New Capital Regulations, among other things, replace existing core surplus and total surplus requirements with common equity tier 1 (CET1), tier 1 and total capital (tier 1 plus tier 2) risk-based capital ratio requirements. The New Capital Regulations also add a tier 1 leverage ratio for all System institutions, which replaces the existing net collateral ratio for System banks. In addition, the New Capital Regulations establish a capital conservation buffer and a leverage buffer; enhance the sensitivity of risk weightings; and, for System banks only, require additional public disclosures. The revisions to the risk weightings include alternatives to the use of credit ratings, as required by the Dodd-Frank Act.

The New Capital Regulations set the following minimum risk-based requirements:

- A CET1 capital ratio of 4.5 percent;
- A tier 1 capital ratio (CET1 capital plus additional tier 1 capital) of 6 percent; and
- A total capital ratio (tier 1 plus tier 2) of 8 percent.

The New Capital Regulations also set a minimum tier 1 leverage ratio (tier 1 capital divided by total assets) of 4 percent, of which at least 1.5 percent must consist of unallocated retained earnings (URE) and URE equivalents, which are nonqualified allocated equities with certain characteristics of URE.

The New Capital Regulations establish a capital cushion (capital conservation buffer) of 2.5 percent above the risk-based CET1, tier 1 and total capital requirements. In addition, the New Capital Regulations establish a leverage capital cushion (leverage buffer) of 1 percent above the tier 1 leverage ratio requirement. If capital ratios fall below the regulatory minimum plus buffer amounts, capital distributions (equity redemptions, cash dividend payments, and cash patronage payments) and discretionary senior executive bonuses are restricted or prohibited without prior FCA approval. The New Capital Regulations establish a three-year phase-in of the capital conservation buffer beginning January 1, 2017. There will be no phase-in of the leverage buffer.

We were in compliance with the requirements of the New Capital Regulations on January 1, 2017.

Accumulated Other Comprehensive Income/(Loss)

Changes in accumulated other comprehensive income/(loss) for 2016, 2015 and 2014 are presented in the following table.

Changes in Accumulated Other Comprehensive Income (Loss) by Component[(1)]

	Unrealized Gains/(Losses) On Investment Securities		Unrealized Gains/(Losses) on Interest Rate Swaps and Other Financial Instruments	Net Pension Adjustment	Total
	Non-OTTI	OTTI			
Balance at December 31, 2015	**$ 38,588**	**$ 7,873**	**$ (40,157)**	**$ (66,291)**	**$ (59,987)**
Other comprehensive income (loss) before reclassifications	**(56,662)**	**(1,297)**	**(583)**	**(5,400)**	**(63,942)**
Amounts reclassified from accumulated other comprehensive income (loss)	**(1,553)**	**(1,607)**	**3,033**	**4,173**	**4,046**
Net current-period other comprehensive income (loss)	**(58,215)**	**(2,904)**	**2,450**	**(1,227)**	**(59,896)**
Balance at December 31, 2016	**$ (19,627)**	**$ 4,969**	**$ (37,707)**	**$ (67,518)**	**$ (119,883)**
Balance at December 31, 2014	$ 72,859	$ 18,049	$ (33,460)	$ (63,710)	$ (6,262)
Other comprehensive loss before reclassifications	(29,176)	(9,959)	(10,062)	(7,197)	(56,394)
Amounts reclassified from accumulated other comprehensive (loss) income	(5,095)	(217)	3,365	4,616	2,669
Net current-period other comprehensive loss	(34,271)	(10,176)	(6,697)	(2,581)	(53,725)
Balance at December 31, 2015	$ 38,588	$ 7,873	$ (40,157)	$ (66,291)	$ (59,987)
Balance at December 31, 2013	$ 27,884	$ (31,646)	$ (2,246)	$ (32,537)	$ (38,545)
Other comprehensive income (loss) before reclassifications	44,375	53,900	(30,122)	(32,649)	35,504
Amounts reclassified from accumulated other comprehensive income (loss)	600	(4,205)	(1,092)	1,476	(3,221)
Net current-period other comprehensive income (loss)	44,975	49,695	(31,214)	(31,173)	32,283
Balance at December 31, 2014	$ 72,859	$ 18,049	$ (33,460)	$ (63,710)	$ (6,262)

[(1)] Amounts are presented net of tax. Amounts reclassified shown in parentheses indicate a decrease in accumulated other comprehensive income or an increase in accumulated other comprehensive income (loss).

The following tables present the effect of reclassifications out of accumulated other comprehensive income (loss) on net income for the years ended December 31, 2016, 2015 and 2014.

Reclassifications from Accumulated Other Comprehensive Income (Loss)

Year Ended December 31, 2016	Amount Reclassified from Accumulated Other Comprehensive Income (Loss)	Location of Gain/Loss Recognized in Income Statement
Unrealized gains (losses) on available-for-sale investment securities:		
Sales gains and losses	$ 1,708	Noninterest Income - Other, Net
Holding gains and losses	-	Noninterest Income - Other, Net
Tax effect	(155)	Provision for Income Taxes
Unrealized gains (losses) on OTTI investment securities:		
Sales gains and losses	2,909	Noninterest Income - Other, Net
Holding gains and losses	(750)	Noninterest Income - Net OTTI Losses Included in Earnings
Tax effect	(552)	Provision for Income Taxes
Unrealized gains (losses) on interest rate swaps and other financial instruments:		
Interest rate contracts	(4,520)	Interest Expense
Foreign exchange contracts	1,135	Interest Income
Tax effect	352	Provision for Income Taxes
Pension and other benefit plans:		
Net actuarial gain/loss	(5,739)	Operating Expenses - Employee Compensation
Prior service cost/credit	(992)	Operating Expenses - Employee Compensation
Tax effect	2,558	Provision for Income Taxes
Total reclassifications	$ (4,046)	

Year Ended December 31, 2015	Amount Reclassified from Accumulated Other Comprehensive Income (Loss)	Location of Gain/Loss Recognized in Income Statement
Unrealized gains (losses) on available-for-sale investment securities:		
Sales gains and losses	$ 8,217	Noninterest Income - Other, Net
Holding gains and losses	-	Noninterest Income - Other, Net
Tax effect	(3,122)	Provision for Income Taxes
Unrealized gains (losses) on OTTI investment securities:		
Sales gains and losses	14,386	Noninterest Income - Other, Net
Holding gains and losses	(11,100)	Noninterest Income - Net OTTI Losses Included in Earnings
Tax effect	(3,069)	Provision for Income Taxes
Unrealized (losses) gains on interest rate swaps and other financial instruments:		
Interest rate contracts	(2,393)	Interest Expense
Foreign exchange contracts	(2,280)	Interest Income
Tax effect	1,308	Provision for Income Taxes
Pension and other benefit plans:		
Net actuarial gain/loss	(6,850)	Operating Expenses - Employee Compensation
Prior service cost/credit	(595)	Operating Expenses - Employee Compensation
Tax effect	2,829	Provision for Income Taxes
Total reclassifications	$ (2,669)	

Reclassifications from Accumulated Other Comprehensive Income (Loss)			
Year Ended December 31, 2014		Amount Reclassified from Accumulated Other Comprehensive Income (Loss)	Location of Gain/Loss Recognized in Income Statement
Unrealized (losses) gains on available-for-sale investment securities:			
Sales gains and losses	$	(707)	Noninterest Income - Other, Net
Holding gains and losses		-	Noninterest Income - Other, Net
Tax effect		107	Provision for Income Taxes
Unrealized gains (losses) on OTTI investment securities:			
Sales gains and losses		4,906	Noninterest Income - Other, Net
Holding gains and losses		-	Noninterest Income - Net OTTI Losses Included in Earnings
Tax effect		(701)	Provision for Income Taxes
Unrealized (losses) gains on interest rate swaps and other financial instruments:			
Interest rate contracts		(1,215)	Interest Expense
Foreign exchange contracts		3,302	Interest Income
Tax effect		(995)	Provision for Income Taxes
Pension and other benefit plans:			
Net actuarial gain/loss		(1,798)	Operating Expenses - Employee Compensation
Prior service cost/credit		(583)	Operating Expenses - Employee Compensation
Tax effect		905	Provision for Income Taxes
Total reclassifications	$	3,221	

Note 8 – Employee Benefit Plans and Incentive Compensation Plans

Employee Benefit Plans

We have employer-funded, qualified defined benefit pension plans, which are noncontributory and cover employees hired prior to January 1, 2007. Depending on date of hire, an employee's benefits are determined either by a formula based on years of service and final average pay, or by the accumulation of a cash balance with interest credits and contribution credits based on years of service and eligible compensation. Effective January 1, 2007, the Bank closed the remaining qualified defined benefit pension plan to new participants.

We also have noncontributory, unfunded nonqualified supplemental executive retirement plans (SERPs) covering certain senior officers and specified other senior managers. In addition, we have a noncontributory, unfunded nonqualified executive retirement plan (ERP) designed to provide enhanced retirement benefits to senior officers employed pursuant to employment agreements. At December 31, 2016, 2015 and 2014, there were two participants in the ERP. The defined benefit pension plans, SERPs and ERP are collectively referred to as Retirement Plans. We hold assets in trust accounts related to our SERPs and ERP; however, such funds remain Bank assets and are not included as plan assets in the accompanying disclosures.

We have a 401(k) savings plan pursuant to which we match a certain percentage of employees' elective contributions. In addition, under this plan, employees hired on or after January 1, 2007 receive additional, non-elective employer defined contributions. Our contributions to the 401(k) savings plan, which are recorded as employee compensation expense, were $7.7 million, $7.0 million and $6.7 million for 2016, 2015 and 2014, respectively. For eligible senior managers, including our senior officers, we also have a nonqualified deferred compensation plan, which includes benefits not provided under the employee savings plan due to certain Internal Revenue Code limitations.

Eligible retirees also have other postretirement benefits (OPEB), which primarily include access to health care benefits. Most participants pay the full premiums associated with these postretirement health care benefits. Premiums are adjusted annually.

The following table provides a summary of the changes in the plans' benefit obligations and fair values of assets over the three-year period ended December 31, 2016, as well as a statement of funded status as of December 31 of each year.

	Retirement Plans			Other Postretirement Benefits		
	2016	**2015**	**2014**	**2016**	**2015**	**2014**
Change in Benefit Obligation:						
Benefit Obligation at Beginning of Year	**$ 347,562**	$ 349,798	$ 295,493	**$ 4,011**	$ 4,962	$ 4,470
Service Cost	**6,570**	7,461	6,891	**141**	175	181
Interest Cost on Benefit Obligation	**15,376**	13,942	13,902	**174**	194	207
Plan Participant Contributions	**-**	-	-	**523**	417	386
Plan Amendments	**683**	5,483	-	**-**	-	-
Actuarial Loss (Gain)	**6,459**	(12,544)	54,363	**(719)**	(223)	476
Benefits Paid	**(18,576)**	(16,578)	(20,851)	**(1,076)**	(1,514)	(758)
Benefit Obligation at End of Year	**358,074**	347,562	349,798	**3,054**	4,011	4,962
Change in Plan Assets:						
Fair Value of Plan Assets at Beginning of Year	**279,483**	290,247	282,700	**-**	-	-
Actual Return on Plan Assets	**16,127**	625	22,491	**-**	-	-
Employer Contributions	**6,678**	5,189	5,907	**553**	1,097	372
Benefits Paid	**(18,576)**	(16,578)	(20,851)	**(1,076)**	(1,514)	(758)
Plan Participant Contributions	**-**	-	-	**523**	417	386
Fair Value of Plan Assets at End of Year	**283,712**	279,483	290,247	**-**	-	-
Funded Status – Fair Value of Plan Assets Less Than Benefit Obligation	**(74,362)**	(68,079)	(59,551)	**(3,054)**	(4,011)	(4,962)
Net Amount Recognized - December 31	**$ (74,362)**	$ (68,079)	$ (59,551)	**$ (3,054)**	$ (4,011)	$ (4,962)

The projected benefit obligation and the accumulated benefit obligation for the Retirement Plans as of December 31 of each year are as follows.

	2016	2015	2014
Projected Benefit Obligation:			
Funded Qualified Plans	**$ 315,845**	$ 308,763	$ 310,155
SERP/ERP	**42,229**	38,799	39,643
Total	**$ 358,074**	$ 347,562	$ 349,798
Accumulated Benefit Obligation:			
Funded Qualified Plans	**$ 298,741**	$ 287,046	$ 282,134
SERP/ERP	**35,639**	33,696	33,520
Total	**$ 334,380**	$ 320,742	$ 315,654

The $283.7 million in fair value of plan assets shown in the table on page 104 relates only to the qualified retirement plans. As depicted in the preceding table, such plans had a projected benefit obligation and an accumulated benefit obligation of $315.8 million and $298.7 million, respectively, as of December 31, 2016.

We hold assets in trust accounts related to our SERPs and ERP. Such assets had a fair value of $31.8 million as of December 31, 2016, which is included in "Other Assets" in the consolidated balance sheet. Unlike the assets related to the qualified plans, those funds remain Bank assets and would be subject to general creditors in a bankruptcy or liquidation. Accordingly, they are not included as part of the assets in the table on page 104. As depicted in the preceding table, our SERPs and ERP had a projected benefit obligation and an accumulated benefit obligation of $42.2 million and $35.6 million, respectively, as of December 31, 2016.

The following table provides the amounts recognized in the consolidated balance sheets as of December 31 of each year.

	Retirement Plans			Other Postretirement Benefits		
	2016	2015	2014	2016	2015	2014
Accrued Benefit Liabilities	**(74,362)**	(68,079)	(59,551)	**(3,054)**	(4,011)	(4,962)
Net Amounts Recognized	**$ (74,362)**	$ (68,079)	$ (59,551)	**$ (3,054)**	$ (4,011)	$ (4,962)

The following table presents the components of net periodic benefit cost for the plans.

	Retirement Plans			Other Postretirement Benefits		
	2016	2015	2014	2016	2015	2014
Service Cost	**$ 6,570**	$ 7,461	$ 6,891	**$ 141**	$ 175	$ 181
Interest Cost on Benefit Obligation	**15,376**	13,942	13,902	**174**	194	207
Expected Return on Plan Assets	**(18,414)**	(19,517)	(18,850)	**-**	-	-
Amortization of Prior Service Cost	**992**	595	583	**(174)**	(157)	-
Recognized Actuarial Loss (Gain)	**5,913**	7,006	1,992	**-**	-	(194)
Net Periodic Benefit Cost	**$ 10,437**	$ 9,487	$ 4,518	**$ 141**	$ 212	$ 194

We anticipate that our total pension expense for the Retirement Plans will be approximately $9.5 million in 2017, as compared to $10.4 million in 2016.

The following table displays the amounts included in accumulated other comprehensive income (loss), a component of shareholders' equity, related to our pension and other postretirement benefit plans.

Amounts Included in Accumulated Other Comprehensive Loss (Income) Pre-Tax at December 31, 2016	Qualified Retirement Plans	Nonqualified Retirement Plans	Other Postretirement Benefits	Total
Net Actuarial Loss (Gain)	$ 88,438	$ 14,513	$ (3,218)	$ 99,733
Prior Service Cost	7,048	656	-	7,704
Amount Recognized in Accumulated Other Comprehensive Loss (Income) [1]	$ 95,486	$ 15,169	$ (3,218)	$ 107,437

[1] Amount recognized in accumulated other comprehensive (income) loss, net of tax, is a loss of $67.5 million as of December 31, 2016. Approximately $3.4 million, net of tax, will be amortized from accumulated other comprehensive (income) loss into net periodic benefit cost in 2017.

Assumptions

We measure plan obligations and annual expense using assumptions designed to reflect future economic conditions. As pension benefits will be paid to current and future retiree for many years, the computations of pension expenses and benefits are based on assumptions about discount rates, estimates of annual increases in compensation levels, mortality rates and expected rates of return on plan assets.

The weighted average rate assumptions used in the measurement of our benefit obligations are as follows:

	2016	2015	2014
Discount Rate	**4.30 %**	4.55 %	4.10 %
Rate of Compensation Increase	**4.75**	4.75	4.75

The weighted average rate assumptions used in the measurement of our net periodic benefit cost are as follows:

	2016	2015	2014
Discount Rate	**4.55 %**	4.10 %	4.85 %
Expected Rate of Return on Plan Assets (Qualified Plans Only)	**6.63**	7.25	7.25
Rate of Compensation Increase	**4.75**	4.75	4.75

The discount rates are calculated using a spot yield curve method developed by an independent actuary. The approach maps a high-quality bond yield curve to the duration of the plans' liabilities, thus approximating each cash flow of the liability stream to be discounted at an interest rate specifically applicable to its respective period in time.

We establish the expected rate of return on plan assets based on current target asset allocations and the anticipated future long-term returns for those asset classes. The expected rate of return on plan assets assumption is also consistent with the pension plans' long-term interest rate assumption used for funding purposes.

In October 2014, the Society of Actuaries issued revised mortality tables and a mortality improvement scale for use by actuaries, benefit plan sponsors and others in setting assumptions regarding life expectancy in the United States for purposes of estimating pension and other postemployment benefit obligations, costs and required contribution amounts. The new mortality tables indicate substantial life expectancy improvements since the last study published in 2000. The Society of Actuaries issued a revised mortality improvement scale in 2016 and 2015, which the Bank adopted in both respective years. The adoption of these new tables resulted in decreases of $3.6 million and $3.4 million and an increase of $20.9 million to our pension plans' projected benefit obligations as of December 31, 2016, 2015 and 2014, respectively. There was no impact to the projected benefit obligation related to our OPEB as of December 31, 2016 as a result of these new tables, however the adoption resulted in a decrease of $0.1 million and an increase of $0.2 million to the projected benefit obligation as of December 31, 2015 and 2014, respectively.

Assumed health care cost trend rates have an effect on the amounts reported for other postretirement benefits. For measurement purposes, a 7.0 percent annual rate of increase in the per capita cost of covered health care benefits was assumed for 2016. The rate was assumed to decrease gradually to 4.5 percent through 2024 and remain at that level thereafter. A 1-percentage-point increase in the assumed health care cost trend rate would increase total annual service and interest cost by $37 and total other postretirement benefit obligations by $183 as of December 31, 2016. Conversely, a 1-percentage-point decrease in the assumed health care cost trend rate would decrease total annual service and interest cost by $31 and total other postretirement benefit obligations by $160.

Plan Assets

The asset allocation target ranges for the pension plans follow the investment policy adopted by our retirement trust committee. This policy provides for a certain level of committee flexibility in selecting target allocation percentages. The actual asset allocations at December 31, 2016, 2015 and 2014 are shown in the following table, along with the adopted range for target allocation percentages by asset class. The actual allocation percentages reflect the market values at year-end and may vary during the course of the year. Plan assets are generally rebalanced to a level within the target range each year at the direction of the committee.

Retirement Plan Assets

	Target Allocation Range	Percentage of Plan Assets at December 31,		
		2016	2015	2014
Asset Category				
Domestic Equity	40-50 %	**45 %**	45 %	48 %
Domestic Fixed Income	30-50	**35**	36	33
International Equity	0-10	**10**	9	10
Emerging Markets Equity and Fixed Income	0-10	**5**	5	4
Hedge Funds	0-10	**5**	5	5
Total	100 %	**100 %**	100 %	100 %

The assets of the pension plans consist primarily of investments in various domestic equity, international equity and bond funds. These funds do not contain any significant investments in a single entity, industry, country or commodity, thereby mitigating concentration risk. No CoBank stock or debt is included in these investments.

The following table presents major categories of plan assets that are measured at fair value at December 31, 2016 for each of the fair value hierarchy levels as defined in Note 12.

Fair Value Measurements

December 31, 2016

	Level 1	Level 2	Level 3	NAV (1)	Total
Asset Category					
Cash	$ 555	$ -	$ -	$ -	$ 555
Domestic Equity:					
Large-cap Growth Funds (2)	64,193	-	-	51,406	115,599
Small-cap Growth Fund (2)	-	-	-	13,717	13,717
International Equity:					
International Fund (3)	27,198	-	-	-	27,198
Fixed Income:					
Total Return Funds (4)	61,354	-	-	-	61,354
Bond Funds (5)	3,801	34,465	-	-	38,266
Emerging Markets:					
Equity and Fixed Income Fund (6)	-	-	-	13,202	13,202
Hedge Funds (7)	-	-	-	13,821	13,821
Total	$ 157,101	$ 34,465	$ -	$ 92,146	$ 283,712

(1) Certain investments that are measured at fair value using the net asset value (NAV) per share as a practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value heirarchy to the net assets in the pension plans.

(2) Funds invest primarily in diversified portfolios of common stocks of U.S. companies in various industries, including consumer goods and services, information technology, healthcare, industrial materials, financial services and energy.

(3) Fund invests primarily in a diversified portfolio of equities of non-U.S. companies in various industries, including information technology, financial services, healthcare, energy, consumer goods and services and telecommunications.

(4) Funds invest primarily in a diversified portfolio of investment grade debt securities and cash instruments.

(5) Fund invests primarily in U.S. Treasury debt securities and corporate bonds of U.S. companies primarily in the financial services industry.

(6) Fund invests in equities and corporate debt securities of companies located in emerging international markets. Industries include energy, consumer goods and services, information technology, industrial materials and financial services. Fund also invests in the sovereign debt of various countries.

(7) Funds invest in diversified portfolios of stocks, bonds and various other financial instruments in a variety of industries including information technology, industrial materials, heathcare, consumer goods and services and financial services.

Level 1 plan assets are funds with quoted daily net asset values that are directly observable by market participants. The fair value of these funds is the net asset value at close of business on the reporting date. Level 2 plan assets are funds with quoted net asset values that are not directly observable by market participants. A significant portion of the underlying investments in these funds have individually observable market prices, which are utilized by the plan's trustee to determine a net asset value at close of business on the reporting date. Level 3 plan assets are funds with unobservable net asset values and supported by limited or no market activity. There were no purchases or sales of Level 3 plan assets in the current year. No transfers into or out of the three levels of assets occurred in the current year.

Investment strategy and objectives are described in the pension plans' formal investment policy document. The basic strategy and objectives are to manage portfolio assets with a long-term time horizon appropriate for the participant demographics and cash flow requirements; to optimize long-term funding requirements by generating rates of return sufficient to fund liabilities and exceed the long-term rate of inflation; and to provide competitive investment returns as measured against appropriate benchmarks.

Expected Contributions

We expect to contribute approximately $17.8 million to our funded, qualified defined benefit pension plans in 2017 and a net $0.3 million, after reflecting collected retiree premiums, to our other postretirement benefit plans in 2017. We also expect to contribute approximately $2.9 million to our trust accounts related to our SERPs and ERP in 2017. Our actual 2017 contributions could differ from the estimates noted above.

Estimated Future Benefit Payments

We expect to make the following benefit payments, which reflect expected future service, as appropriate.

Estimated Benefit Payments

Year:	Retirement Benefits	Other Postretirement Benefits
2017	$ 20,464	$ 293
2018	20,896	284
2019	23,311	242
2020	23,505	242
2021	23,429	244
2022 to 2026	127,142	1,175

Incentive Compensation Plans

We have a broad-based, Board-approved short-term incentive compensation plan covering substantially all employees pursuant to which annual cash awards may be earned. Criteria used to determine amounts payable include the achievement of specified financial measures and strategic business objectives, which are approved annually by the Compensation Committee of the Board of Directors. Individual performance is also considered in the determination of the amounts payable.

We also have a Board-approved long-term incentive compensation plan, pursuant to which cash awards may be earned by senior officers and specified other senior managers who have a significant impact on long-term financial performance. Criteria used to determine amounts payable include achievement of certain Bank financial targets and strategic business objectives over a three-year performance period. Cash awards are to be paid subsequent to completion of each three-year period, subject to approval by the Compensation Committee of the Board of Directors.

Under the terms of the short-term incentive compensation plan, a minimum return on active patron stock investment must be achieved in order for a payout to be approved. Likewise, a minimum return on active patron stock investment must be achieved in each year within the three-year performance period for a full payout under the long-term incentive plan. The required minimum return on active patron stock investment was 11 percent for all performance periods disclosed herein.

Note 9 – Income Taxes

The components of the provision for income taxes are as follows:

Year Ended December 31,	2016	2015	2014
Current:			
Federal	**$ 111,685**	$ 95,673	$ 84,556
State	**19,666**	12,004	14,949
Total Current	**131,351**	107,677	99,505
Deferred:			
Federal	**27,839**	56,438	57,535
State	**(905)**	7,005	5,828
Total Deferred	**26,934**	63,443	63,363
Total	**$ 158,285**	$ 171,120	$ 162,868
Comprehensive Tax Provision			
Allocable to:			
Pre-Tax Income	**$ 158,285**	$ 171,120	$ 162,868
Shareholders' Equity -			
Amounts Allocated to:			
Investment Securities	**(18,047)**	(15,263)	15,971
Derivatives	**(411)**	(2,978)	(7,235)
Pension Liability	**(752)**	(1,582)	(17,643)
Total	**$ 139,075**	$ 151,297	$ 153,961

The components of deferred tax assets and liabilities are shown below.

December 31,	2016	2015	2014
Allowance for Credit Losses	**$ 219,920**	$ 206,062	$ 201,758
Employee Benefits	**61,679**	53,290	49,830
Unrealized Net Losses			
on Investment Securities			
and Derivatives	**15,226**	-	-
Loan Origination Fees	**8,847**	9,102	9,092
Other Deferred Tax Assets	**45,553**	43,815	40,849
Gross Deferred Tax Assets	**351,225**	312,269	301,529
Leasing	**689,890**	644,589	585,470
Unrealized Net Gains			
on Investment Securities			
and Derivatives	**-**	3,232	21,473
Other Deferred Tax Liabilities	**31,448**	26,837	13,355
Gross Deferred Tax Liabilities	**721,338**	674,658	620,298
Net Deferred Tax Liabilities	**$ (370,113)**	$ (362,389)	$ (318,769)

Deferred income taxes are provided for the change in temporary differences between the basis of certain assets and liabilities for financial reporting and income tax reporting purposes except for our nontaxable entity. The expected future tax rates are based upon enacted tax laws.

We have concluded that it is more likely than not that the deferred tax assets will be realized based on our history of earnings, sources of taxable income in carry back periods, and our ability to implement tax planning strategies.

The effective tax rates for the years ended December 31, 2016, 2015 and 2014 of 14.3 percent, 15.4 percent and 15.3 percent, respectively, were less than the statutory income tax rate primarily due to $588.1 million, $514.1 million and $467.5 million, respectively, of patronage distributions which are tax deductible, if made by our taxable entity, as permitted by Subchapter T of the Internal Revenue Code. The nontaxable activities conducted in the FCB subsidiary also contributed to a lower effective tax rate.

Year Ended December 31,	2016	2015	2014
Federal Tax at Statutory Rate	**$ 386,386**	$ 387,727	$ 373,498
State Tax, Net	**12,237**	12,063	13,594
Patronage Distributions			
Allocated by:			
Taxable Entity	**(98,905)**	(84,373)	(78,113)
Nontaxable Entity	**(106,765)**	(95,128)	(83,989)
Effect of Nontaxable Entity	**(26,958)**	(47,672)	(56,141)
Tax-Exempt Activities	**(109)**	(103)	(65)
Credits Related to Renewable			
Energy Transactions	**(10,399)**	(3,146)	(1,600)
Other	**2,798**	1,752	(4,316)
Provision for Income Taxes	**$ 158,285**	$ 171,120	$ 162,868

A reconciliation of the beginning and ending amount of unrecognized tax benefits, excluding interest and penalties, is as follows:

Year Ended December 31, 2016		
Balance at Beginning of Year	**$**	**4,036**
Additions Based on Tax Positions Related to the Current Year		**865**
Additions for Tax Positions of Prior Years		**270**
Reductions for Tax Positions of Prior Years		**(109)**
Settlements		**(2)**
Lapse of Applicable Statute of Limitations		**(893)**
Balance at End of Year	**$**	**4,167**
Year Ended December 31, 2015		
Balance at Beginning of Year	$	5,487
Additions Based on Tax Positions Related to the Current Year		757
Additions for Tax Positions of Prior Years		150
Reductions for Tax Positions of Prior Years		(100)
Settlements		(585)
Lapse of Applicable Statute of Limitations		(1,673)
Balance at End of Year	$	4,036
Year Ended December 31, 2014		
Balance at Beginning of Year	$	5,164
Additions Based on Tax Positions Related to the Current Year		903
Additions for Tax Positions of Prior Years		100
Reductions for Tax Positions of Prior Years		(150)
Lapse of Applicable Statute of Limitations		(530)
Balance at End of Year	$	5,487

The total amount of unrecognized tax benefits that, if recognized, would impact the effective tax rate is $3.5 million. We do not currently believe that the unrecognized tax benefits will change significantly within the next 12 months.

CoBank is no longer subject to federal tax examination for periods before 2013.

CoBank files tax returns in most states each year and is under continuous examination by various state taxing authorities. With few exceptions, we are no longer subject to state and local income tax examinations by taxing authorities for periods before 2013. For all open audits, any potential adjustments have been considered in establishing our reserve for uncertain tax positions as of December 31, 2016.

We recognize accrued interest and penalties related to unrecognized tax benefits as a component of the provision for income taxes. During the year ended December 31, 2016, we recognized an increase of approximately $0.1 million in interest and penalties. We had approximately $1.2 million of interest and penalties accrued at December 31, 2016 and 2015 and $2.0 million at December 31, 2014.

Note 10 – Financial Instruments With Off-Balance Sheet Risk

We utilize various financial instruments with off-balance sheet risk to satisfy the financing needs of our borrowers and to manage our exposure to interest rate risk. Such financial instruments include commitments to extend credit and commercial letters of credit. Commitments to extend credit are agreements to lend to a borrower provided that certain contractual conditions are met. 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, 2016, outstanding commitments to extend credit and commercial letters of credit were $31.4 billion and $304.1 million, respectively.

Since many of these commitments may expire without being drawn, the total commitments do not necessarily represent future cash requirements. Our exposure to many of these commitments is mitigated by borrowing base requirements contained in loan agreements. However, these credit-related financial instruments have off-balance sheet credit risk because their amounts are not reflected on the consolidated balance sheets until funded or drawn upon. The credit risk associated with issuing commitments and commercial letters of credit is substantially the same as that involved in extending loans to borrowers. Therefore, management applies the same credit policies to these commitments. The amount of collateral obtained, if deemed necessary upon extension of credit, is based on management's credit evaluation of the borrower. As discussed in Note 1, we maintain a reserve for unfunded commitments.

For a fee, we provide financial standby letters of credit for borrowers, which are irrevocable commitments to guarantee payment of a specified financial obligation. We also provide performance standby letters of credit which are irrevocable agreements by us, as a guarantor, to make payments to the guaranteed party in the event a specified third-party fails to perform under a nonfinancial contractual obligation, such as a third-party failing to timely deliver certain commodities at a specified time and place. We also issue indemnification agreements that function like guarantees. These indemnification agreements contingently require us, as the indemnifying party guarantor, to make payments to an indemnified party under certain specified circumstances. Certain recourse provisions would enable us, as a guarantor, to recover from third parties any of the amounts paid under guarantees, thereby limiting our maximum potential exposure.

As of December 31, 2016, the maximum potential amount of future payments that we may be required to make under our outstanding standby letters of credit was $1.5 billion, with a fair value of $10.3 million, which is included in other liabilities in the consolidated balance sheet. Payment/performance risk of the standby letters of credit guarantee is assessed using the same internal customer credit ratings that we use to manage credit risk in our loan portfolio. These outstanding standby letters of credit have expiration dates ranging from January 2017 to July 2030.

Note 11 – Derivative Financial Instruments and Hedging Activities

Risk Management Objectives and Strategies

We maintain an overall market interest rate risk management strategy that incorporates the use of derivative financial instruments to manage liquidity and to minimize significant unplanned fluctuations in earnings that are caused by interest rate volatility. Our goal is to manage interest rate sensitivity by modifying the repricing frequency or effective maturity of certain balance sheet assets and liabilities. We also maintain a foreign exchange risk management strategy to reduce the impact of currency fluctuations on our relatively nominal amount of foreign currency-denominated loans. As a result of interest rate and foreign exchange rate fluctuations, fixed-rate assets and liabilities will appreciate or depreciate in market value. The effect of this unrealized appreciation or depreciation is expected to be substantially offset by gains and losses on the derivative instruments that are linked to these assets and liabilities. Interest rate and foreign exchange fluctuations also cause interest income and interest expense of variable-rate assets and liabilities to increase or decrease. The effect of this variability in earnings is expected to be substantially offset by gains and losses on the derivative instruments that are linked to these assets and liabilities.

Uses of Derivatives

To achieve risk management objectives and satisfy the financing needs of our borrowers, we execute various derivative transactions with other financial institutions. Derivatives (primarily interest rate swaps) are used to manage liquidity and the interest rate risk arising from maturity and repricing mismatches between assets and liabilities. Under interest rate swap arrangements, we agree with a counterparty to exchange, at specified intervals, payment streams calculated on a specified notional amount, with at least one payment stream based on a specified floating-rate index. We use a variety of interest rate swaps including the exchange of floating-rate for fixed-rate swaps and fixed-rate for floating-rate swaps with payment obligations tied to specific indices. In addition, we execute foreign exchange spot and forward contracts to manage currency risk on loans denominated in foreign currencies. We also enter into derivatives for our customers as a service to enable them to transfer, modify or reduce their interest rate risk and foreign exchange risk by transferring such risk to us. We substantially offset this risk transference by concurrently entering into offsetting agreements with counterparties.

The notional amounts and related activity of derivatives at December 31, 2016, 2015 and 2014 are shown in the following table.

Activity in the Notional Amounts of Derivative Financial Instruments

($ in Millions)	Swaps	Caps	Spots and Forwards	Total
December 31, 2015	**$ 20,817**	**$ 2,816**	**$ 267**	**$ 23,900**
Additions /Accretion	**7,490**	**429**	**3,606**	**11,525**
Maturities /Amortization	**(3,669)**	**(145)**	**(3,646)**	**(7,460)**
Terminations	**(707)**	**-**	**-**	**(707)**
December 31, 2016	**$ 23,931**	**$ 3,100**	**$ 227**	**$ 27,258**
December 31, 2014	$ 19,755	$ 2,961	$ 208	$ 22,924
Additions /Accretion	8,388	200	2,233	$ 10,821
Maturities /Amortization	(5,906)	(345)	(2,174)	$ (8,425)
Terminations	(1,420)	-	-	(1,420)
December 31, 2015	$ 20,817	$ 2,816	$ 267	$ 23,900
December 31, 2013	$ 21,982	$ 2,684	$ 279	$ 24,945
Additions /Accretion	3,880	566	3,353	7,799
Maturities /Amortization	(5,756)	(289)	(3,424)	(9,469)
Terminations	(351)	-	-	(351)
December 31, 2014	$ 19,755	$ 2,961	$ 208	$ 22,924

Accounting for Derivative Instruments and Hedging Activities

We record derivatives as assets or liabilities at their fair value on the consolidated balance sheets. We record changes in the fair value of a derivative 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 that hedge changes in the fair value of assets or liabilities, changes in the fair value of the derivative will generally be offset in the statement of income by changes in the hedged item's fair value attributable to the risk being hedged. For cash flow hedge transactions, in which we hedge the variability of future cash flows related to a variable-rate or foreign currency denominated asset or liability, changes in the fair value of the derivative are reported in accumulated other comprehensive income (loss). The gains and losses on the derivatives that we report in accumulated other comprehensive income (loss) will be reclassified as earnings in the periods in which earnings are affected by the variability of the cash flows of the hedged item. We record the ineffective portion of all hedges in current period earnings.

For our customer transactions, which are not designated as hedging instruments, we record the related changes in fair value in current period earnings. We substantially offset this risk transference by concurrently entering into offsetting agreements with counterparties, with the changes in fair value of these transactions also recorded in current period earnings.

Fair Value Hedges

The majority of the fair value hedging activity relates to entering into interest rate swaps primarily to convert our non-prepayable fixed-rate debt to floating-rate debt to achieve our liquidity management strategy. The amount converted depends on contractual interest rates and maturities. For the remaining fair value hedges, we enter into receive-fixed, pay-floating swaps to align our equity positioning strategy with our risk management strategy. For fair value hedges, the amount of hedge ineffectiveness is recognized as net interest income in current period earnings.

Cash Flow Hedges

We purchase interest rate caps to hedge cap risk embedded within a portion of our floating-rate investment securities. The interest rate caps hedge floating-rate debt cash flows that fund the cash flows from floating-rate investment securities. If the strike rates in the purchased interest rate caps are exceeded, we receive cash flows on the derivative to hedge our floating-rate funding exposure above such strike levels. We also enter into foreign exchange spot and forward contracts to manage currency risk on loans denominated in foreign currencies. Typically, foreign currency contracts are purchased to fund the principal cash flows of the loan and simultaneously sold to lock in the principal and interest cash flows upon repricing or maturity date of the loan. For cash flow hedges, the amount of hedge ineffectiveness, the amount excluded from effectiveness assessment, and the amounts reclassified from accumulated other comprehensive income (loss) into current period earnings are all reflected in net interest income. At December 31, 2016, we expect that $6.7 million of expense will be reclassified from accumulated other comprehensive income (loss) into earnings in the next 12 months, based on the anticipated cash flows of existing financial instruments. The maximum term over which we are hedging our exposure to the variability of future cash flows for all forecasted transactions is approximately 19 years.

Derivatives Not Designated As Hedges

Derivative agreements with our customers and the related offsetting derivative agreements with counterparties are not designated as hedging instruments and do not receive hedge accounting treatment. Accordingly, any changes in the fair value of these derivatives are recognized immediately as noninterest income/expense in current period earnings.

Counterparty Credit Risk

The use of derivatives for risk management introduces credit risk related to customers and counterparties. Generally, when the fair value of a derivative contract is positive, we are exposed to credit risk.

Derivative transactions with our customers are typically secured through our loan agreements. As of December 31, 2016 and 2015, the notional amount of derivatives with our customers totaled $6.5 billion and $5.8 billion, respectively.

The majority of our non-customer derivatives are transacted with derivative counterparties and governed by master swap agreements, which include bilateral collateral arrangements, requiring the Bank or our counterparties to post collateral on a daily basis with thresholds set at zero for all active counterparties. The master swap agreements also include netting agreements requiring the net settlement of covered contracts with the same counterparty in the event of default by the other party. The “net” mark-to-market exposure represents the netting of the positive and negative exposures with that counterparty. Notwithstanding these protections, we are exposed to intra-day credit risk with these counterparties. As of December 31, 2016 and 2015, the notional amount of derivatives with our counterparties totaled $13.7 billion and $15.4 billion, respectively, which excludes the $7.1 billion and $2.7 billion, respectively, of cleared derivatives discussed below.

We record derivative exposures and related cash collateral balances at gross amounts in our consolidated balance sheets. Pursuant to our master swap agreements, as of December 31, 2016, our counterparties had posted $85.9 million in cash and $6.9 million in securities as collateral with us. We estimate that the amount of losses related to derivatives we could be exposed to in the event of nonperformance by dealer counterparties to our derivative positions, net of collateral held by us, was $1.1 million, $3.9 million and $3.6 million at December 31, 2016, 2015 and 2014.

The Dodd-Frank Wall Street Reform and Consumer Protection Act (the “Dodd-Frank Act”) requires certain derivative transactions to be cleared through a central clearinghouse and traded on regulated swap execution facilities. The U.S. Commodity Futures Trading Commission has exempted certain qualifying swaps entered into by end-users and financial cooperatives from these new requirements. The exemptions do not cover all swaps executed by CoBank and are generally limited to swaps entered into in connection with loans and derivatives for customer-owners. CoBank has also voluntarily chosen to clear some swap transactions for economic and risk management purposes. As a result, certain of our derivative transactions are cleared through a futures commission merchant (FCM) with a clearinghouse or central counterparty (CCP). When these swaps are cleared, a single bilateral swap is divided into two separate swaps with the CCP becoming the counterparty to both of the initial parties to the swap. CCPs have several layers of protection against default including initial and variation margin that is required to be posted by participants. FCMs prequalify counterparties to all cleared swaps, set exposure limits for each counterparty and collect initial and variation margin daily for changes in the value of cleared derivatives. The margin collected from both parties to the swap protects against credit risk in the event of a counterparty default. Initial and variation margin requirements are set by and held for the benefit of the CCP. Additional initial margin may be required and held by the FCM in some instances. At December 31, 2016 and 2015, the notional amount of our cleared derivatives was $7.1 billion and $2.7 billion, respectively. Initial and variation margin totaling $22.4 million and $70.4 million, respectively, was pledged for our cleared derivatives as of December 31, 2016, and $23.7 million and $34.1 million, respectively, as of December 31, 2015.

Hedge Terminations

During 2016, 2015 and 2014, we terminated approximately $223.3 million, $820.2 million and $130.8 million, respectively, in notional value of interest rate swaps for asset-liability management purposes. These swaps were accounted for as fair value hedges.

We terminated interest rate swaps with customers and offsetting dealer counterparties totaling $483.3 million, $599.9 million, and $220.6 million of notional value in 2016, 2015 and 2014, respectively. Proceeds from the customer terminations were offset by proceeds from the offsetting dealer terminations.

A summary of the impact of derivative financial instruments on our consolidated balance sheets as of December 31, 2016, 2015 and 2014 is shown below.

Fair Value of Derivative Financial Instruments

As of December 31, 2016	Fair Value of Derivative Assets[1]	Fair Value of Derivative Liabilities[2]
Derivatives Designated as Hedging Instruments		
Interest Rate Contracts	$ 51,148	$ 53,390
Foreign Exchange Contracts	3,710	770
Total Derivatives Designated as Hedging Instruments	$ 54,858	$ 54,160
Derivatives Not Designated as Hedging Instruments		
Interest Rate Contracts	$ 151,191	$ 105,849
Foreign Exchange Contracts	2,385	2,715
Total Derivatives Not Designated as Hedging Instruments	$ 153,576	$ 108,564
Total Derivatives	$ 208,434	$ 162,724

[1] These assets make up the "Interest Rate Swaps and Other Financial Instruments" assets in the consolidated balance sheet as of December 31, 2016.

[2] These liabilities make up the "Interest Rate Swaps and Other Financial Instruments" liabilities in the consolidated balance sheet as of December 31, 2016.

Fair Value of Derivative Financial Instruments

As of December 31, 2015	Fair Value of Derivative Assets[1]	Fair Value of Derivative Liabilities[2]
Derivatives Designated as Hedging Instruments		
Interest Rate Contracts	$ 141,499	$ 2,912
Foreign Exchange Contracts	2,286	1,010
Total Derivatives Designated as Hedging Instruments	$ 143,785	$ 3,922
Derivatives Not Designated as Hedging Instruments		
Interest Rate Contracts	$ 149,753	$ 106,770
Foreign Exchange Contracts	2,451	2,705
Total Derivatives Not Designated as Hedging Instruments	$ 152,204	$ 109,475
Total Derivatives	$ 295,989	$ 113,397

[1] These assets make up the "Interest Rate Swaps and Other Financial Instruments" assets in the consolidated balance sheet as of December 31, 2015.

[2] These liabilities make up the "Interest Rate Swaps and Other Financial Instruments" liabilities in the consolidated balance sheet as of December 31, 2015.

Fair Value of Derivative Financial Instruments

As of December 31, 2014	Fair Value of Derivative Assets[1]	Fair Value of Derivative Liabilities[2]
Derivatives Designated as Hedging Instruments		
Interest Rate Contracts	$ 303,669	$ 3,538
Foreign Exchange Contracts	3,692	9
Total Derivatives Designated as Hedging Instruments	$ 307,361	$ 3,547
Derivatives Not Designated as Hedging Instruments		
Interest Rate Contracts	$ 146,589	$ 106,281
Foreign Exchange Contracts	1,706	1,792
Total Derivatives Not Designated as Hedging Instruments	$ 148,295	$ 108,073
Total Derivatives	$ 455,656	$ 111,620

[1] These assets make up the "Interest Rate Swaps and Other Financial Instruments" assets in the consolidated balance sheet as of December 31, 2014.

[2] These liabilities make up the "Interest Rate Swaps and Other Financial Instruments" liabilities in the consolidated balance sheet as of December 31, 2014.

A summary of the impact of derivative financial instruments on our consolidated statements of income and comprehensive income for the years ended December 31, 2016, 2015 and 2014 is shown in the following tables.

Derivative Financial Instruments in Fair Value Hedging Relationships

	Net Amount of Gain or (Loss) Recognized in Income on Derivative and Hedged Item[(1)]		
Year Ended December 31,	**2016**	**2015**	**2014**
Interest Rate Contracts	**$ 1,109**	$ 2,777	$ 6,872
Total	**$ 1,109**	$ 2,777	$ 6,872

(1) Located in Interest Expense in the consolidated statements of income for the years ended December 31, 2016, 2015 and 2014. In 2015 and 2014, amounts predominantly consist of the accretion of fair value adjustments resulting from the AgBank merger.

Derivative Financial Instruments in Cash Flow Hedging Relationships

Year Ended December 31, 2016	Amount of Gain or (Loss) Recognized in Accumulated Other Comprehensive Income (Loss) on Derivative[(1)]	Amount of Gain or (Loss) Reclassified from Accumulated Other Comprehensive Income (Loss) to Income on Derivative[(1)]	Amount of Gain or (Loss) Recognized in Income on Derivative[(2)]
Interest Rate Contracts	**$ (3,009)**	**$ (4,520)** [(3)]	**$ -**
Foreign Exchange Contracts	**1,664**	**1,135** [(4) (5)]	**1,505** [(4)]
Total	**$ (1,345)**	**$ (3,385)**	**$ 1,505**

(1) Effective portion

(2) Ineffective portion and amount excluded from effectiveness assessment.

(3) Located in Interest Expense in the consolidated statement of income for the year ended December 31, 2016.

(4) Located in Interest Income – Loans in the consolidated statement of income for the year ended December 31, 2016.

(5) Fully offset by a ($1,135) loss on foreign currency denominated loans (hedged items) which is also located in Interest Income - Loans in the consolidated statement of income for the year ended December 31, 2016.

Derivative Financial Instruments in Cash Flow Hedging Relationships

Year Ended December 31, 2015	Amount of Gain or (Loss) Recognized in Accumulated Other Comprehensive Income (Loss) on Derivative[(1)]	Amount of Gain or (Loss) Reclassified from Accumulated Other Comprehensive Income (Loss) to Income on Derivative[(1)]	Amount of Gain or (Loss) Recognized in Income on Derivative[(2)]
Interest Rate Contracts	$ (11,941)	$ (2,393) [(3)]	$ -
Foreign Exchange Contracts	(2,407)	(2,280) [(4) (5)]	193 [(4)]
Total	$ (14,348)	$ (4,673)	$ 193

(1) Effective portion

(2) Ineffective portion and amount excluded from effectiveness assessment.

(3) Located in Interest Expense in the consolidated statement of income for the year ended December 31, 2015.

(4) Located in Interest Income – Loans in the consolidated statement of income for the year ended December 31, 2015.

(5) Fully offset by a $2,280 gain on foreign currency denominated loans (hedged items) which is also located in Interest Income - Loans in the consolidated statement of income for the year ended December 31, 2015.

Derivative Financial Instruments in Cash Flow Hedging Relationships

Year Ended December 31, 2014		Amount of Gain or (Loss) Recognized in Accumulated Other Comprehensive Income (Loss) on Derivative[1]		Amount of Gain or (Loss) Reclassified from Accumulated Other Comprehensive Income (Loss) to Income on Derivative[1]		Amount of Gain or (Loss) Recognized in Income on Derivative[2]
Interest Rate Contracts	$	(41,277)	$	(1,215) [3]	$	-
Foreign Exchange Contracts		4,915		3,302 [4] [5]		(536) [4]
Total	$	(36,362)	$	2,087	$	(536)

[1] Effective portion

[2] Ineffective portion and amount excluded from effectiveness assessment.

[3] Located in Interest Expense in the consolidated statement of income for the year ended December 31, 2014.

[4] Located in Interest Income – Loans in the consolidated statement of income for the year ended December 31, 2014.

[5] Fully offset by a ($3,302) loss on foreign currency denominated loans (hedged items) which is also located in Interest Income - Loans in the consolidated statement of income for the year ended December 31, 2014.

Derivative Financial Instruments not Designated as Hedging Relationships[1]

	Net Amount of Gain or (Loss) Recognized in Income On Derivative[2]					
Year Ended December 31,		**2016**		**2015**		**2014**
Interest Rate Contracts	**$**	**(998)**	$	812	$	(228)
Foreign Exchange Contracts		**(77)**		(169)		(196)
Total	**$**	**(1,075)**	$	643	$	(424)

[1] Primarily represents our derivative agreements with customers and related offsetting derivative agreements with counterparties.

[2] Located in Other Noninterest Income/Expense in the consolidated statements of income for the years ended December 31, 2016, 2015 and 2014.

Asset/Liability Offsetting

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

The following tables summarize derivative assets and liabilities, related accrued interest and amounts of collateral exchanged pursuant to our agreements.

Offsetting of Financial and Derivative Instruments

	Gross Amounts of Assets/Liabilities Presented in the Consolidated Balance Sheets	Amounts Not Offset In the Consolidated Balance Sheets: Cash Collateral Received/ Pledged(1)	Amounts Not Offset In the Consolidated Balance Sheets: Investment Securities Received/Pledged as Collateral(1)	Net Amount
As of December 31, 2016				
Assets:				
Interest Rate Swaps and Other Financial Instruments:				
Dealer	$ 94,898	$ (85,941)	$ (6,918)	$ 2,039
Customer	104,028	-	-	104,028
Clearinghouse	9,508	-	-	9,508
Accrued Interest Receivable on Derivative Contracts	40,782	-	-	40,782
Liabilities:				
Interest Rate Swaps and Other Financial Instruments:				
Dealer	42,219	(570)	-	41,649
Customer	34,568	-	-	34,568
Clearinghouse	85,937	(70,415)	(22,448)	- (2)
Accrued Interest Payable on Derivative Contracts	4,500	-	-	4,500

(1) Cash collateral received is recognized in the consolidated balance sheets whereas investment securities received are not recognized in the consolidated balance sheets.

(2) Cash and investment securities pledged as collateral fully offset the related gross liability on the consolidated balance sheet.

Offsetting of Financial and Derivative Instruments				
		Amounts Not Offset In the Consolidated Balance Sheets		
	Gross Amounts of Assets/Liabilities Presented in the Consolidated Balance Sheets	Cash Collateral Received/ Pledged[1]	Investment Securities Received/Pledged as Collateral[1]	Net Amount
As of December 31, 2015				
Assets:				
Interest Rate Swaps and Other Financial Instruments:				
Dealer	$ 152,222	$ (115,191)	$ (34,665)	$ 2,366
Customer	137,132	-	-	137,132
Clearinghouse	6,635	-	-	6,635
Accrued Interest Receivable on Derivative Contracts	67,228	-	-	67,228
Liabilities:				
Interest Rate Swaps and Other Financial Instruments:				
Dealer	63,904	(1,570)	-	62,334
Customer	6,574	-	-	6,574
Clearinghouse	42,919	(34,103)	(23,747)	- [2]
Accrued Interest Payable on Derivative Contracts	5,278	-	-	5,278
As of December 31, 2014				
Assets:				
Interest Rate Swaps and Other Financial Instruments:				
Dealer	$ 324,808	$ (238,560)	$ (60,094)	$ 26,154
Customer	130,848	-	-	130,848
Accrued Interest Receivable on Derivative Contracts	68,411	-	-	68,411
Liabilities:				
Interest Rate Swaps and Other Financial Instruments:				
Dealer	102,288	(15,290)	-	86,998
Customer	9,332	-	-	9,332
Accrued Interest Payable on Derivative Contracts	4,920	-	-	4,920

(1) Cash collateral received is recognized in the consolidated balance sheets whereas investment securities received are not recognized in the consolidated balance sheets.

(2) Cash and investment securities pledged as collateral fully offset the related gross liability on the consolidated balance sheet.

Note 12 – Disclosure About Estimated Fair Value of Financial Instruments

The fair value of financial instruments represents the estimated amount to be received to sell an asset or paid to transfer or extinguish a liability (an exit price) in active markets among willing participants at the reporting date. The FASB has established a three-level fair value hierarchy aimed at maximizing the use of observable inputs – that is, inputs that reflect the assumptions market participants would use in pricing an asset or liability. Observable inputs are based on market data obtained from sources independent of the reporting entity. Unobservable inputs are supported by limited or no market activity and require significant management judgment or estimation.

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 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.

A description of the methods, assumptions and inputs to the valuation process used to determine or estimate the fair value of each class of financial instruments within the three-level hierarchy follows.

Level 1

Level 1 inputs are quoted prices in active markets for identical assets or liabilities. Our Level 1 assets at December 31, 2016 consist of assets held in a trust account related to deferred compensation and our SERPs and ERP. The trust account includes investments in securities that are actively traded and have quoted net asset value prices that are directly observable in the marketplace.

Level 2

Level 2 inputs include quoted prices for similar assets and liabilities in active markets; quoted prices in markets that are not active; and inputs that are observable, or can be corroborated, for substantially the full term of the asset or liability. Our Level 2 assets and liabilities at December 31, 2016 include our derivative contracts, collateral balances related to derivative contracts, certificates of deposit, federal funds sold and other overnight funds, U.S. Treasury and agency debt investment securities, Ginnie Mae MBS, non-agency MBS, corporate bonds, the substantial majority of agency MBS and the majority of ABS.

The fair value of federal funds sold and other overnight funds is generally their face value, plus accrued interest, as these instruments are readily convertible to cash and are short-term in nature.

The fair value of our investment securities classified as Level 2 is determined by a third-party pricing service that uses valuation models to estimate current market prices. Inputs and assumptions related to these models are typically observable in the marketplace. Such models incorporate prepayment assumptions and underlying collateral information to generate cash flows that are discounted using appropriate benchmark interest rate curves and volatilities. These third-party valuation models also incorporate information regarding non-binding broker/dealer quotes, available trade information, historical cash flows, credit ratings, and other market information. The estimated fair values of investment securities also appear in Note 4.

The fair value of our derivative financial instruments is estimated using internal market valuation models. These models use an income approach and incorporate benchmark interest rate curves (primarily the USD LIBOR/swap curve), volatilities, counterparty credit quality and other inputs that are observable directly or indirectly in the marketplace. We compare internally calculated derivative valuations to broker/dealer quotes to substantiate the results. The fair value of collateral assets and liabilities related to derivative contracts is their face value, plus accrued interest, as these instruments are cash balances; therefore, fair value approximates face value.

The following table presents information about valuation techniques and inputs to Level 2 fair value measurements.

Information About Valuation Techniques and Inputs to Level 2 Fair Value Measurements

	Valuation Technique	Inputs
Federal Funds Sold and Other Overnight Funds	Carrying Value	Par/Principal Plus Accrued Interest
Certificates of Deposit	Third-Party Pricing Service	Benchmark Yield Curve Quoted Prices
Investment Securities	Third-Party Pricing Service	Prepayment Rate Lifetime Default Rate Loss Severity Benchmark Yield Curve Quoted Prices
Interest Rate Swaps and Other Financial Instruments	Discounted Cash Flow	Benchmark Yield Curve Counterparty Credit Risk Volatility
Collateral Assets and Collateral Liabilities	Carrying Value	Par/Principal Plus Accrued Interest

Level 3

Level 3 inputs are unobservable and supported by limited or no market activity. Our Level 3 assets at December 31, 2016 include our Farmer Mac MBS, FHA/VA non-wrapped reperformer MBS and a small portion of agency MBS and ABS. Based on the lack of active trading volume and an orderly market for these securities, we classified these securities as Level 3. Fair value for all Farmer Mac MBS and a small portion of our Level 3 ABS is calculated internally using third-party models. Fair value for FHA/VA non-wrapped reperformer MBS, Level 3 agency MBS and the substantial majority of our Level 3 ABS is estimated through a third-party pricing service that uses valuation models to estimate current market prices. Inputs into all of these valuation models include underlying collateral data and projected losses as well as information for prepayment speeds and discounting spreads. Due to the lack of marketplace information, the inputs into these valuation models primarily represent management assumptions, with some corroboration to market inputs where information is available.

Level 3 assets at December 31, 2016 also include $78.8 million of loans originally measured at cost, which were written down to fair value as a result of impairment. The valuation of these assets requires a determination of the fair value of the underlying collateral, which may include the use of independent appraisals or other market-based information to develop a management estimate of fair value. As a result, these fair value measurements fall under Level 3 in the fair value hierarchy; however, they are excluded from the tables on pages 119 and 120 because they are not measured on a recurring basis.

Our Level 3 liabilities at December 31, 2016 include standby letters of credit whose market value is internally calculated based on information that is not observable either directly or indirectly in the marketplace.

In 2016, three FHA/VA Wrapped Reperformer MBS, included in U.S. Agency MBS, with a total fair value of $102.7 million at December 31, 2016 were transferred out of Level 2 and into Level 3. These investments were downgraded by rating agencies during 2016 at which time pricing inputs were no longer observable. No other transfers into or out of the three levels of assets or liabilities occurred in the current year.

The following table presents quantitative information about Level 3 fair value measurements as of December 31, 2016.

Quantitative Information About Valuation Techniques and Unobservable Inputs to Level 3 Fair Value Measurements

($ in Millions)	Fair Value	Valuation Technique	Unobservable Inputs	Range
Assets				
Investment Securities:				
U.S. Agency MBS	$ 147	Third-Party Pricing Service	Prepayment Rate	*
			Lifetime Default Rate	*
			Loss Severity	*
FHA/VA Non-Wrapped Reperformer MBS	275	Third-Party Pricing Service	Prepayment Rate	*
			Lifetime Default Rate	*
			Loss Severity	*
Farmer Mac MBS	97	Discounted Cash Flow	Prepayment Rate	8-12 percent
			Mark-to-Market Spread	1 percent
Asset-Backed	32	Third-Party Pricing Service	Prepayment Rate	*
			Lifetime Default Rate	*
			Loss Severity	*
Other (included in Asset-Backed)	7	Discounted Cash Flow	Prepayment Rate	0 percent
Impaired Loans	79	Appraisal	Income/Expense Data	**
			Comparable Sales	**
			Replacement Cost	**
Liabilities				
Standby Letters of Credit	$ 10	Discounted Cash Flow	Mark-to-Market Spread	0.2-1 percent

* Excludes ranges which are determined by a third-party pricing service

** Range of inputs are unique to each collateral property

Assets and Liabilities Measured at Fair Value on a Recurring Basis

The following tables present the assets and liabilities that are measured at fair value on a recurring basis at December 31, 2016, 2015 and 2014 for each of the fair value hierarchy levels.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

December 31, 2016

($ in Millions)	Level 1	Level 2	Level 3	Total
Assets				
Federal Funds Sold and				
Other Overnight Funds	$ -	$ 750	$ -	$ 750
Investment Securities:				
Certificates of Deposit	-	776	-	776
U.S. Treasury Debt	-	11,141	-	11,141
U.S. Agency Debt	-	5,144	-	5,144
Residential MBS:				
Ginnie Mae	-	541	-	541
U.S. Agency	-	6,564	147	6,711
FHA/VA Non-Wrapped				
Reperformer	-	-	275	275
Non-Agency	-	71	-	71
Commercial MBS:				
U.S. Agency	-	2,641	-	2,641
Agricultural MBS:				
Farmer Mac	-	-	97	97
Corporate Bonds	-	40	-	40
Asset-Backed and Other	-	289	39	328
Interest Rate Swaps and				
Other Financial Instruments	-	208	-	208
Assets Held in Trust				
(included in Other Assets)	69	-	-	69
Collateral Assets (included				
in Other Assets)	-	71	-	71
Total Assets	$ 69	$ 28,236	$ 558	$ 28,863
Liabilities				
Interest Rate Swaps and				
Other Financial Instruments	$ -	$ 163	$ -	$ 163
Collateral Liabilities				
(included in Bonds and Notes)	-	86	-	86
Standby Letters of Credit				
(included in Other Liabilities)	-	-	10	10
Total Liabilities	$ -	$ 249	$ 10	$ 259

Assets and Liabilities Measured at Fair Value on a Recurring Basis

December 31, 2015

($ in Millions)	Level 1	Level 2	Level 3	Total
Assets				
Investment Securities:				
U.S. Treasury Debt	$ -	$ 7,188	$ -	$ 7,188
U.S. Agency Debt	-	5,857	-	5,857
Residential MBS:				
Ginnie Mae	-	906	-	906
U.S. Agency	-	7,711	52	7,763
FHA/VA Non-Wrapped				
Reperformer	-	-	342	342
Non-Agency	-	129	-	129
Commercial MBS:				
U.S. Agency	-	1,982	-	1,982
Agricultural MBS:				
Farmer Mac	-	-	124	124
Corporate Bonds	-	166	-	166
Asset-Backed and Other	-	-	47	47
Interest Rate Swaps and				
Other Financial Instruments	-	296	-	296
Assets Held in Trust				
(included in Other Assets)	63	-	-	63
Collateral Assets (included				
in Other Assets)	-	36	-	36
Total Assets	$ 63	$ 24,271	$ 565	$ 24,899
Liabilities				
Interest Rate Swaps and				
Other Financial Instruments	$ -	$ 113	$ -	$ 113
Collateral Liabilities				
(included in Bonds and Notes)	-	115	-	115
Standby Letters of Credit				
(included in Other Liabilities)	-	-	10	10
Total Liabilities	$ -	$ 228	$ 10	$ 238

Assets and Liabilities Measured at Fair Value on a Recurring Basis

December 31, 2014

($ in Millions)	Level 1	Level 2	Level 3	Total
Assets				
Investment Securities:				
U.S. Treasury Debt	$ -	$ 7,625	$ -	$ 7,625
U.S. Agency Debt	-	5,680	-	5,680
Residential MBS:				
Ginnie Mae	-	1,472	-	1,472
U.S. Agency	-	7,530	57	7,587
FHA/VA Non-Wrapped Reperformer	-	-	391	391
Non-Agency	-	166	-	166
Commercial MBS:				
U.S. Agency	-	1,007	-	1,007
Agricultural MBS:				
Farmer Mac	-	-	150	150
Corporate Bonds	-	146	-	146
Asset-Backed and Other	-	3	93	96
Interest Rate Swaps and Other Financial Instruments	-	456	-	456
Assets Held in Trust (included in Other Assets)	61	-	-	61
Collateral Assets (included in Other Assets)	-	15	-	15
Total Assets	$ 61	$ 24,100	$ 691	$ 24,852
Liabilities				
Interest Rate Swaps and Other Financial Instruments	$ -	$ 112	$ -	$ 112
Collateral Liabilities (included in Bonds and Notes)	-	239	-	239
Standby Letters of Credit (included in Other Liabilities)	-	-	9	9
Total Liabilities	$ -	$ 351	$ 9	$ 360

The following table presents the changes in Level 3 assets and liabilities measured at fair value on a recurring basis:

Level 3 Assets and Liabilities Measured at Fair Value on a Recurring Basis

($ in Millions)	U.S. Agency Residential MBS	Farmer Mac Agricultural MBS	FHA/VA Non-Wrapped Reperformer Residential MBS	Asset-Backed Securities and Other	Standby Letters of Credit
Balance at December 31, 2015	**$ 52**	**$ 124**	**$ 342**	**$ 47**	**$ 10**
Transfers In	**103**	**-**	**-**	**-**	**-**
Total Gains or Losses (Realized/Unrealized):					
Included in Other Comprehensive Income	**(8)**	**-**	**1**	**(2)**	**-**
Sales	**-**	**-**	**(24)**	**-**	**-**
Issuances	**-**	**-**	**-**	**-**	**8**
Settlements	**8**	**(27)**	**(52)**	**(10)**	**(8)**
Accretion	**(8)**	**-**	**8**	**4**	**-**
Balance at December 31, 2016	**$ 147**	**$ 97**	**$ 275**	**$ 39**	**$ 10**
Balance at December 31, 2014	$ 57	$ 150	$ 391	$ 93	$ 9
Total Gains or Losses (Realized/Unrealized):					
Included in Other Noninterest Income	-	-	(10)	14	-
Included in Other Comprehensive Income	2	-	18	(13)	-
Purchases	-	-	-	4	-
Sales	-	-	(21)	(44)	-
Issuances	-	-	-	-	6
Settlements	(8)	(25)	(51)	(10)	(5)
Accretion	1	(1)	15	3	-
Balance at December 31, 2015	$ 52	$ 124	$ 342	$ 47	$ 10
Balance at December 31, 2013	$ 55	$ 179	$ 440	$ 106	$ 10
Total Gains or Losses (Realized/Unrealized):					
Included in Other Noninterest Income	-	-	-	2	-
Included in Other Comprehensive Income	11	-	(9)	-	-
Sales	-	-	-	(7)	-
Issuances	-	-	-	-	4
Settlements	(10)	(28)	(60)	(12)	(5)
Accretion	1	(1)	20	4	-
Balance at December 31, 2014	$ 57	$ 150	$ 391	$ 93	$ 9

Estimated Fair Value of Certain Other Financial Instruments

The following table presents the estimated fair values of financial instruments that are recorded in the consolidated balance sheets at cost, as well as certain off-balance sheet financial instruments, as of December 31, 2016, 2015 and 2014.

($ in Millions)

	December 31, 2016			December 31, 2015			December 31, 2014		
	Carrying Amount	Estimated Fair Value	Fair Value Hierarchy	Carrying Amount	Estimated Fair Value	Fair Value Hierarchy	Carrying Amount	Estimated Fair Value	Fair Value Hierarchy
Financial Assets:									
Net Loans	**$ 94,699**	**$ 95,664**	**Level 3**	$ 88,554	$ 89,501	Level 3	$ 79,901	$ 81,416	Level 3
Financial Liabilities:									
Bonds and Notes	**$ 115,086** (1)	**$ 115,660** (1)	**Level 3** (1)	$ 106,970 (2)	$ 107,537 (2)	Level 3 (2)	$ 97,535 (3)	$ 98,322 (3)	Level 3 (3)
Subordinated Debt	**499**	**478**	**Level 3**	903	926	Level 3	903	927	Level 3
Off-Balance Sheet Financial Instruments:									
Commitments to Extend Credit	**$ -**	**$ (102)**	**Level 3**	$ -	$ (106)	Level 3	$ -	$ (114)	Level 3

(1) Includes $86 million in Level 2 collateral liabilities carried at fair value as of December 31, 2016.
(2) Includes $115 million in Level 2 collateral liabilities carried at fair value as of December 31, 2015.
(3) Includes $239 million in Level 2 collateral liabilities carried at fair value as of December 31, 2014.

Net Loans

Our loan portfolio includes fixed- and floating-rate loans. Since no active trading market exists for most of our loans, fair value is estimated by discounting the expected future cash flows using current interest rates at which similar loans would be made to borrowers with similar credit risk.

Bonds and Notes

Bonds and notes 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 U.S. Treasury yield curve and an estimated yield-spread relationship between Farm Credit debt securities and U.S. Treasury securities. We estimate an appropriate yield-spread taking into consideration bank and security dealer yield indications, observed new Government Sponsored Enterprise debt security pricing, and pricing levels in the related USD interest rate swap market.

Subordinated Debt

The fair value of subordinated debt is estimated based upon quotes obtained from a broker/dealer.

Commitments to Extend Credit

The fair value of commitments to extend credit is estimated by applying a risk-adjusted spread percentage to these obligations.

The following table presents information about valuation techniques and inputs to other fair value measurements.

Information About Valuation Techniques and Inputs to Other Fair Value Measurements

	Valuation Technique	Input
Net Loans	Discounted Cash Flow	Prepayment Rate Mark-to-Market Spread Benchmark Yield Curve Probability of Default Loss Given Default
Bonds and Notes	Discounted Cash Flow	Benchmark Yield Curve Farm Credit Spread
Subordinated Debt	Non-binding Broker/Dealer Quote	Price for Similar Security
Commitments to Extend Credit	Discounted Cash Flow	Mark-to-Market Spread

Note 13 – Related Party Transactions

In the ordinary course of business, we enter into loan transactions with customers, the officers or directors of which may also serve on our Board of Directors. Such loans are subject to special review and reporting requirements contained in the FCA regulations, are reviewed and approved only at the most senior loan committee level within the Bank and are regularly reported to the Board of Directors. Except as noted below, all related party loans are made in accordance with established policies on substantially the same terms, including interest rates and collateral requirements, as those prevailing at the time for comparable transactions with unrelated borrowers.

During 2010, we made a $4.0 million loan to Dixie Electric Membership Corporation (DEMCO), with which Richard W. Sitman, a member of our Board of Directors, is affiliated. The loan was made to refinance a portion of DEMCO's existing long-term indebtedness. CoBank's pricing policy was unintentionally misapplied to this loan and the loan was closed with an interest rate of 3.25 percent, which is lower than rates on similar loans to unrelated borrowers. As of December 31, 2016, there was $1.8 million outstanding on this loan, which is 6 percent of the Bank's total exposure to DEMCO.

Total loans outstanding to customers whose officers or directors serve on our Board of Directors amounted to $9.7 billion at December 31, 2016. During 2016, $26.5 billion of advances on loans were made and repayments totaled $25.7 billion. None of these loans outstanding at December 31, 2016 were delinquent, in nonaccrual or accruing restructured status or, in the opinion of management, involved more than a normal risk of collectability.

Note 14 – Segment Financial Information

We conduct lending operations through three operating segments: Agribusiness, Strategic Relationships and Rural Infrastructure.

The accompanying table presents condensed disaggregated information for the segments. Allocations of resources and corporate items, as well as measurement of financial performance, are made at these operating segment levels. All customer activity, including loans and leases and related income, is specifically assigned to the business units that make up the operating segments. Investment securities and federal funds sold and other overnight funds, which are primarily held as a liquidity reserve to support our banking operations, are not specifically assigned to operating segments; however, the income from investment securities and federal funds sold and other overnight funds is allocated to the operating segments. Information to reconcile the total reportable segments to the total CoBank financial statements is shown as "Corporate/Other." Intersegment transactions are insignificant.

We do not hold significant assets in any foreign country. Substantially all of our agricultural export finance loans are U.S. dollar-denominated and 26 percent of these loans are guaranteed by a U.S. government-sponsored loan guarantee program. For the three years ended December 31, 2016, 2015 and 2014, no customer made up 10 percent or more of our gross or net interest income.

Segment Financial Information	Agribusiness	Strategic Relationships	Rural Infrastructure	Subtotal	Corporate/ Other	Total CoBank
2016 Results of Operations ($ in Thousands):						
Net Interest Income	**$ 655,473**	**$ 285,129**	**$ 431,848**	**$ 1,372,450**	**$ (10,672)**	**$ 1,361,778**
Provision for Loan Losses (Loan Loss Reversal)	**71,000**	**-**	**(8,000)**	**63,000**	**-**	**63,000**
Noninterest Income	**119,048**	**936**	**69,300**	**189,284**	**(4,399)**	**184,885**
Operating Expenses	**219,490**	**41,279**	**123,200**	**383,969**	**(4,267)**	**379,702**
Provision for Income Taxes	**80,868**	**-**	**77,968**	**158,836**	**(551)**	**158,285**
Net Income	**$ 403,163**	**$ 244,786**	**$ 307,980**	**$ 955,929**	**$ (10,253)**	**$ 945,676**
Selected Financial Information at December 31, 2016 ($ in Millions):						
Loans	**$ 28,660**	**$ 45,994**	**$ 20,604**	**$ 95,258**	**$ -**	**$ 95,258**
Less: Allowance for Loan Losses	**(393)**	**-**	**(166)**	**(559)**	**-**	**(559)**
Net Loans	**$ 28,267**	**$ 45,994**	**$ 20,438**	**$ 94,699**	**$ -**	**$ 94,699**
Total Assets	**$ 28,673**	**$ 46,134**	**$ 20,535**	**$ 95,342**	**$ 30,789** (1)	**$ 126,131**
(1) Other assets are comprised of:						
Federal Funds Sold and Other Overnight Funds						**$ 750**
Investment Securities						**27,765**
Other Assets						**2,274**
2015 Results of Operations ($ in Thousands):						
Net Interest Income	$ 604,182	$ 283,889	$ 393,744	$ 1,281,815	$ (8,480)	$ 1,273,335
(Loan Loss Reversal) Provision for Loan Losses	(30,800)	-	40,800	10,000	-	10,000
Noninterest Income (Expense)	118,075	(3,811)	57,752	172,016	(2,243)	169,773
Operating Expenses	193,849	38,091	94,335	326,275	(960)	325,315
Provision for Income Taxes	110,277	-	61,090	171,367	(247)	171,120
Net Income	$ 448,931	$ 241,987	$ 255,271	$ 946,189	$ (9,516)	$ 936,673
Selected Financial Information at December 31, 2015 ($ in Millions):						
Loans	$ 26,131	$ 43,358	$ 19,552	$ 89,041	$ -	$ 89,041
Less: Allowance for Loan Losses	(313)	-	(173)	(486)	-	(486)
Net Loans	$ 25,818	$ 43,358	$ 19,379	$ 88,555	$ -	$ 88,555
Total Assets	$ 26,127	$ 43,467	$ 19,457	$ 89,051	$ 28,420 (1)	$ 117,471
(1) Other assets are comprised of:						
Investment Securities						$ 24,504
Other Assets						3,916
2014 Results of Operations ($ in Thousands):						
Net Interest Income	$ 599,825	$ 279,989	$ 360,316	$ 1,240,130	$ (8,363)	$ 1,231,767
Provision for Loan Losses (Loan Loss Reversal)	37,000	-	(52,000)	(15,000)	-	(15,000)
Noninterest Income (Expense)	89,539	(2,750)	36,855	123,644	527	124,171
Operating Expenses	183,883	33,707	88,158	305,748	(1,948)	303,800
Provision for Income Taxes	82,952	-	81,047	163,999	(1,131)	162,868
Net Income	$ 385,529	$ 243,532	$ 279,966	$ 909,027	$ (4,757)	$ 904,270
Selected Financial Information at December 31, 2014 ($ in Millions):						
Loans	$ 24,359	$ 39,919	$ 16,104	$ 80,382	$ -	$ 80,382
Less: Allowance for Loan Losses	(330)	-	(151)	(481)	-	(481)
Net Loans	$ 24,029	$ 39,919	$ 15,953	$ 79,901	$ -	$ 79,901
Total Assets	$ 24,323	$ 40,050	$ 16,017	$ 80,390	$ 26,991 (1)	$ 107,381
(1) Other assets are comprised of:						
Investment Securities						$ 24,320
Other Assets						2,671

Note 15 – Commitments and Contingent Liabilities

Under the Farm Credit Act of 1971, as amended, we are primarily liable for the portion of outstanding Systemwide Debt Securities issued by CoBank. We are also contingently liable, as defined in statutory joint and several liability provisions, for the outstanding Systemwide Debt Securities issued by the other System banks. Total Systemwide Debt Securities of the System were $257.8 billion at December 31, 2016.

There are several mechanisms in place affecting exposure to statutory joint and several liabilities. System banks are statutorily required to maintain eligible assets at a level at least equal in value to the total amount of debt for which such System bank is primarily liable. In addition, in the event of a default by a System bank, the Insurance Fund would be required to make timely payment of principal and interest on Systemwide Debt Securities, to the extent that net assets are available in the Insurance Fund, before the joint and several liability of the System banks would be triggered. At December 31, 2016, the aggregated assets of the Insurance Fund totaled $4.5 billion. Finally, System banks must maintain certain financial criteria in order to participate in Systemwide debt issuances. If these criteria are not met, a troubled System bank's access to and participation in Systemwide debt issuances could be limited or denied.

On at least a quarterly basis, we assess our liabilities and contingencies in connection with outstanding legal proceedings utilizing the latest information available. For those matters where it is probable that we will incur a loss, and the amount of the loss can be reasonably estimated, we record a liability in our consolidated financial statements. For other matters, where a loss is not probable or the amount of the loss is not estimable, we will not accrue legal reserves.

On June 13, 2016, a lawsuit was commenced by the filing of a complaint in the United States District Court Southern District of New York against CoBank by a number of investors (the "Plaintiffs") who had held CoBank's 7.875 percent Subordinated Notes due in 2018 (the "Notes"). The Notes were redeemed at par plus accrued interest by CoBank on April 15, 2016 due to the occurrence of a "Regulatory Event" (as defined under the terms of the Notes). The Plaintiffs have asserted a breach of contract claim and a breach of implied covenant of good faith and fair dealing claim alleging that CoBank impermissibly redeemed the Notes. The Plaintiffs have requested damages in an amount to be determined at trial, reasonable attorneys' fees and any other such relief as the court may deem just and proper. CoBank filed its answer on September 20, 2016 and discovery is ongoing. CoBank intends to vigorously defend against these allegations. The likelihood of any outcome of this proceeding cannot be determined at this time.

While the outcome of legal proceedings is inherently uncertain, based on information currently available, advice of legal counsel and available insurance coverage, we believe that the liabilities, if any, arising from our legal proceedings will not have a material adverse effect on our consolidated financial position, results of operations or cash flows. However, in the event of unexpected future developments, it is possible that the ultimate resolution of these matters, if unfavorable, may be material to the Bank's consolidated financial position, results of operations or cash flows.

We have various other commitments outstanding and contingent liabilities as discussed elsewhere in these notes to consolidated financial statements, including commitments to extend credit as discussed in Note 10.

Note 16 – Quarterly Financial Information

Unaudited quarterly results of operations for the years ended December 31, 2016, 2015 and 2014, are shown in the table below.

Quarterly Financial Information (Unaudited)

2016	First	Second	Third	Fourth	Total
Net Interest Income	**$ 336,877**	**$ 345,941**	**$ 334,011**	**$ 344,949**	**$ 1,361,778**
Provision for Loan Losses	**8,000**	**20,000**	**20,000**	**15,000**	**63,000**
Noninterest Income and Expenses, Net	**43,305**	**43,535**	**44,822**	**63,155**	**194,817**
Provision for Income Taxes	**42,260**	**39,103**	**37,475**	**39,447**	**158,285**
Net Income	**$ 243,312**	**$ 243,303**	**$ 231,714**	**$ 227,347**	**$ 945,676**
2015	**First**	**Second**	**Third**	**Fourth**	**Total**
Net Interest Income	$ 315,285	$ 309,362	$ 315,201	$ 333,487	$ 1,273,335
Provision for Loan Losses	10,000	-	-	-	10,000
Noninterest Income and Expenses, Net	27,725	28,562	38,217	61,038	155,542
Provision for Income Taxes	45,334	48,471	41,161	36,154	171,120
Net Income	$ 232,226	$ 232,329	$ 235,823	$ 236,295	$ 936,673
2014	**First**	**Second**	**Third**	**Fourth**	**Total**
Net Interest Income	$ 308,966	$ 311,351	$ 299,213	$ 312,237	$ 1,231,767
(Loan Loss Reversal) Provision for Loan Losses	-	(25,000)	-	10,000	(15,000)
Noninterest Income and Expenses, Net	31,428	55,869	38,308	54,024	179,629
Provision for Income Taxes	46,267	47,552	36,209	32,840	162,868
Net Income	$ 231,271	$ 232,930	$ 224,696	$ 215,373	$ 904,270

Note 17 – Affiliated Associations

CoBank is chartered by the FCA to serve the Associations that provide credit and related financial services to or for the benefit of eligible borrowers/shareholders for qualified purposes in specific geographic areas in the United States. The Associations are not authorized by the Farm Credit Act to participate in the issuance of Systemwide Debt Securities. Therefore, we are the primary funding source for our affiliated Associations. As of January 1, 2017, we have 23 affiliated Associations serving 23 states across the Northwest, West, Southwest, Rocky Mountains, Mid-Plains, and Northeast regions of the United States.

The Associations originate and service long-term real estate mortgage loans as well as short- and intermediate-term loans for agricultural purposes. The Associations may also purchase eligible loan participations from System entities and other lending institutions. Additionally, the Associations may serve as an intermediary in offering multi-peril crop insurance and credit life insurance, and providing additional financial services to borrowers.

The Farm Credit Act and FCA regulations require us to monitor and approve certain activities of our affiliated Associations. CoBank and our affiliated Associations operate under a creditor/debtor relationship evidenced by a General Financing Agreement (GFA) entered into separately with each Association. The GFA sets forth the creditor/debtor relationship between us and each Association and also references certain requirements contained in the Farm Credit Act and FCA regulations. The Associations' respective boards of directors are expected to establish and monitor the necessary policies and procedures to comply with all FCA regulations. In all other respects, the lending relationship with the Associations is substantially similar to that with our other borrowers.

We make loans to the Associations, which, in turn, make loans to their eligible borrowers. We have senior secured interests in substantially all of the Associations' assets, which extend to the underlying collateral of the Associations' loans to their customers. The total wholesale loans outstanding to our affiliated Associations were $41.5 billion at December 31, 2016. During 2016, $92.3 billion of advances on wholesale loans were made to our affiliated Associations and repayments totaled $89.9 billion.

Our bylaws permit our Board of Directors to set the required level of Association investment in the Bank within a range of 4 to 6 percent of the one-year historical average of Association borrowings. In 2016, the required investment level was 4 percent. There are no capital sharing agreements between us and our affiliated Associations.

Our affiliated Associations are considered customers and thus operate independently and maintain an arms-length relationship with us, except to the extent that the Farm Credit Act requires us, as the funding bank, to monitor and approve certain activities of these Associations. Accordingly, the financial information of affiliated Associations is not included in our consolidated financial statements.

Effective January 1, 2014, two Association mergers occurred in the CoBank District. The Federal Land Bank

Association of Kingsburg, FLCA and Northern California Farm Credit, ACA, merged to form Golden State Farm Credit, ACA. Additionally, Farm Credit of Maine, ACA merged into Farm Credit East, ACA. Effective October 1, 2014, Farm Credit of Central Oklahoma, ACA, merged into Farm Credit of Western Oklahoma, ACA.

In 2014, one of our affiliated Associations, Farm Credit Services Southwest, ACA (FCSSW), noted a sudden significant increase in delinquencies in a discrete portion of its retail lending portfolio. An in-depth investigation directed by a special investigative committee of the FCSSW board of directors identified material weaknesses in internal controls relating to credit origination, administration, servicing and cash management procedures. As a result, it was determined that certain loans were made to ineligible borrowers under the Farm Credit Act and/or were inadequately secured. In October 2014, the board of directors and management of FCSSW announced that FCSSW's financial statements as of and for the year ended December 31, 2013, and the prior years included therein, as well as the three months ended March 31, 2014 and the six months ended June 30, 2014 could no longer be relied upon. In July 2015, FCSSW published restated financial reports for the above-mentioned periods.

As a result of these events, our wholesale loan to FCSSW, which totaled $891.3 million at December 31, 2014, was downgraded to the 'Substandard' credit quality classification. Pursuant to our regulatory requirements, we classify our wholesale loans using the same credit rating methodology as is used with our commercial loans. Our loans to affiliated Associations are collateralized by substantially all of the Association assets, and the earnings, capital and loan loss reserves of the Associations provide an additional layer of protection against losses in their retail loan portfolios. While the 'Substandard' classification resulted from events during 2014 described above, we did not incur any losses on FCSSW's wholesale loan. Effective November 1, 2015, FCSSW became a wholly-owned subsidiary of Farm Credit West, ACA, another of our affiliated Associations. The wholesale loan to Farm Credit West, ACA, which now includes the amounts previously associated with FCSSW, is rated in the 'Acceptable' credit quality classification.

Effective January 1, 2015, Frontier Farm Credit (Frontier), one of our affiliated Associations, and Farm Credit Services of America (FCSAmerica), an Association affiliated with AgriBank, FCB, formed a strategic alliance. As part of the alliance, Frontier and FCSAmerica have integrated their day-to-day business operations, systems and leadership teams while continuing to exist as separate Associations. Each Association has its own board, with representatives participating in a coordinating committee to facilitate board governance between the two organizations. CoBank continues to serve as the funding bank for Frontier.

Effective January 1, 2016, two of our affiliated Associations, Farm Credit Services of East Central Oklahoma, ACA, and Chisholm Trail Farm Credit, ACA, merged to form Oklahoma AgCredit, ACA.

Effective January 1, 2017, two of our affiliated Associations, Farm Credit of Southwest Kansas, ACA, and American AgCredit, ACA, merged and are doing business as American AgCredit, ACA. During 2016, these two entities operated under a joint management agreement pursuant to which the President and CEO of American AgCredit, ACA, served as the CEO of both Associations.

Effective January 1, 2017, Farm Credit of Ness City, FLCA (Ness City), and one of our affiliated Associations, High Plains Farm Credit, ACA (High Plains), entered into a joint management agreement with the intent to merge. Pursuant with the agreement, the CEO, Chief Financial Officer and Chief Credit Officer of High Plains are jointly serving in these positions for Ness City. The anticipated merger date is October 1, 2017. The merger will be subject to the approval of the stockholders of both Associations as well as the FCA.

Report of Management
CoBank, ACB

March 7, 2017

To our Shareholders:

The consolidated financial statements of CoBank, ACB (CoBank) are prepared by management, which is responsible for their integrity and objectivity, including amounts that must necessarily be based on judgments and estimates. The consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America as appropriate in the circumstances. The consolidated financial statements, in the opinion of management, fairly present, in all material respects, the consolidated financial position of CoBank. Other consolidated financial information included in the Annual Report to Shareholders is consistent with that in the financial statements.

To meet its responsibility for reliable consolidated financial information, management depends on 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 must be related to the benefits derived. To monitor compliance, CoBank's internal audit staff performs audits of the accounting records, reviews accounting systems and internal controls, and recommends improvements as deemed appropriate. CoBank's 2016, 2015 and 2014 consolidated financial statements have been audited by PricewaterhouseCoopers LLP, independent auditors. In addition, our independent auditors have audited our internal control over financial reporting as of December 31, 2016, 2015 and 2014. CoBank is also examined by the Farm Credit Administration.

The chief executive officer, as delegated by the Board of Directors, has overall responsibility for CoBank's system of internal controls and financial reporting, subject to the review of the audit committee of the Board of Directors. The chief executive officer reports periodically on those matters to the audit committee. The audit committee consults regularly with management and meets periodically with the independent auditors and internal auditors to review the scope and results of their work. The audit committee reports regularly to the Board of Directors. Both the independent auditors and the internal auditors have direct access to the audit committee, which is composed solely of directors who are not officers or employees of CoBank.

The undersigned certify that this CoBank Annual Report to Shareholders has been reviewed by the undersigned and has been prepared in accordance with all applicable statutory or regulatory requirements and that the information contained herein is true, accurate and complete to the best of their knowledge.

Everett M. Dobrinski Chair of the Board	Thomas E. Halverson Chief Executive Officer	David P. Burlage Chief Financial Officer

Management's Report on Internal Control Over Financial Reporting
CoBank, ACB

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. CoBank's internal control over financial reporting is a process designed under the supervision of our chief executive officer and our chief financial officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Bank's financial statements for external reporting purposes in accordance with U.S. generally accepted accounting principles. As of the end of the Bank's 2016 fiscal year, management conducted an assessment of the effectiveness of the Bank's internal control over financial reporting based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, our management concluded that the Bank's internal control over financial reporting is effective as of December 31, 2016.

Our internal control over financial reporting includes policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles, and that receipts and expenditures are being made only in accordance with authorizations of management and the directors of CoBank; and (iii) 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 our financial statements.

The effectiveness of the Bank's internal control over financial reporting as of December 31, 2016 has been audited by PricewaterhouseCoopers LLP, independent auditors, as stated in their report appearing on pages 69 and 70, which expresses an unqualified opinion on the effectiveness of the Bank's internal control over financial reporting as of December 31, 2016. There have been no changes in the Bank's internal control over financial reporting that occurred during our most recent fiscal quarter (i.e., the fourth quarter of 2016) that have materially affected, or are reasonably likely to materially affect, the Bank's internal control over financial reporting.

Controls and Procedures
CoBank, ACB

We maintain a system of disclosure controls and procedures. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information disclosed by us in our quarterly and annual reports is accumulated and communicated to our management, including our chief executive officer and our chief financial officer, as appropriate, to allow timely decisions to be made regarding disclosure. The chief executive officer and the chief financial officer have evaluated our disclosure controls and procedures as of the end of the period covered by this annual report and have concluded that our disclosure controls and procedures are effective as of that date.

We also maintain a system of internal controls. The term “internal controls,” as defined by the American Institute of Certified Public Accountants’ Codification of Statement on Auditing Standards, AU-C Section 315, means a process effected by those charged with governance, management and other personnel that is designed to provide reasonable assurance about the achievement of the entity’s objectives with regard to the reliability of financial reporting, effectiveness and efficiency of operations, and compliance with applicable laws and regulations. We continually assess the adequacy of our internal controls over financial reporting and enhance our controls in response to internal control assessments and internal and external audit and regulatory recommendations. There have been no significant changes in our internal controls or in other factors that could significantly affect such controls subsequent to the date we carried out our evaluations. In accordance with our internal control procedures, these financial statements were prepared under the oversight of the audit committee of our Board of Directors.

Annual Report to Shareholders Disclosure Information Required by Farm Credit Administration Regulations

CoBank, ACB

In accordance with Farm Credit Administration (FCA) regulations, CoBank has prepared this Annual Report to Shareholders for the year ended December 31, 2016, in accordance with all applicable statutory or regulatory requirements.

CoBank leases its national office building which is located in Greenwood Village, Colorado. As described on page 79, CoBank moved into the new corporate headquarters in late 2015 and commenced a lease agreement at that time. CoBank also leases various facilities which are described on the inside back cover of this Annual Report to Shareholders. CoBank leases banking center offices in Ames, IA; Atlanta, GA; Austin, TX; Enfield, CT; Fargo, ND; Louisville, KY; Lubbock, TX; Minneapolis, MN; Omaha, NE; Rocklin, CA; Spokane, WA; Sterling, CO; and St. Louis, MO. CoBank leases office space in Washington D.C. and Singapore. CoBank owns its Wichita Banking Center facilities in Wichita, KS. CoBank leases the majority of this building to various unrelated tenants. Farm Credit Leasing Services Corporation leases its headquarters office in Minneapolis, MN, as well as outside sales offices in Atlanta, GA; Celina, OH; Enfield, CT; Louisville, KY; Lubbock, TX; New Smyrna Beach, FL; Omaha, NE; Rocklin, CA; St. Louis, MO and Wichita, KS, some of which are located in CoBank banking centers.

CoBank has a national charter and, as a result, serves customers across rural America. Travel to customer locations may be difficult due to the rural nature of many of our customers' operations. In order to provide the appropriate level of customer contact and to optimize the efficiency of management travel, CoBank utilizes a variety of transportation to serve its customers, including aircraft (both commercial and fractional interest).

Annual Report to Shareholders Disclosure Information Required by Farm Credit Administration Regulations
CoBank, ACB

	Section	Location
Involvement in Certain 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.		
Relationship with Independent Auditors There has been no change in independent auditors or no disagreements on any matters of accounting principle or financial statement disclosure during the period.		
Financial Statements Financial Statements and Footnotes	Financial Information.................................	Pages 71 to 127
Report of Management	Report of Management	Page 128
Report of Independent Auditors	Report of Independent Auditors..................	Pages 69 to 70
Aggregate Fees Incurred for Services Rendered by Independent Auditors	Board of Directors Disclosure....................	Page 135
Credit and Services to Young, Beginning and Small Farmers and Ranchers and Producers or Harvesters of Aquatic Products	Young, Beginning and Small Farmers	Page 164
Unincorporated Business Entities	Unincorporated Business Entities	Page 165

Board of Directors Disclosure as of December 31, 2016
CoBank, ACB

Directors

At year-end 2016, CoBank was governed by a 27-member Board of Directors including 23 directors elected by customers from six different geographic regions. There was one vacant seat on the Board due to the death of William A. Squires, an elected director, in November 2016. The Board has elected two outside directors (independent of any customer or Farm Credit System affiliation) and two appointed directors (customer affiliation permitted) to complement the expertise of the customer-elected Board members.

Director terms run for four years. Employees of Farm Credit System institutions, including CoBank, cannot serve on CoBank's Board of Directors within one year of employment.

In 2015, shareholders approved bylaw amendments implementing a plan to reduce the size of the Board of Directors. Pursuant to the plan, which began to take effect in 2016, a total of 10 Board seats will be eliminated by 2020, reducing the number of elected directors on the Board from 24 to 14. The Board will also have up to four appointed directors and will continue to have two outside directors with no customer or Farm Credit System affiliations.

Director Independence

The Board must be composed at all times of at least 75 percent of directors who are deemed to be independent. The Board has adopted standards to assist it in making the annual affirmative determination of each director's independence status. A director will be considered "independent" if he or she meets the 14 criteria for independence set forth by the Board, which were established based upon leading industry practice and, in part, the listing standards of the New York Stock Exchange. For example, the loans from CoBank to an affiliated Association or Title III customer, as defined by the Farm Credit Act, where a CoBank director is also a director must not comprise more than 15 percent of the total loans of CoBank. In addition, the Board has made a determination as to each independent director that no relationship exists which, in the opinion of the Board, would interfere with the exercise of independent judgment in carrying out the director's responsibilities. In making these determinations, the Board reviewed and discussed information provided by the directors and by CoBank with regard to each director's business and personal activities as they may relate to CoBank and CoBank's management. As of December 31, 2016, all directors were considered to be independent.

Information About Committees of the Board of Directors

The standing Board committees consist of the following: an Audit Committee, a Compensation Committee, an Executive Committee, a Governance Committee and a Risk Committee. The Board has adopted written charters for each of these committees. The full text of each charter is available on our website at www.cobank.com.

All standing Board committees report on their meetings at the regular meeting of the full Board. Minutes of each committee meeting are signed by the committee chair and recording secretary, or another individual acting in their place at the meeting.

In 2016, the Board of Directors held a total of six meetings and standing committees of the Board of Directors held a total of 32 meetings. The primary responsibilities of each committee are described on the following pages.

Board of Directors Disclosure as of December 31, 2016
CoBank, ACB

Standing Committees

Audit Committee

The Audit Committee members are appointed by the Board chair in consultation with the Board officers and committee chairs. The Audit Committee is governed by a formal charter and chaired by one of the Board's outside directors. All members of the Audit Committee are independent of management of the Bank and any other System entity. During 2016, the Audit Committee met a total of five times, including regular meetings in executive session with the Chief Risk Officer, the head of the Internal Audit Division, the head of the Asset Review Division, and the Bank's independent auditors. The Audit Committee reviews and approves the quarterly and annual financial statements.

During 2016, Barry M. Sabloff served as Chair of the Audit Committee. The Board of Directors determined that Mr. Sabloff had the qualifications and experience necessary to serve as the "Audit Committee financial expert," as defined by the rules of the Securities and Exchange Commission and the FCA, and he was so designated. Mr. Sabloff's term expired at the end of 2016. The Board has also designated Gary A. Miller and William M. Farrow as "Audit Committee financial experts."

The primary purpose of the Audit Committee is to assist the Board in fulfilling its oversight responsibilities by carrying out the following responsibilities:

(1) Overseeing management's conduct of the Bank's financial reporting process and systems of internal accounting and financial controls;

(2) Monitoring the independence and performance of the Bank's internal audit and asset review functions, the risk assessment process, and the independent auditors;

(3) Ensuring the Bank's compliance with legal and regulatory requirements; and

(4) Providing an avenue of communication among the independent auditors, management and the Board.

Management has the primary responsibility for the consolidated financial statements and the financial reporting process, including the system of internal controls. The Audit Committee oversees the Bank's independent auditors, systems of internal accounting and financial controls, and financial reporting process on behalf of the Board of Directors. In this regard, the Audit Committee helps to ensure independence of the Bank's independent auditors, the integrity of management and the adequacy of disclosure to shareholders. The Audit Committee has unrestricted access to representatives of the Internal Audit Division, independent auditors and financial management.

The Audit Committee preapproves all audit and audit-related services and permitted non-audit services (including the fees and terms thereof) to be performed for the Bank by its independent auditors, as negotiated by management.

The Audit Committee reviewed the audited consolidated financial statements in the Annual Report for the year ended December 31, 2016 with management and the Bank's independent auditors. The independent auditors are responsible for expressing an opinion on the conformity of the Bank's audited consolidated financial statements with accounting principles generally accepted in the United States of America, including a discussion of the quality of the Bank's accounting principles, the reasonableness of significant judgments, the clarity of disclosures in the consolidated financial statements and the adequacy of internal controls. The Audit Committee discussed with the independent auditors the results of the 2016 audit and all other matters required to be discussed by Statements on Auditing Standards. In addition, the Audit Committee received, reviewed and discussed the written disclosures from the independent auditors regarding their independence. Based on the review and discussions described above, the Audit Committee recommended to the Board of Directors that the audited consolidated financial statements be included in the Bank's Annual Report for the year ended December 31, 2016 and for filing with the FCA.

Aggregate fees incurred by the Bank for services rendered by its independent auditors, PricewaterhouseCoopers LLP, for the years ended December 31, 2016 and 2015 were as follows:

Year Ended December 31,	2016	2015
Audit	$ **692,500**	$ 627,500
Audit-related	**140,879**	25,000
All Other	**2,700**	4,050
Total	$ **836,079**	$ 656,550

Audit fees were for the annual audit of the consolidated financial statements for 2016 and 2015.

Audit-related fees for 2016 primarily related to a preferred stock offering. For 2015, audit-related fees were for assurance and related services associated with certain compliance procedures.

All other fees for 2016 and 2015 represent our annual subscription to accounting research tools as well as costs related to continuing education.

<u>Compensation Committee</u>

The Compensation Committee members are appointed by the Board chair in consultation with the Board officers and committee chairs. All members of the Compensation Committee are independent of management. The committee is primarily responsible for representing the Board in matters related to compensation programs for the Bank, including salary, incentive and benefits programs, and in facilitating the terms of employment, compensation and evaluation of and succession planning for the Chief Executive Officer (CEO). The Compensation Committee has responsibility for monitoring succession planning for other senior leaders. The Compensation Committee also reviews the results of the Bank's affirmative action program and human equity initiatives.

<u>Executive Committee</u>

The Executive Committee members are appointed by the Board chair in consultation with the Board officers and committee chairs. The committee is primarily responsible for developing for Board consideration recommendations surrounding the design and implementation of the Bank's strategic plan. It acts on behalf of the Board between Board meetings when necessary. The Executive Committee is responsible for reviewing the Bank's budget and reports of operations, and for reviewing the capital adequacy plan and portfolio strategy. The committee reviews the Bank's annual business and financial plan and recommends such plan for approval by the Board. The committee also provides advice and counsel to the Board and management on policy matters related to capital and finance.

<u>Governance Committee</u>

The Governance Committee members are appointed by the Board chair in consultation with the Board officers and committee chairs. The committee is primarily responsible for monitoring and recommending for Board consideration corporate governance processes and structures that are consistent with leading practices for boards and board committees. The committee coordinates the annual Board self-evaluation and a periodic director peer evaluation. The committee also oversees the Bank's director nomination process, which is conducted by an independent Nominating Committee (see page 136), and director election process. In addition, the committee annually assesses the needs of the Board – taking into account the experience and background of current directors – and also recommends prospective outside and appointed directors to the full Board.

<u>Risk Committee</u>

The Risk Committee members are appointed by the Board chair in consultation with the Board officers and committee chairs. The committee is primarily responsible for overseeing the enterprise risk management practices of the Bank, including management's ability to assess and manage the Bank's credit, market, liquidity, operational, strategic and reputation, and regulatory and compliance risks. The committee also provides an open avenue of communication between management and the Board in order to effectively manage risks.

Other Committees

Nominating Committee

The Nominating Committee for 2016 consisted of 19 customer-owner representatives and two retired CoBank directors, all of whom were elected by the Bank's stockholders. No member of the Board or management served on the Nominating Committee. The Bank uses an independent nominating committee which is charged with the responsibility to identify qualified candidates for Board membership and to review director nominations, helping to ensure that the Bank continues to attract a highly qualified and diverse Board. The Nominating Committee seeks candidates who are recognized leaders and who fulfill specific needs for skill set, industry knowledge, and geographic and other forms of diversity on the Board. Customers are encouraged to submit resumes of candidates for elected positions. The Nominating Committee makes a best effort to recommend at least two candidates for each position up for election. Shareholders and interested candidates may gather signatures for petitions to run for the Board following the conclusion of the Nominating Committee's work. A nominee must not have reached age 70 on or prior to the date the term of office is to begin and must meet other eligibility requirements established by Bank bylaws and federal regulations.

Succession Committee

The Succession Committee was appointed in June 2013 by the Board of Directors to lead a CEO succession process, and completed its work in May 2016, when the Board of Directors selected Thomas E. Halverson to become the CEO, effective January 1, 2017. The Succession Committee's role was to identify candidates with the skill set and competencies necessary to lead CoBank in the future and to address the challenges that CoBank will face to continue as a dependable provider of credit and value-added financial services to support agriculture, rural infrastructure and rural communities. The Succession Committee consisted of all continuing directors who were members of the Compensation Committee, Board officers and all other members who were Board committee chairs during 2013. In 2015, due to the retirement of the previous Succession Committee Chair, a new Chair was appointed. Additionally, two new members of the Compensation Committee were named to the Succession Committee in 2015. The Succession Committee met five times in 2016.

Transition Committee

The Transition Committee was appointed in May 2016 by the Board of Directors to oversee tasks essential to the successful CEO leadership transition from Robert B. Engel, who served as CEO through December 31, 2016, to Thomas E. Halverson, who assumed this position effective January 1, 2017. The Transition Committee consists of Board officers and two representative directors. The Transition Committee met seven times in 2016.

Board of Directors Disclosure as of December 31, 2016
CoBank, ACB

The following represents certain information regarding the directors as of December 31, 2016, including business experience during the past five years. The terms of directors are scheduled to expire as of December 31 of the years indicated.

1 - Audit Committee	6 - Audit Committee Chair	11 - Succession Committee
2 - Compensation Committee	7 - Compensation Committee Chair	12 - Succession Committee Chair
3 - Executive Committee	8 - Executive Committee Chair	13 - Transition Committee
4 - Governance Committee	9 - Governance Committee Chair	14 - Transition Committee Chair
5 - Risk Committee	10 - Risk Committee Chair	

Name	Term Expires	Principal Occupation and Other Business Affiliations
Robert M. Behr [1] Age: 62 Year Service Began: 2013	2020	**Principal Occupation:** Chief Executive Officer: Citrus World, Inc., producing and marketing Florida’s Natural brand citrus juices, Lake Wales, FL (since September 2015); Chief Executive Officer: Citrus World Services, Inc., citrus marketing, Lake Wales, FL; Chief Executive Officer: Florida's Natural Food Service, Inc., citrus marketing, Lake Wales, FL; Chief Executive Officer: Florida's Natural Growers, Inc., citrus marketing, Lake Wales, FL; Chief Executive Officer: Hickory Branch Corporation, citrus grower, Lake Wales, FL; Chief Executive Officer, World Citrus West, Inc., citrus packaging, Lake Wales, FL; Former Chief Operating Officer: Citrus World, Inc. (December 2009 through August 2015). **Other Business Affiliations:** Owner: Behr-Nolte, a citrus grove, Lakeland, FL; Owner: CPI 3034 LLC, a citrus grove, Winter Haven, FL; Chair: Florida's Natural Growers Foundation, Inc., a charitable foundation, Lake Wales, FL; Director: Fresh N Natural Foods (PTE LTD), distributor of Florida's Natural juice products, Republic of Singapore; Owner: MBN Property, a citrus grove, LaBelle, FL; Owner: Summer Breeze, a citrus grove, Gainesville, FL.
M. Dan Childs [1] Age: 66 Year Service Began: 2015	2018	**Principal Occupation:** Owner/Operator: wheat and stocker cattle farming operation, Johnston County, OK; Senior Agricultural Consultant: Noble Foundation, a nonprofit institution to support agriculture, Ardmore, OK. **Other Business Affiliations:** Director: The Farm Credit Council, a national trade association, Washington, D.C.; Director: Farm Credit Council Services, a service provider, Greenwood Village, CO; Director: Oklahoma AgCredit, ACA, an agricultural credit association, Broken Arrow, OK; Vice President/Director: Foundation for Livestock and Grain Marketing, a nonprofit organization, Lakewood, CO; Director: Johnston County Industrial Authority, an economic development association, Tishomingo, OK.

Board of Directors Disclosure as of December 31, 2016

CoBank, ACB

Name	Term Expires	Principal Occupation and Other Business Affiliations
Everett M. Dobrinski [3, 8, 11, 13, 14] Chair Age: 70 Year Service Began: 1999	2019	**Principal Occupation:** Owner/Operator: Dobrinski Farm, a cereal grain and oilseed farming operation, Makoti, ND. **Other Business Affiliations:** Director: The Farm Credit Council, a national trade association, Washington, D.C.; Director: Nationwide Insurance Board Advisory Committee, an insurance company, Columbus, OH; Director: North Dakota Coordinating Council for Cooperatives, a trade association, Jamestown, ND.
William M. Farrow, III [1] Age: 61 Year Service Began: 2007	2018	**Principal Occupation:** Director, President and CEO: Urban Partnership Bank, a commercial bank, Chicago, IL; Owner: Winston and Wolfe LLC, a technology development and advisory company, Chicago, IL. **Other Business Affiliations:** Director: Chicago Board Options Exchange, an options and volatility trading resource, Chicago, IL; Director: Federal Reserve Bank of Chicago, a federal depository bank, Chicago, IL; Director: NorthShore University Health System, a hospital system, Evanston, IL.
Benjamin J. Freund [3] Age: 61 Year Service Began: 2014	2017	**Principal Occupation:** Owner/Officer: Freund's Farm, Inc., a dairy farming operation, East Canaan, CT; Owner/Director: CowPots, LLC, a manufacturer of biodegradable plantable pots, East Canaan, CT. **Other Business Affiliations:** Officer: Canaan Valley Agricultural Cooperative, Inc., a manure management cooperative, East Canaan, CT; Director/Advisory Board: Connecticut Farmland Preservation Advisory Board, advises Connecticut Commissioner of Agriculture, Hartford, CT.
Andrew J. Gilbert [5] Age: 58 Year Service Began: 2016	2019	**Principal Occupation:** Former Owner/Operator: Adon Farms Operations, LLC, a dairy farm and grain operation, Potsdam, NY (retired in 2016); Former Owner/Operator: Adon Farms Real Estate Holdings, LLC, a real estate LLC, Potsdam, NY (retired in 2016); Former Owner/Operator: Parishville Sand & Gravel, a sand and gravel supplier, Potsdam, NY (retired in 2016). **Other Business Affiliations:** Director: St. Lawrence County Development Study Advisory Board, a promoter of economic development, Massena, NY.

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CoBank, ACB

Name	Term Expires	Principal Occupation and Other Business Affiliations
John L. Guthrie [3] Age: 72 Year Service Began: 2012	2016	**Principal Occupation:** Owner/Operator: Guthrie Ranches, a diversified cattle and farming operation, Porterville, CA; Partner: McGruder Partners, a farming investment and operation, Porterville, CA; Director: Guthrie Investment Co., a diversified farming operation and financial investments, Porterville, CA. **Other Business Affiliations:** Director: Federal Farm Credit Banks Funding Corporation, the issuer of Systemwide debt, Jersey City, NJ; Director: California Cattlemen's Association, a trade association, Sacramento, CA.
Daniel T. Kelley [2, 7, 11, 13] First Vice Chair Age: 68 Year Service Began: 2004	2017	**Principal Occupation:** Owner/Operator: Kelley Farms, a corn and soybean farming operation, Normal, IL. **Other Business Affiliations:** Director: Global Farmer Network, a nonprofit organization, Des Moines, IA; Chairman: Illinois Agricultural Leadership Foundation, agricultural leadership development, Macomb, IL; Director: Midwest Grain, LLC, grain merchandising, Bloomington, IL; Director: Nationwide Bank, a federal savings bank, Columbus, OH; Director: Nationwide Mutual Insurance Company, an insurance company, Columbus, OH.
James A. Kinsey [3] Age: 67 Year Service Began: 2001	2016	**Principal Occupation:** Owner/Operator: Kinsey's Oak Front Farms, a purebred Angus seed-stock farming operation, Flemington, WV.
David J. Kragnes [4] Age: 64 Year Service Began: 2009	2020	**Principal Occupation:** Owner/Operator: David Kragnes Farm, a corn and bean row crop farming operation, Felton, MN. **Other Business Affiliations:** Director: The Farm Credit Council, a national trade association, Washington, D.C.; Director/Advisory Board: Quentin Burdick Center for Cooperatives, a cooperative education center, Fargo, ND.
James R. Magnuson [4] Age: 63 Year Service Began: 2013	2018	**Principal Occupation:** General Manager and Chief Executive Officer: Key Cooperative, an agricultural grain marketing and farm supply cooperative, Roland, IA. **Other Business Affiliations:** Director: ACDI-VOCA, an international development agency, Washington, D.C.; Director: Agricultural Cooperative Employment Services, a provider of employment services, Manhattan, KS; Director: Roland Transport, Inc., a trucking company, Roland, IA.

Name	Term Expires	Principal Occupation and Other Business Affiliations
Jon E. Marthedal [4, 9] Age: 60 Year Service Began: 2013	2017	**Principal Occupation:** Owner/Operator: Marthedal Farms, a grapes, raisins and blueberries farming operation, Fresno, CA; Owner/Operator: Keystone Blue Farms, LLC, a blueberries farming operation, Fresno, CA; Owner/Officer: Marthedal Enterprises Inc., a provider of farm management and custom agriculture services, Fresno, CA. **Other Business Affiliations:** Director: The Farm Credit Council, a national trade association, Washington, D.C.; President: California Blueberry Association, a state trade organization, Fresno, CA; Director: California Blueberry Commission, a state commission, Fresno, CA; Vice Chairman: California Raisin Marketing Board, a state marketing board, Fresno, CA; Vice Chairman: Raisin Administrative Committee, a federal marketing order, Fresno, CA; Director: Sun-Maid Growers of California, a raisin processing and marketing cooperative, Kingsburg, CA.
Gary A. Miller [1] Age: 56 Year Service Began: 2006	2017	**Principal Occupation:** President and Chief Executive Officer: GreyStone Power Corporation, an electric distribution cooperative, Douglasville, GA. **Other Business Affiliations:** Treasurer: Douglas County Development Authority, an economic development agency, Douglasville, GA; Alternate Director: Georgia EMC, a statewide trade organization, Tucker, GA; Director: GRESCO Utility Supply, Inc., electric material supplier, Smarr, GA; Director: Wellstar Health System, healthcare provider, Marietta, GA.
Catherine Moyer [2, 11] Age: 41 Year Service Began: 2010	2018	**Principal Occupation:** Chief Executive Officer and General Manager: The Pioneer Telephone Association, Inc. (d/b/a Pioneer Communications), a telecommunications provider, Ulysses, KS; Chief Executive Officer: High Plains Telecommunications, Inc., a telecommunications provider, Ulysses, KS. **Other Business Affiliations:** Chair: Kansas Lottery Commission, providing oversight of Kansas lottery and games, Topeka, KS; Chair: Kansas Rural Independent Telecommunications Coalition, an advocacy group for rural telecommunications, Topeka, KS; Director: Rural Trust Insurance Company, a provider of property and casualty coverage to small telecommunications providers, Greenbelt, MD; Director: State Independent Telephone Association of Kansas, an advocacy group for rural telecommunications, Topeka, KS; Chair: Telcom Insurance Group, a provider of property and casualty coverage to small telecommunications providers, Greenbelt, MD; Director/Advisory Council: Washburn University School of Law Alumni Association Board of Governors, a law school alumni association, Topeka, KS.

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Name	Term Expires	Principal Occupation and Other Business Affiliations
Alarik Myrin[4] Age: 70 Year Service Began: 2012	2018	**Principal Occupation:** President: Myrin Ranch, Inc., a ranching and farming operation, Altamont, UT; Managing Member: Myrin Livestock Co., LLC, a family cattle ranching operation, Altamont, UT; Managing Member: Myrin Investment Co., LLC., real estate rental management, Altamont, UT; Managing Member: Canyon Meadows Ranch, LLC, retail and wholesale grass fed beef, Altamont, UT. **Other Business Affiliations:** Director: Lake Fork Irrigation Co., a water irrigation company, Altamont, UT; Chair: Uintah Basin Medical Center, a hospital, clinic, rehabilitation center and nursing home facility, Roosevelt, UT; Director: Western Agrihaul, LLC, a trucking operation, Altamont, UT.
Ronald J. Rahjes [3] Age: 65 Year Service Began: 2012	2019	**Principal Occupation:** Officer: Wesley J. Rahjes and Sons, Inc., a diversified family farming corporation producing wheat, corn, soybeans and grain sorghum, Kensington, KS; Partner: R&D Farms, a farming partnership, Kensington, KS; Owner: R&C Tax Service, a tax preparation services firm, Kensington, KS. **Other Business Affiliations:** Director: Rural Telephone/Nextech, Inc., a telecommunications company, Lenora, KS.
David L. Reinders [2, 11, 12, 13] Age: 60 Year Service Began: 2011	2018	**Principal Occupation:** Former Chief Executive Officer: Ag Producers Co-op, a grain and farm supply cooperative, Sunray, TX (retired August 1, 2016); Consultant: Ag Producers Co-op, a grain and farm supply cooperative, Sunray, TX (August through December 2016). **Other Business Affiliations:** Director: Texas Agricultural Cooperative Council, a statewide agriculture industry trade association, Austin, TX.
Kevin G. Riel [2, 11] Age: 51 Year Service Began: 2014	2017	**Principal Occupation:** President and Chief Executive Officer: Double 'R' Hop Ranches, Inc., a diversified farming operation primarily growing hops, together with apples, grapes and row crops, Harrah, WA; President and Chief Executive Officer: Tri-Gen Enterprises, Inc., an agricultural marketing operation, Harrah, WA; Managing Partner: WLJ Investments, LLC, a land holding and management company, Harrah, WA. **Other Business Affiliations:** Director: Northwest Farm Credit Services, ACA, an agricultural credit association, Spokane, WA; Board President/Director: Hop Growers of America, a trade association, Moxee, WA.

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Name	Term Expires	Principal Occupation and Other Business Affiliations
Clint E. Roush [5] Age: 69 Year Service Began: 2012	2018	**Principal Occupation:** President: Clint Roush Farms, Inc., a wheat, alfalfa and stocker/feeder cattle farming operation, Arapaho, OK. **Other Business Affiliations:** Director/Advisory Board: Bill Fitzwater Endowed Cooperative Chair, promoting cooperative education, Stillwater, OK; Director: Custer County Cattlemen's Association, a trade association, Arapaho, OK; Director: Custer County Rural Water District, a water distribution organization, Custer City, OK; Chair: Farmers Cooperative Association of Clinton, OK, an agricultural marketing and supply cooperative, Clinton, OK.
Barry M. Sabloff [1, 6, 11] Age: 70 Year Service Began: 2005	2016	**Principal Occupation:** General Partner: Sabloff Family Limited Partnership, L.P., a partnership managing investments in Marquette National Corporation common stock, Chicago, IL; Former Executive Vice President: Bank One, N.A. (now merged with JPMorgan Chase & Co.), Chicago, IL (retired in 2001). **Other Business Affiliations:** Board President/Director: American School in London Foundation, an educational foundation, Princeton, NJ; Director: American School in London Foundation (UK), an educational foundation, London, England; Trustee/Treasurer: Columbia College Chicago, a private arts and media college, Chicago, IL; Vice Chairman/Director: Marquette Bank, a community bank, Chicago, IL; Director: Marquette Bank Affordable Housing Foundation, a charitable foundation focused on affordable housing in Chicago and surrounding area, Orland Park, IL; Director: Marquette Bank Education Foundation, a charitable foundation focused on education in Chicago and surrounding area, Orland Park, IL; Vice Chairman/Director: Marquette National Corporation, a bank holding company, Chicago, IL.
Stephanie Herseth Sandlin [5] Age: 46 Year Service Began: 2014	2017	**Principal Occupation:** General Counsel and Vice President Corporate Development: Raven Industries, Inc., a diversified technology and manufacturing company serving agriculture, aerospace and energy markets, Sioux Falls, SD.
Karen L. Schott [4, 13] Age: 49 Year Service Began: 2016	2019	**Principal Occupation:** Owner/Secretary/Treasurer: Bar Four F Ranch, Inc., a dryland, small grains and lease pasture farming operation, Broadview, MT. **Other Business Affiliations:** Director: Northwest Farm Credit Services, ACA, an agricultural credit association, Spokane, WA.

Board of Directors Disclosure as of December 31, 2016

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Name	Term Expires	Principal Occupation and Other Business Affiliations
Kenneth W. Shaw [4] Age: 66 Year Service Began: 2015 Also Served: 2012	2017	**Principal Occupation:** Owner/Operator: cow/calf/yearling stocker ranching operation, Mountainair, NM. **Other Business Affiliations:** Director: Central New Mexico Electric Cooperative, Inc., an electric distribution cooperative, Moriarty, NM.
Richard W. Sitman [3] Age: 63 Year Service Began: 1999 Also Served: 1995-1996	2019	**Principal Occupation:** Retired Owner/Operator: Jos. M. Sitman, Inc., a retail business, Greensburg, LA (retired in July 2013). **Other Business Affiliations:** Chairman: DEMCO Energy Services, LLC, an electric service supplier, Baton Rouge, LA; Ex Officio Director: DEMCO Foundation, a nonprofit organization, Baton Rouge, LA; Chairman: Dixie Business Center, a business incubator, Denham Springs, LA; Chairman: Dixie Electric Membership Corporation, an electric distribution cooperative, Baton Rouge, LA; Director: First Guaranty Bank, a commercial bank, Hammond, LA; Director: Louisiana Council of Farmer Coops, a trade association, Port Allen, LA; Director: Zachary Taylor Parkway Association, an economic development association, Baton Rouge, LA.
Kevin A. Still [5, 10, 11, 13] Second Vice Chair Age: 59 Year Service Began: 2002	2018	**Principal Occupation:** President and Chief Executive Officer: Co-Alliance, LLP, a partnership of five cooperatives supplying energy, agronomy and animal nutrition, and producing swine and marketing grain, Avon, IN; Chief Executive Officer and Treasurer: Midland Co-op, Inc., IMPACT Co-op, Inc., LaPorte County Farm Bureau Cooperative Association, Frontier Co-op, Inc., and Excel Co-op, Inc., agricultural retail cooperatives, Avon, IN; President: Michiana Agra, LLC, an agricultural retail cooperative, Constantine, MI; President: Northwind Pork, LLC, a pork producing operation, Kewanna, IN. **Other Business Affiliations:** Officer: Agronomy Services, LLP, an agricultural retail organization, Fairmont, IN; Vice President/Director: Connexities, LLC, a technology provider, Danville, IN; Chairman: Local Harvest Food, a food broker, Avon, IN; Owner/President: Still Farms, LLC, a grain farm, Galesburg, IL.

Board of Directors Disclosure as of December 31, 2016
CoBank, ACB

Name	Term Expires	Principal Occupation and Other Business Affiliations
Edgar A. Terry [5] Age: 57 Year Service Began: 2016	2019	**Principal Occupation:** Owner/President: Terry Farms, Inc., a vegetable and strawberry farming operation, Ventura, CA; Owner/Officer: Amigos Fuerza, Inc., a provider of farm labor contracting, Ventura, CA; Owner/Vice President: Rancho Adobe, Inc., farmland real estate, Ventura, CA; Owner/Partner: Central AP, LLP, farmland real estate, Ventura, CA; Owner/Partner: JJE, LLC, farmland real estate, Ventura, CA; Owner/Officer: Moonridge Management, Inc., a provider of back office and HR consulting, Ventura, CA; Owner/President: Willal, Inc., a sales and marketing company, Ventura, CA; Senior Adjunct Professor: California Lutheran University, an educational institution, Thousand Oaks, CA. **Other Business Affiliations:** Director: Farm Credit System Audit Committee, providing financial audit oversight, Jersey City, NJ; Chair: Center for Economic Research and Forecasting, an economic forecasting and fundraising advisory board, Thousand Oaks, CA; Vice Chair: Ventura County Fairgrounds Foundation, a nonprofit organization, Ventura, CA.
Scott H. Whittington [2] Age: 64 Year Service Began: 2013	2020	**Principal Occupation:** General Manager: Lyon-Coffey Electric Cooperative, Inc., an electric distribution cooperative, Burlington, KS. **Other Business Affiliations:** Director: The Farm Credit Council, a national trade association, Washington, D.C.; Director/Advisory Council: Central National Bank, a commercial bank, Burlington, KS; Director: First National Bank of Kansas, a commercial bank, Burlington, KS; Alternate Trustee: Kansas Electric Cooperatives, a statewide trade association for electric cooperatives, Topeka, KS; Director: Kansas Electric Power Cooperative, a generation and transmission cooperative, Topeka, KS; Director/Executive Council: Kansas Touchstone Energy Cooperative, an electric distribution cooperative alliance, Burlington, KS.

Board of Directors Disclosure as of December 31, 2016
CoBank, ACB

Compensation of Directors

For 2016, directors were compensated in cash at an annual rate of $57,391, paid in quarterly installments, which was the maximum amount permitted by the FCA for CoBank directors. Directors may elect to defer payment of all or part of their director compensation in accordance with agreements and applicable law. Compensation is for attendance at Board meetings, certain other meetings preapproved by the Board, and special duties as assigned. Directors' compensation is reduced by $2,500 for an unexcused absence at any regular Board meeting. FCA regulations also allow additional compensation to be paid to a director in exceptional circumstances where extraordinary time and effort are involved. In 2016, the Board approved additional compensation in excess of $57,391 to the Board chair and the Audit Committee chair, and to other directors in recognition of greater than normal involvement in connection with special assignments and attendance at special Board and committee meetings, including a stipend to the Succession and Compensation Committee chairs for CEO succession and compensation matters. Additional information for each director who served during 2016 is provided in the following table. Current CoBank policy regarding reimbursements for travel, subsistence and other related expenses states that for meetings designated by the Board and approved special assignments, Board members shall be reimbursed for reasonable travel and related expenses that are necessary and that support CoBank's business interests. As may be appropriate, CoBank may share in the reimbursement of expenses with other organizations. A copy of CoBank's policy is available to shareholders upon request to the Bank's Office of General Counsel. The aggregate amount of reimbursement for travel, subsistence and other related expenses for all directors as a group was $538,903, $667,174, and $619,417 for the years ended December 31, 2016, 2015, and 2014, respectively.

Board of Directors Disclosure as of December 31, 2016
CoBank, ACB

The following table presents the number of days served at Board meetings and other official CoBank activities, and compensation paid to each director for the year ended December 31, 2016.

Name of Director	Number of Days Served at Board Meetings	Number of Days Served in Other Official CoBank Activities	Total Compensation Paid During 2016
Robert M. Behr	18	9	$ 57,391
M. Dan Childs	18	26	57,391
Everett M. Dobrinski (1) (2)	18	62	74,608
William M. Farrow III	18	17	57,391
Benjamin J. Freund	18	22	57,891
Andrew J. Gilbert	18	56	57,391
John L. Guthrie (1)	18	12	57,891
Daniel T. Kelley (3)	18	39	72,891
James A. Kinsey	18	6	57,891
David J. Kragnes (1)	18	32	60,891
James R. Magnuson	18	33	57,391
Jon E. Marthedal (1)	18	23	62,891
Gary A. Miller	18	7	57,391
Catherine Moyer	17	22	58,891
Alarik Myrin	18	21	60,891
Ronald J. Rahjes	16	23	57,891
David L. Reinders (4)	18	24	69,891
Kevin G. Riel	18	39	58,891
Clint E. Roush	18	23	57,391
Barry M. Sabloff (5)	18	19	74,608
Stephanie Herseth Sandlin	16	5	57,391
Karen L. Schott	18	30	66,391
Kenneth W. Shaw	18	7	60,891
Richard W. Sitman	18	29	57,891
William A. Squires	12	13	57,391
Kevin A. Still	18	24	63,891
Edgar A. Terry	17	19	57,391
Scott H. Whittington (1)	18	36	58,391
Total	492	678	$ 1,707,382

(1) In 2016, these directors represented CoBank's interests by serving on the boards of various trade groups and other organizations important to the Bank. Days of service related to these activities and compensation received (if any) are not included in this report.

(2) Mr. Dobrinski received an additional 30% in compensation ($17,217), the statutory maximum, for service as the Chair of the Board.

(3) Mr. Kelley, the Chair of the Compensation Committee, received $6,000 in additional compensation for service related to compensation matters.

(4) Mr. Reinders, the Chair of the Succession Committee, received $3,000 in additional compensation for service related to succession matters.

(5) Mr. Sabloff received an additional 30% in compensation ($17,217), the statutory maximum, for service as the Chair of the Audit Committee.

Senior Officers

CoBank, ACB

Thomas E. Halverson,
Chief Executive Officer

Mr. Halverson, 52, was appointed chief executive officer effective January 1, 2017. Mr. Halverson is responsible for implementing the Bank's strategic and business direction as set by the Board of Directors. He serves as chairman on the Board of Directors of Farm Credit Leasing Services Corporation (FCL). Prior to his current position, Mr. Halverson was CoBank's chief banking officer. Before joining CoBank in July 2013, Mr. Halverson spent more than 15 years with Goldman Sachs, most recently as managing director and chief of staff for Goldman Sachs Bank USA. Prior to that he served in a variety of executive positions at the firm, including head of credit risk management for Goldman Sachs in Asia ex-Japan. Before joining Goldman Sachs, Mr. Halverson served as principal credit officer for country risk at the European Bank for Reconstruction and Development. Mr. Halverson serves on the Board of Directors of the Federal Farm Credit Banks Funding Corporation.

David P. Burlage,
Chief Financial Officer

Mr. Burlage, 53, was appointed chief financial officer effective November 16, 2009. Mr. Burlage is responsible for directing the Bank's financial affairs and developing its overall financial position. He oversees the treasury, financial planning and analysis, capital planning, accounting, tax and reporting functions of the Bank. Prior to his current position, Mr. Burlage served as senior vice president of the Finance Division. Mr. Burlage began his career as an auditor with Arthur Andersen & Co. Mr. Burlage has over 31 years of financial experience. He serves on the Board of Governors of the Farm Credit System Association Captive Insurance Company, the Board of Advisors of University of Colorado Denver Business School and as chairman of the Young Americans Center for Financial Education. He is a CPA and member of the American Institute of Certified Public Accountants.

Robert B. Engel,
Senior Advisor to the Chief Executive Officer

Mr. Engel, 63, served as chief executive officer from 2006 through December 31, 2016. On January 1, 2017, Mr. Engel was appointed senior advisor to the chief executive officer. Prior to joining CoBank in 2000 as president and chief operating officer, he was chief banking officer at HSBC Bank USA. During his 14-year tenure at HSBC, Mr. Engel served in a variety of management positions, including chief credit officer and chief banking officer. Mr. Engel has 31 years of banking experience, and eight years of accounting experience with KPMG and Deloitte & Touche. Mr. Engel serves as the Chairman of the Board of Trustees of Regis University as well as on the Board of Trustees of Niagara University.

F. William Davis,
Chief Credit Officer - Elect

Mr. Davis, 58, joined CoBank on February 6, 2017 and will become chief credit officer upon Mr. Key's retirement on March 31, 2017. Prior to joining CoBank, Mr. Davis was chief credit officer for Farm Credit Services of America (FCSAmerica) and Frontier Farm Credit, a CoBank affiliated Association that operates under a strategic alliance with FCSAmerica. Previously, Mr. Davis was FCSAmerica's senior vice president of credit and before that director of credit underwriting. Prior to joining FCSAmerica, he held senior credit positions with Farm Credit Services of Western Missouri and the Farm Credit Bank of St. Louis. He began his career as an assistant vice president and branch manager with the Federal Land Bank Association in Missouri.

Senior Officers (Continued)

CoBank, ACB

Amy H. Gales,
Executive Vice President Agribusiness Banking

Ms. Gales, 58, was appointed head of the Regional Agribusiness Banking Group effective January 1, 2011. She is responsible for delivering credit and other financial services to the Bank's middle market U.S. agricultural cooperative customers and lending relationships with Associations. Ms. Gales is also in charge of building CoBank's business relationships with Farm Credit System partners. She serves on the Board of Directors of FCL. Prior to her current position at CoBank, Ms. Gales was responsible for agribusiness lending in CoBank's central region. Before joining CoBank in 2007, Ms. Gales served in a variety of leadership positions at both Commerce Bank and Wells Fargo. Prior to that, she was chief executive officer of a grain and farm supply cooperative and executive director of an agricultural development center. She serves on the Board of Directors of Food Bank of the Rockies.

Daniel L. Key,
Chief Credit Officer

Mr. Key, 60, was appointed chief credit officer effective July 2, 2013. Mr. Key is responsible for all of CoBank's credit approval and administrative functions, which include loan approval, credit support and analysis, credit guidelines and training, loan compliance and monitoring, collateral audit and special assets. Mr. Key is retiring on March 31, 2017 after more than 35 years of professional service to the Farm Credit System, at which time he will be succeeded by Mr. Davis. Prior to his position as chief credit officer, Mr. Key was senior vice president for credit approval. Mr. Key joined CoBank in 1993, where he has served in both relationship management and credit roles in a wide variety of industries and lending environments.

Robert L. O'Toole,
Chief Human Resources Officer and CEO Chief of Staff

Mr. O'Toole, 54, was appointed chief of staff effective January 1, 2017 and has served as chief human resources officer since February 1, 2015. He is responsible for the Bank's talent acquisition and retention strategies, compensation and payroll, employee benefits, and learning, leadership and organizational development initiatives including human equity and engagement. He also provides support to the chief executive officer, primarily with program management and strategic initiatives across the executive team and the Bank. Mr. O'Toole has more than 30 years of experience in business and human resources. Prior to joining CoBank in 2001, he was with ING Group. Mr. O'Toole is certified as a Senior Professional in Human Resources (SPHR) by the Human Resource Certification Institute and a Senior Certified Professional by the Society for Human Resource Management (SHRM-SCP). Mr. O'Toole serves on the Board of Directors and is the Compensation Committee chair for the Denver Young Artists Orchestra.

Andrew D. Jacob,
Chief Regulatory, Legislative and Compliance Officer and Interim Chief Risk Officer

Mr. Jacob, 56, was appointed chief regulatory, legislative and compliance officer (CRLCO) effective February 1, 2015 and has served as interim chief risk officer since September 1, 2016. As CRLCO, he is responsible for regulatory matters, government relations, compliance and corporate communications, as well as the Bank's security program and public private partnership efforts. Mr. Jacob also serves as CoBank's Ethics, Compliance, and Standards of Conduct Officer and is responsible for directing the administration of the director and associate standards of conduct programs under the oversight of the Board of Directors. As interim chief risk officer, he is responsible for providing leadership and guidance on all key risk areas of the Bank, including credit risk, operational risk, market risk and reputational risk. Before joining CoBank in January 2011, Mr. Jacob spent nearly 25 years with the Farm Credit Administration, where he served in a variety of examination and policy leadership roles. He serves as Chairman of the National Cooperative Business Association CLUSA International. Mr. Jacob is a Chartered Financial Analyst.

M. Mashenka Lundberg,
Chief Legal Officer and General Counsel

Ms. Lundberg, 49, was appointed chief legal officer effective January 1, 2017 and has served as general counsel since February 18, 2014. She is responsible for all aspects of CoBank's legal function, including providing legal counsel to all areas of CoBank's business operations. Ms. Lundberg also oversees the Bank's board relations function and the Legal and Loan Processing Division. Prior to joining CoBank, Ms. Lundberg was a partner with the law firm of Bryan Cave from 2012 to 2014. Prior to that time, Ms. Lundberg was a partner with the law firm of Holme Roberts & Owen and served as the firm's General Counsel and also on the firm's Executive Committee. She has extensive experience in the field of corporate law and represented a wide range of corporate clients in a variety of transactions during her career in private practice.

Senior Officers (Continued)

CoBank, ACB

John Svisco,
Chief Business Services Officer

Mr. Svisco, 58, was appointed chief business services officer effective July 2, 2013. He has responsibility for the Bank's Digital Business Solutions, Administrative Services, Business Continuity and other functions. Mr. Svisco, who joined CoBank in 2002, managed loan and lease operations during his first seven years at the Bank as senior vice president of the operations division, and was most recently chief administrative officer. He has extensive experience in operations and finance in the financial services industry, including 20 years with HSBC Bank USA, where his last position was senior vice president of operations services. He serves on the Boards of Directors of AgVantis, Inc. and Mount Saint Vincent Home.

Robert F. West,
Executive Vice President Infrastructure Banking

Mr. West, 58, was appointed head of the Infrastructure Banking Group effective January 1, 2017. He is responsible for delivering credit and other financial services to the Bank's rural electric, water, communications and community facilities customers. Previously, Mr. West was the head of CoBank's Communications Banking Division. Before joining CoBank in 1996, Mr. West spent six years with Shawnut National Bank where he served as director/team leader for lending to the communications and media industries. Mr. West has more than 32 years of experience in commercial banking and lending covering a broad range of communications and media businesses.

Ann E. Trakimas,
Chief Operating Officer

Ms. Trakimas, 60, was appointed chief operating officer effective January 3, 2011. Ms. Trakimas oversees the Bank's Operations, Information Technology, Data Strategy, Process Excellence and the Business Analyst functions within the Enterprise Solutions and Services division. Before joining CoBank, Ms. Trakimas served as a director on the board of the Federal Farm Credit Banks Funding Corporation for six years. There she chaired the Audit Committee and was a member of the System Audit Committee. Prior to that, Ms. Trakimas worked for Goldman Sachs where she held numerous executive positions including heading the firm's Financial Institutions Credit Risk Management and Advisory team. Ms. Trakimas has more than 39 years of experience in the financial services industry. She serves on the Board of Directors of the Denver Metro Chamber of Commerce.

Mary E. McBride

Ms. McBride, 61, served as president through August 31, 2016 and then as strategic advisor through her departure on December 31, 2016.

Lori L. O'Flaherty

Ms. O'Flaherty, 57, served as chief risk officer through August 31, 2016 and then as strategic advisor through her departure on December 31, 2016.

Senior Officers Compensation Discussion and Analysis

CoBank, ACB

Overview

This section describes the compensation programs for CoBank's Chief Executive Officer (CEO) and other senior officers, as defined by FCA regulations (collectively, senior officers), as well as those programs for any highly compensated employees as defined by FCA regulations. This section also presents the compensation earned by our CEO, as well as aggregate compensation earned by our other senior officers and any highly compensated employees, for the years ended December 31, 2016, 2015, and 2014.

The Board of Directors, through its Compensation Committee (Committee), has adopted a total compensation philosophy for the Bank. Our total compensation philosophy is intended to align the interests of our senior officers with those of our shareholders and is more fully described below. We accomplish this by providing incentive compensation that rewards performance in relation to the business and financial plan established by our Board of Directors.

Our compensation programs contain a number of elements that are aligned with "best practices" for executive compensation, including:

- The majority of total compensation for senior officers is delivered through performance-based, variable incentive programs – for 2016 the CEO's target total direct compensation mix was 30 percent base salary and 70 percent performance-based, variable incentives;
- We have an incentive compensation recovery ("clawback") provision for all members of the Bank's Management Executive Committee, including the CEO;
- Award levels for the annual and long-term incentive plans are "capped";
- The individual maximum payout for the annual short-term incentive plan is 225 percent of target, and the maximum payout is 150 percent of target for the long-term incentive plans;
- The short-term and long-term incentive programs have a minimum return on active patron stock investment that must be achieved before any incentives can be earned;
- Through 2016, our CEO and one other senior officer were employed pursuant to employment agreements that contain terms, and where provided, severance benefits that are aligned with market practices and do not provide for excise tax gross-ups.
- The Committee commissions an annual assessment of compensation related risks; and
- The Committee engages an independent executive compensation consultant.

We believe these elements balance our risk profile with total compensation while aligning our compensation program with our shareholders' long-term interests and best practices in governance of executive compensation.

As described in the "Financial Condition and Results of Operations" section of Management's Discussion and Analysis on page 34 of this Annual Report, in 2016 CoBank reported record financial performance while fulfilling its mission in a safe and sound manner. As a result of our performance, our short-term incentive plan for 2016 was funded between the target and maximum award levels. In addition, based on strong performance in the 2014 through 2016 period, our long-term incentive plan was also funded between the target and maximum award levels. These and other elements of our senior officers' compensation are explained below.

Compensation Philosophy and Objectives

The Bank's total compensation philosophy is designed to maintain a compensation program that will:

- Attract, retain and reward employees with the skills required to accomplish the Bank's strategic business objectives;
- Provide accountability and incentives for achievement of those objectives;
- Link compensation to Bank performance and increased shareholder value;
- Properly balance the risk profile of the Bank with both short- and long-term incentives;
- Be designed within a consistent philosophy and framework;
- Create a culture of adherence to core values and strong ethical behavior;
- Be integrated with the Bank's business processes, including business planning, performance management and succession planning; and
- Enhance management of risk and accountability.

Senior Officers Compensation Discussion and Analysis
CoBank, ACB

The total compensation philosophy seeks to achieve the appropriate balance among market-based salaries, benefits and variable incentive compensation designed to incent and reward both the current and long-term achievement of our strategic business objectives, business and financial plans and mission fulfillment. It also seeks to incent prudent risk taking within Board-established parameters with the proper balance and accountabilities between short- and long-term business performances. For senior officers, CoBank strives to deliver a significant portion of total target compensation through performance-based pay, with the actual proportion of total compensation provided through both short- and long-term incentives varying with actual financial performance, the achievement of Board-approved strategic business objectives and each senior officer's individual performance. We believe this philosophy fosters a performance-oriented, results-based culture wherein compensation varies from one year to the next on the basis of actual results achieved. We also find that this variable performance-based compensation approach is properly aligned with an acceptable risk profile and shareholder returns.

Process for Compensation Decisions

The Board of Directors has established the Committee to oversee the design, implementation and administration of compensation and benefits programs for CoBank. The Committee meets regularly to execute the responsibilities of its charter. The Committee reviews the performance of the Bank's CEO semi-annually, and the Board of Directors approves the compensation level of the CEO, comprised of salary, benefits and supplemental compensation, including short- and long-term incentive compensation. The CEO is responsible for setting the compensation levels of the Bank's Management Executive Committee, who, in turn, are responsible for the compensation of all other employees. In addition, the Committee reviews the compensation of the members of the Management Executive Committee.

The Committee generally makes a final decision regarding the CEO's incentive compensation in its February meeting to fully take into consideration the prior year's Bank and individual performance. Decisions about salary and performance also occur at other meetings in the year, as considered appropriate. The Committee utilizes an independent advisor, to annually compare the CEO's compensation level to a select peer group of financial institutions. This evaluation helps ensure that such compensation is appropriate for the CEO's experience and competencies and is competitive with positions of similar scope and complexity at relevant financial institutions. The comparative peer group is composed of companies with significant corporate and commercial lending activities, and which have other similar characteristics such as asset size, net income or significant customer relationships.

For 2014, 2015 and 2016, the Committee engaged Pay Governance LLC (Consultant) directly to serve as its independent advisor. On an annual basis, the Committee assures the qualifications of the Consultant as an independent and objective advisor. In 2014, 2015 and 2016, Pay Governance did not provide any other services to CoBank that were not approved in advance by the Committee.

Components of CoBank Total Compensation Program

Given the cooperative ownership structure of CoBank, no equity or stock-based plans are used to compensate any employee, including senior officers. Senior officers' compensation primarily consists of four components – salary, short-term incentive plan, long-term incentive plan and retirement benefits – as described below. All employees participate in salary, the short-term incentive plan and retirement benefits, while senior officers and specified other senior leaders are also eligible to participate in the long-term incentive plan. All senior officers can elect to defer certain incentive payments through a nonqualified deferred compensation plan. In addition, senior officers are eligible for supplemental retirement benefits, as discussed beginning on page 157.

Overview of Senior Officers' Compensation		
Component	**CoBank Philosophy**	**Design Characteristics**
Salary	• Market-based compensation • Provides a foundation for other components • Competitive relative to positions of similar scope and complexity at a select peer group of financial institutions • Reflects individual performance, competencies and responsibilities	• Traditional salary structure with salary ranges for each position • Structure reviewed annually • Salaries based on market and individual performance

Overview of Senior Officers' Compensation (continued)		
Component	**CoBank Philosophy**	**Design Characteristics**
Short-Term Incentive Plan	• Links rewards to achievement of annual goals • Recognizes corporate and individual performance • Aligns the interests of shareholders and senior officers through bankwide financial and strategic business objectives • Balances short-term results with the risk profile of the Bank • Establishes competitive incentive opportunities relative to peers	• Multiple corporate financial and non-financial goals • Awards are capped • Minimum performance for each goal required • Minimum return on active patron stock investment of 11 percent must be achieved in plan year in order for any payout to be made • Individual and corporate performance weighted equally, and a minimum level of individual performance must be achieved • Clawback provision for the Bank's Management Executive Committee, including the CEO
Long-Term Incentive Plan	• Provides opportunities for compensation tied to CoBank's sustained performance • Reinforces accountability and balance for the annual outcomes embodied in the short-term incentive plan • Provides balance through emphasis on long-term results, relative to short-term orientation of annual short-term incentive plan • Encourages longer-term retention of plan participants • Promotes the creation of profitable growth in shareholder and customer value, and enhances the sustainability of CoBank to serve its customers while providing proper balance to the risk profile of the Bank • Aligns the interests of shareholders and senior officers through bankwide financial and strategic business objectives • Establishes competitive incentive opportunities relative to peers	• Multiple corporate financial and non-financial goals • Awards are capped • Three-year performance periods • New plan starts each year (plans overlap) • Minimum performance for each goal required • Minimum return on active patron stock investment of 11 percent must be achieved in each year of the plan for a full payout • No individual performance factor although a minimum level of individual performance must be achieved; corporate performance determines level of payout • Clawback provision for the Bank's Management Executive Committee, including the CEO
Retirement Benefits	• Provides for a source of income subsequent to retirement • Encourages longer-term retention of employees • Provides for competitive total compensation opportunities over the employee's career	• Benefits vary based on date of hire • Senior officers hired prior to January 1, 2007 participate in a defined benefit plan and supplemental retirement plan • Senior officers hired on or after January 1, 2007 do not participate in a defined benefit plan but receive additional, non-elective employer contributions to the 401(k) retirement savings plan • Other retirement benefits include a 401(k) retirement savings plan and access to health care benefits. Substantially all participants pay the full premiums associated with postretirement health care benefits • Clawback provision for the Bank's Management Executive Committee, including the CEO

Senior Officers Compensation Discussion and Analysis
CoBank, ACB

Salary

Overview

Salary Considerations
- o Individual performance, competencies and experience
- o Maintenance or expansion of responsibilities and scope of position
- o Peer group data and internal equity
- o Overall CoBank merit increase budget

Salaries represent a foundational component of CoBank's total compensation program as the value of other components is determined in relation to base salary. Senior officer salaries are market-based and established taking into consideration individual performance, the specific competencies and experience the senior officer brings to CoBank, the responsibilities and scope of the position, peer group data and internal equity. Salaries for senior officers are reviewed annually, and adjusted if necessary.

Short-Term Incentives

Overview

Short-Term Incentive Plan (STIP)
- o Corporate and individual performance weighted equally
- o Corporate financial performance measures are balanced: profitability, loan quality and operating efficiency
- o Board of Directors also provides subjective evaluation related to achievement of the Bank's strategic business objectives
- o All employees are eligible to participate
- o For 2016, CoBank performed at or above maximum award levels on one corporate performance goal and between the target and maximum award levels on the other four corporate performance goals

Annual short-term incentive payments are based on a combination of annual corporate and individual performance. The short-term incentive plan, which has the same design for all employees, including the CEO and other senior officers, aligns the interests of shareholders and employees through the establishment of a balanced scorecard of bankwide financial and strategic business objectives. Under the terms of the plan, a minimum return on active patron stock investment must be achieved for the plan year in order for a payout to be approved, ensuring that shareholders are rewarded first. The return minimum was 11 percent for the years ended December 31, 2016, 2015 and 2014.

The actual short-term incentive award is determined as follows:

Salary × Individual Annual Short-Term Incentive Target × Corporate Performance Factor × Individual Performance Factor

Based on corporate and individual performance factors, participants can earn from zero to 225 percent of their individual annual short-term incentive target. Payments are typically made during March, but always following the end of the year to which the award is applicable. Participants are not eligible to receive a short-term payout if they are no longer employed by CoBank at the time of the scheduled payout, unless otherwise provided for as a part of a normal retirement or in an employment agreement. The key elements of the actual payout are described below.

- *Individual Annual Short-Term Incentive Target* — Annual short-term incentive targets are set for all employees at the beginning of the year. For the 2016 performance period, the target short-term incentive level for the CEO was 75 percent of salary. For the other senior officers, the targets ranged from 40 to 70 percent.

- *Corporate Performance Factor* — Corporate performance is determined at the end of the year based on annual actual business results relative to a balanced scorecard of bankwide financial and strategic business objectives, as established at the beginning of each year by the Board of Directors, and is the same for all employees, including the CEO and other senior officers. The Board of Directors retains the right to make adjustments to the corporate performance factor, where appropriate, in addition to providing a subjective performance result for the achievement of strategic business objectives.

  CoBank utilizes a balanced scorecard for measuring short-term corporate performance to emphasize overall success in executing our strategy and managing risks. The short-term corporate scorecard establishes certain key performance indicators, of which 80 percent focus on the achievement of specified financial measures related to profitability, loan quality and operating efficiency, and 20 percent focus on the achievement of the strategic business objectives that are established at the beginning of each year by the Board of Directors. The final performance result, or corporate performance factor, is determined by comparing the actual performance of each measure to the targets established at the beginning of the year. Each scorecard performance measure is weighted separately, and the factor is set such that if performance of each measure meets the established target, the result is a performance factor of 100 percent. Beginning with the 2015 plan, performance within a range of 97 to 103 percent of target for the financial measures is also recognized at a performance factor of 100 percent. The corporate performance factor can vary from zero to 150 percent, depending on performance against the targets. The Committee approves the overall corporate performance factor and funding of the STIP for actual performance relative to target. The 2016 Short-Term Corporate Scorecard is as follows:

2016 Short-Term Corporate Scorecard

Performance Measure	Weight
Net Income	25 %
Return on Common Equity	20 %
Strategic Business Objectives	20 %
Loan Quality (Adverse Loans to Risk Funds)	20 %
Operating Expense Ratio	15 %

- *Individual Performance Factor* — At the beginning of each year, all CoBank employees, including the CEO and other senior officers, establish individual goals they seek to achieve that year in support of the business. These individual goals are anchored to the Bank's business and financial plan, as well as the Bank's strategic business objectives and also include key behavioral competencies appropriate for that employee. The CEO is responsible for administering the short-term incentive plan and approves the individual performance factors of the other senior officers. The Board of Directors approves the goals and individual performance factor of the CEO. The assessment of an individual's actual performance with respect to his or her annual goals is reflected as an individual performance factor and ranges from zero to 150 percent.

The actual short-term incentive awards for 2016, 2015 and 2014 for the CEO, other senior officers and any highly compensated employees are presented in the Summary Compensation Table on page 160.

Long-Term Incentives

Overview

Long-Term Incentive Plan (LTIP)

- Awards based upon corporate performance for overlapping three-year periods
- Corporate financial performance measures are balanced: profitability, loan quality and capital adequacy
- Board of Directors also provides subjective evaluation related to the achievement of corporate strategic business objectives
- For the 2014 through 2016 performance period, CoBank performed at or above maximum award levels on two corporate performance goals, between the target and maximum award levels on two corporate performance goal, and between the threshold and the target on one corporate performance goal.

CoBank utilizes a long-term incentive compensation plan that provides senior officers and specified other senior leaders with the opportunity for compensation tied to CoBank's sustained success. The long-term incentive plan provides the accountability and balance for the annual outcomes embodied in the short-term plan. Participants in the long-term plan directly influence the longer-term outcomes of actions and risks taken during each performance period, which provides the proper balance between short-term results and long-term value creation. Eligibility for participation is limited to those individuals who clearly have the ability to drive the success of strategies critical to long-term value creation for shareholders. The purpose of this plan is to encourage longer-term retention of plan participants, to promote the creation of profitable growth in shareholder and customer value, and to enhance the sustainability of CoBank to serve its customers while providing proper balance to the risk profile of the Bank. The long-term incentive plan aligns the interests of shareholders and senior officers through the establishment of bankwide financial and strategic business objectives, and reinforces a long-term focus on financial performance, strategic positioning and risk management.

Long-term incentive plan payouts are based on corporate performance in the achievement of key financial metrics and strategic business objectives over a three-year performance period, as defined by CoBank's long-term corporate scorecard. These three-year performance metrics and objectives are established at the beginning of each three-year performance period by the Board of Directors in connection with the annual business and financial plan. A minimum return on active patron stock investment must be achieved in each year of the three-year performance period for a full payout to be approved, ensuring that shareholders are rewarded first. The return minimum is 11 percent for each of the three-year performance periods.

The actual long-term incentive award is determined as follows:

Salary × Individual Long-Term Incentive Target × Corporate Performance Factor

Based on the corporate performance factor, participants can earn from zero to 150 percent of their individual long-term incentive target. Payments are typically made during March of each year following the end of the three-year performance period to which the award is applicable. Participants are eligible to receive a prorated award at the time of the scheduled payout if they are no longer employed at CoBank at the time of payment and their termination meets plan eligibility requirements for reasons related to retirement, death or disability, or if otherwise provided for in an employment agreement. Participants are not eligible to receive any payment at the time of the scheduled payout if they are no longer employed by CoBank and do not otherwise meet the eligibility requirements for payment. The key elements of the actual payout are described below.

- *Individual Long-Term Incentive Target* — For the 2014 through 2016 performance period, the long-term incentive target for the CEO was 160 percent of salary. For the remaining senior officers, the targets ranged from 30 to 90 percent.

- *Corporate Performance Factor* — Corporate performance is determined at the end of a designated three-year period based on actual business results relative to a balanced scorecard of bankwide financial measures established at the beginning of the three-year performance period, and strategic business objectives, as established at the beginning of each year of the three-year performance period by the Board of Directors. The Board of Directors retains the right to make adjustments to the corporate performance factor, where appropriate, in addition to providing a subjective performance result for the achievement of strategic business objectives.

CoBank utilizes a balanced scorecard for measuring long-term corporate performance to emphasize overall success in executing our strategy and managing risks. The long-term corporate scorecard establishes certain key performance indicators, of which 80 percent focus on the achievement of specified financial measures established at the beginning of the three-year performance period related to profitability, loan quality and capital adequacy, and 20 percent focus on the achievement of the strategic business objectives that are established at the beginning of each year of the three-year performance period by the Board of Directors. The final performance result, or corporate performance factor, is determined by comparing the actual performance of each measure to the financial targets established at the beginning of each three-year performance period and an average of strategic business objective results during each year in the three-year performance period. Each scorecard performance measure is weighted separately, and for the 2014-2016 performance period, the factor is set such that if performance of each measure exactly meets the established target, the result is a performance factor of 100 percent. Beginning with the 2015-2017 plan, performance within a range of 97 to 103 percent of target for the financial measures is also recognized at a performance factor of 100 percent. The corporate performance factor can vary from zero to a maximum of 150 percent depending on performance against the targets. The Committee approves the corporate performance factor based on actual performance in comparison to target. The Long-Term Corporate Scorecards for the three-year performance periods 2014 through 2016, 2015 through 2017 and 2016 through 2018 are as follows:

Long-Term Corporate Scorecards:
2014 – 2016, 2015 – 2017 and 2016 – 2018 Periods

Performance Measure	Weight
Net Income	20 %
Permanent Capital Ratio	20 %
Return on Common Equity	20 %
Strategic Business Objectives	20 %
Loan Quality (Adverse Loans to Risk Funds)	20 %

The actual long-term incentive awards for 2016, 2015 and 2014 for the CEO and other senior officers are presented in the Summary Compensation Table on page 160.

Terms of Senior Officers' Employment Agreements

Through 2016, the CEO and one other senior officer, whose employment ended on December 31, 2016, were employed pursuant to employment agreements, which provide specified compensation and related benefits to these senior officers in the event of employment termination, except for termination for cause. In 2016, the employment agreement for the senior officer other than the CEO was amended and restated to include a specified term, which ended on December 31, 2016. The agreement provided for (a) payment of the officer's prorated salary and incentives through the date of the termination, (b) semi-monthly payments two times the officer's base compensation and short-term incentives at target, (c) enhanced retirement benefits if the termination resulted from a change in control, (d) continued participation in the Bank's health and welfare benefits over a two-year period, and (e) certain other benefits over a two-year period to the same extent as such benefits were being provided on the date of termination. The employment agreement also provided certain limited payments upon death or disability of the officer. The agreement also required non-competition and non-solicitation by the officer over the term of the payments, and the payments are considered taxable income, without any consideration or provision for "gross-up" for tax purposes. The Bank will pay the amounts over the period provided for in the agreement with the senior officer, other than, (c) enhanced retirement benefits from a change in control. All future amounts due have been accrued and included in compensation expense in 2016. The senior officer has executed the required non-competition and non-solicitation agreement, as well as provided for a release of any claims, actions or lawsuits against the Bank that relate to the officer's employment with the Bank.

The CEO employment agreement provides for employment during a fixed term, through June 30, 2017. Additionally, the agreement for the CEO provides for (a) a reduction in the amount and term of severance payments and benefits at the end of each completed service year during the term of the agreement, resulting in no eligibility for severance during the last year of the agreement, (b) an indexed increase in the annual retirement benefit cap, reaching a maximum of $900,000 in the last year of the agreement, for each completed service year over the term of the agreement to retain the present value of the total lump sum calculation at each year end, and (c) eligibility for incentive payments totaling $2,000,000 paid in installments over the term of the agreement based on the achievement of certain additional performance and retention objectives as established and measured by the Board of Directors. The agreement for the CEO allowed for a flexible and effective CEO retention and succession process, including providing for the CEO to serve as CEO through December 31, 2016, and as a Senior Advisor through the remainder of the term of the agreement. Additionally, a consulting agreement has been established between the CEO and the Bank to include provisions that will allow the CEO to provide services to the Bank in an advisory status, as requested by the Bank beginning on July 1, 2017. The consulting agreement will expire on June 30, 2018.

To receive payments and other benefits under the employment agreement, the CEO must sign a release agreeing to give up any claims, actions or lawsuits against the Bank that relate to his employment with the Bank.

Retirement Benefits

Overview

We have employer-funded qualified defined benefit pension plans, which are noncontributory and cover employees hired prior to January 1, 2007. Depending on the date of hire, benefits are determined either by a formula based on years of service and final average pay, or by the accumulation of a cash balance with interest credits and contribution credits based on years of service and eligible compensation. We also have noncontributory, unfunded, nonqualified supplemental executive retirement plans (SERPs) covering all but three senior officers employed through December 31, 2016, as well as specified other senior managers. In addition, as more fully discussed below, we have a noncontributory, unfunded nonqualified executive retirement plan (ERP) designed to provide enhanced retirement benefits to the CEO and one other senior officer employed pursuant to employment agreements in 2016. All employees are also eligible to participate in a 401(k) retirement savings plan, which includes employer matching contributions. Employees hired on or after January 1, 2007, receive additional, non-elective employer contributions to the 401(k) retirement savings plan. All retirement-eligible employees, including senior officers, are also currently eligible for other postretirement benefits, which primarily include access to health care benefits. Substantially all participants pay the full premiums associated with the postretirement health care benefits.

Defined Benefit Pension Plans

Senior officers hired prior to January 1, 2007 are participants in the defined benefit pension plans. Pursuant to these plans, the benefits, including those of the CEO, are determined based on years of service and final average pay. Eligible compensation for senior officers, as defined under the final average pay formula, is the highest 60 consecutive-month average, which includes salary and incentive compensation measured over a period of one year or less, and excludes long-term incentive awards, expense reimbursements, taxable fringe benefits, relocation allowance, short- and long-term disability payments, nonqualified deferred compensation distributions, lump sum vacation payouts and all severance payments. Retirement benefits for senior officers are calculated assuming payment in the form of a single life annuity with five years certain and retirement at age 65. However, the actual form and timing of retirement benefit payments are based on participant elections. The plans require five years of service to become vested. All senior officers participating in the defined benefit pension plans have been employed for more than five years and, as such, are fully vested in the plans. The benefit formula is the sum of 1.5 percent of eligible compensation up to Social Security covered compensation plus 1.75 percent of eligible compensation in excess of Social Security covered compensation, multiplied by the years of eligible benefit service. Social Security covered compensation is the 35 year average of the Social Security taxable wage bases up to the participant’s Social Security retirement age.

Federal laws limit the amount of compensation we may consider when determining benefits payable under the qualified defined benefit pension plans. We maintain SERPs that pay the excess pension benefits that would have been payable under our qualified defined benefit pension plans.

Executive Retirement Plan

As noted previously, an ERP has been adopted for the CEO and for one other senior officer, whose employment ended on December 31, 2016, subject to their respective employment agreements. The CEO’s agreement provides for a retirement benefit of 55.0 percent of eligible compensation as of December 31, 2016, with no reduction for early retirement, but subject to a maximum benefit amount. The ERP is limited such that benefits provided under that plan are payable only if retirement benefits payable per year from the defined benefit and SERP retirement plans are less than the indexed retirement benefit cap, expressed as a single life annuity with five years certain. The ERP is integrated with the existing final average pay defined benefit retirement plan and the existing SERP. It provides the required additional retirement benefits to the extent such benefits are not covered by the other two plans, but only up to the maximum total retirement benefits noted above. If benefits from the defined benefit retirement plan and the SERP exceed this maximum, no benefits are payable from the ERP. In the event of the death of the CEO during the term of his employment with the Bank, the plan provides a death benefit to a surviving spouse. The benefits provided to the other senior officer under the ERP are the same as those provided to the CEO, but at reduced levels.

Nonqualified Deferred Compensation Plan

We have a nonqualified deferred compensation plan that allows senior officers and other eligible senior managers to defer all or a portion of their incentive compensation. Additionally, the Bank makes contributions to this plan on behalf of participants whose benefits under the 401(k) retirement savings plan are limited due to federal tax laws. Contributions are made at the same percentages as available under the 401(k) retirement savings plan. The compensation that is deferred is invested in any number of investment options selected by the participants. These investment options are either identical or substantially similar to those available to all participants in the Bank's 401(k) retirement savings plan. The participant is subject to all risks and returns of amounts invested. The election to defer is irrevocable and the deferred amounts cannot be paid except in accordance with specified elections as permitted by law. At that time, the participant will receive payment of the amounts credited to his or her account under the plan in a manner that has been specified by the participant. If a participant dies before the entire amount has been distributed, the undistributed portion will be paid to the participant's beneficiary.

Compensation Risk Management

The Committee considers potential risks when reviewing and approving compensation programs. The Board of Directors approves the total compensation philosophy and programs to ensure there is a proper balance and alignment between the overall acceptable risk profile of the Bank and the manner in which prudent risk taking is reflected in the design of the underlying program. We have designed our compensation programs, including our incentive compensation plans, with specific features to address potential risks while rewarding employees for achieving short-term and long-term financial and strategic objectives through prudent business judgment and appropriate risk taking. The objective is to motivate employees to take prudent risk within Board-approved parameters while ensuring employees are also accountable for the long-term outcomes of their actions. The following elements have been incorporated in our compensation programs available for our senior officers:

- *A Balanced Mix of Compensation Components* – The target compensation mix for our senior officers is composed of salary, short-term incentive, long-term incentive and retirement benefits, representing a mix that is weighted toward long-term performance and service with CoBank.

- *No Production Based Incentive Plans* – The STIP and LTIP are the only incentive plans within CoBank and are funded based upon the Bank's financial and business results. There are no additional "production" or "sales" based incentives tied to number of customers, number of loans, number of products, loan volume or any other metric that solely measures top-line results.

- *Multiple Performance Factors* – Our incentive compensation plans include balanced scorecards of organization-wide financial performance and integration with individual performance assessments through our performance management system.
  - Incentive plans include a Board-determined subjective evaluation of our achievement of strategic business objectives
  - The short-term incentive is dependent on multiple performance metrics, including a subjective measure of performance against strategic business objectives and an assessment of individual performance
  - The long-term incentives are cash-based, with three-year performance metrics to complement our annual short-term incentives
  - Board of Directors retains the right to adjust performance factors
  - Targets and ranges of performance for each metric are approved by the Board of Directors prior to the beginning of the performance period

- *Multiple Year Performance Measurement* – Our long-term incentives include a three-year performance measurement period that requires sustained corporate performance complemented by a required minimum level of shareholder return in order for the plan to be fully funded.

- *Caps on Incentive Payments* – Our incentive compensation plan payments are subject to caps that limit the maximum award that may be paid.

- *Threshold Performance Requirements for Each Metric* – Our incentive compensation plan payments are contingent upon achieving minimum performance levels for each financial performance goal.

- *Threshold Individual Performance Requirements* – Our incentive compensation plans require a minimum individual performance level before a payment may be made for any given performance year.

- *Compensation Committee Discretion* – The Committee subjectively evaluates the Bank's achievement of strategic business objectives and approves all incentive plan funding following a review of the Bank's performance against plan performance criteria established and approved prior to the beginning of each year of an incentive plan performance period.

- S*hareholder Return* – A minimum return on active patron stock investment must be achieved for incentive compensation payments to be approved.

Effective January 1, 2013, the Board of Directors approved an incentive compensation recovery ("clawback") policy to encourage the highest ethical standards, to further ensure incentive plans do not encourage excessive risk-taking and to ensure the alignment of compensation with accurate financial data. The policy provides that in the event of a restatement of the financial statements, the Bank may seek recovery from members of the Bank's Management Executive Committee of incentive compensation and nonqualified retirement benefits that would not otherwise have been paid if the correct financial information had been used to determine the amount payable. The Board of Directors may only seek recovery or reduction of compensation under this policy within the three-year period following the date the Bank filed the incorrect report.

Additionally, the Compensation Committee annually considers an assessment of compensation-related risks for all of our employees. The assessment includes a review of multiple facets of our compensation program including governance practices, program documentation, incentive plan design, processes, employment practices, benefits program, and cultural considerations. Reviews of various aspects of our programs are also conducted by independent auditors, whose reports are provided to our Board of Directors. Based on this assessment, the Compensation Committee concluded that our compensation plans do not create risks that are reasonably likely to have a material adverse effect on CoBank. In making this conclusion, the Compensation Committee reviewed the key design elements of our compensation programs in relation to industry "best practices" as presented by the Consultant, as well as the design features and administrative processes that mitigate any potential risks, such as through our internal controls and oversight by management and the Board of Directors.

At the request of the Board of Directors, the CEO elected to receive retirement benefits payable from the SERP and ERP in the form of an annuity, as opposed to a lump sum. The Committee believes this arrangement enhances the focus on overall risk management and the long-term success of the Bank.

Summary Compensation Table

The following table summarizes compensation earned by our CEO and aggregate compensation of other senior officers for the years ended December 31, 2016, 2015 and 2014. Our current Board policy regarding reimbursements for travel, subsistence and other related expenses states that all employees, including senior officers, shall be reimbursed for actual reasonable travel and related expenses that are necessary and that support our business interests. A copy of our policy is available to shareholders of CoBank and of our affiliated Farm Credit Associations upon request.

Summary Compensation Table[1] ($ in Thousands)

Name of Individual or Number in Group[2]	Year	Salary	Annual: Short-Term Incentive Compensation[3]	Annual: Long-Term Incentive Compensation[3]	Change in Pension Value	Deferred/ Perquisites[4]	Other[5]	Total
CEO:								
Robert B. Engel	2016	**$ 925**	**$ 1,405**	**$ 1,901**	**$ 604**	**$ 215**	**$ 500**	**$ 5,550**
Robert B. Engel	2015	895	1,299	1,901	695	169	333	5,292
Robert B. Engel	2014	880	1,386	2,182	109	180	333	5,070
Aggregate Number of Senior Officers (excluding the CEO):								
10	2016	**$ 3,879**	**$ 4,297**	**$ 3,077**	**$ 4,589**	**$ 794**	**$ 4,460**	**$ 21,096**
10	2015	3,681	4,019	2,806	1,874	682	50	13,112
9	2014	3,494	3,975	3,167	2,030	592	250	13,508

(1) Disclosure of the total compensation paid during 2016 to any designated senior officer is available to shareholders of CoBank and of our affiliated Farm Credit Associations upon request. Compensation amounts do not include earnings or losses on nonqualified deferred compensation, as such earnings or losses are not considered above-market or preferential.

(2) The senior officers are those officers defined by FCA regulation §619.9310.

(3) Incentive compensation amounts represent amounts earned in the reported fiscal year, which are paid in March of the subsequent year to persons who continue to be employed by CoBank or unless otherwise provided for as part of normal retirement or in an employment agreement. The short-term incentive compensation amounts are calculated based on relevant performance factors for the reported fiscal year, while the long-term incentive compensation amounts are calculated based on the relevant performance factors for the three-year performance period ended in the reported fiscal year.

(4) Represents company contributions to a qualified retirement savings plan and nonqualified deferred compensation plan, as well as payment of tax return preparation and financial planning expenses, relocation, certain travel-related costs, wellness benefits, life insurance benefits, long-term disability benefits, and associated income tax impact.

(5) For 2016, $500 represents amount paid to the CEO for retention pursuant to a contractual agreement between the CEO and CoBank. Also for 2016, $4,460 includes $2,811 for amounts payable to a senior officer (who left the Bank in 2016) for separation pay, incentive compensation and certain other benefits pursuant to the terms of an employment agreement, which included a release and provisions for non-solicitation and non-competition, as more fully described on page 156; $1,549 for amounts payable to a senior officer (who left the Bank in 2016) for separation pay, incentive compensation and certain other benefits pursuant to a separation agreement which included a release and provisions for non-solicitation and non-competition; $25 for the balance due on a sign-on payment to a senior officer who joined the Bank in 2014; and $75 for a Board-approved project bonus to a senior officer. For 2015 and 2014, $333 represents amounts paid to the CEO for achievement of certain additional performance objectives as established and measured by the Board of Directors. Also for 2015, $50 represents a sign-on payment to a senior officer who joined the Bank in 2014. Also for 2014, $250 includes $175 for sign-on payments to two senior officers who joined the Bank in 2013 and 2014, and $75 for a Board-approved project bonus to a senior officer.

Pension Benefits

The following table presents certain pension benefit information by plan for the CEO and the senior officer group as of December 31, 2016.

Pension Benefits Table ($ in Thousands)

Name of Individual or Number in Group[1]	Plan Name	Number of Years of Credited Service[2]	Actuarial Present Value of Accumulated Benefits	Payments During Last Fiscal Year
CEO:				
Robert B. Engel	CoBank, ACB Retirement Plan	16.58	$ 790	$ -
	Supplemental Executive Retirement Plan	16.58	6,452	-
	Executive Retirement Plan	16.58	3,427	-
Total			$ 10,669	$ -
Aggregate Number of Senior Officers (excluding the CEO):				
6	CoBank, ACB Retirement Plan	18.54	$ 6,117	$ -
	Supplemental Executive Retirement Plan	18.54	9,426	-
	Executive Retirement Plan	23.67	640	-
Total			$ 16,183	$ -

(1) The senior officers included in the pension benefits disclosure are those defined by FCA regulations §619.9310 and §620.6.

(2) For the Retirement Plan and the Supplemental Executive Retirement Plan, represents an average for the aggregate senior officer group.

Report on Compensation
CoBank, ACB

Members of the Compensation Committee of the Board of Directors are appointed by the Board chair in consultation with the Board officers and committee chairs. All members of the Compensation Committee qualify as independent directors as defined by Board policy.

The Compensation Committee (Committee) approves the overall compensation philosophy at the Bank utilizing an independent, Committee-appointed, executive compensation consultant, which includes establishing the compensation philosophy which guides program design including pay mix comprised of base pay, short- and long-term incentive compensation plans and employee benefits. In so doing, the Committee has developed and implemented compensation policies and programs that support the Bank's core values and links compensation to overall Bank and individual performance, ensuring a proper balance with the risk profile of the Bank, thereby contributing to the value of the shareholders' investment in the Bank.

The Committee is responsible for establishing the performance standards for the Chief Executive Officer and the compensation structure for other Bank employees. The Committee reviews the Board's performance evaluation of the Chief Executive Officer, approves an overall performance rating, and recommends for full Board approval all aspects of compensation (base salary, performance-based compensation including all incentives, benefits, and perquisites) for the Chief Executive Officer, consistent with the business and financial objectives of the Bank, the results achieved by the executive, Board directed performance objectives, and competitive compensation practices. The Committee carefully evaluates incentive-based compensation programs and payments thereunder to ensure they are reasonable and appropriate to the services performed by senior officers. The Committee monitors the terms and provisions of the incentive-based compensation programs for senior officers and assesses the balance of financial rewards to senior officers against the risks to the institution. The Committee carefully evaluates whether senior officer compensation, incentive, and benefit programs are designed to support the Bank's long-term business strategy and mission as well as promote safe and sound business practices. The Committee reviews the institution's projected long-term obligations for compensation and retirement benefits. The Committee operates under a written charter, adopted by the Committee and the Board of Directors, which more fully describes the Committee's responsibilities.

The Committee has reviewed and discussed the Senior Officers Compensation Discussion and Analysis with management. Based on this review and discussion, the Committee recommended to the Board of Directors, and the Board approved, that the Senior Officers Compensation Discussion and Analysis be included in the Annual Report for the year ended December 31, 2016.

Members of the 2017 Compensation Committee:

Daniel T. Kelley, Chair
Catherine Moyer
David L. Reinders
Kevin G. Riel
Scott H. Whittington

March 7, 2017

Code of Ethics
CoBank, ACB

CoBank sets high standards for honesty, ethics, integrity, impartiality and conduct. Each year, every associate certifies compliance with the letter, intent and spirit of our Associate Responsibilities and Conduct Policy, which establishes the ethical standards of our organization, and each senior officer is required to disclose additional information. Additionally, our chief executive officer, chief operating officer, chief risk officer, chief credit officer, general counsel, chief financial officer and other senior financial professionals certify compliance with the letter, intent and spirit of our Code of Ethics. Our Code of Ethics supplements our Associate Responsibilities and Conduct Policy and establishes additional responsibilities specifically related to the preparation and distribution of our financial statements and related disclosures. Details about our Code of Ethics are available at www.cobank.com. At your request, we will provide you with a copy of our Code of Ethics, free of charge. Please contact:

Corporate Communications Division
P. O. Box 5110
Denver, CO 80217
(303) 740-4061

The Bank also maintains a whistleblower hotline and a special website through which complaints about business ethics or standards of conduct, financial reporting irregularities, internal controls or violations of law can be reported anonymously by directors, officers, employees, customer-owners and external parties. The whistleblower hotline can be reached by calling 1-888-525-5391 and the online reporting site is found at www.reportlineweb.com/cobank.

Young, Beginning, and Small Farmers

CoBank, ACB

Under the Farm Credit Act, CoBank does not have authority to lend directly to young, beginning, and small farmers. Rather, we recognize that Associations serve young, beginning, and small farmers, which we support through wholesale funding, partnering on Association programs as they deem appropriate, and completing reporting required by regulations. We believe the future of agriculture and rural America is well served when loan programs are developed by Associations to aid ambitious and capable young, beginning, and small farmers. Therefore, we have adopted a written policy that encourages the board of directors at each of our affiliated Associations to establish a program to provide sound and constructive credit and other services to young, beginning, and small farmers and ranchers and producers or harvesters of aquatic products (YBS farmers and ranchers). Each affiliated Association provides us annually with a report measuring achievement with respect to these programs for YBS farmers and ranchers. A summary of the combined reports for our affiliated Associations and certain participations CoBank purchased from Associations follows.

YBS Farmers and Ranchers ($ in Thousands)

	Loan Numbers		Loan Volume	
	Number	Percent of Portfolio	Dollars	Percent of Portfolio
Loans and Commitments Outstanding at December 31, 2016:				
Young	22,357	15.83 %	$ 6,276,103	8.57 %
Beginning	30,431	21.54	8,568,715	11.70
Small	50,556	35.79	6,581,297	8.89
Gross New Loans and Commitments Made During 2016:				
Young	6,676	16.31 %	$ 1,854,712	8.72 %
Beginning	7,982	19.50	2,313,842	10.87
Small	13,306	32.51	1,377,441	6.47

Small Farmers and Ranchers

Number / Volume of Loans Outstanding by Loan Size at December 31, 2016

Number / Volume	$0 – $50,000	$50,001 – $100,000	$100,001 – $250,000	$250,001 and greater
Total Number of Loans to Small Farmers and Ranchers	21,711	10,266	12,064	6,515
Total Loan Volume to Small Farmers and Ranchers ($ in Thousands)	$ 415,578	$ 772,592	$ 1,939,400	$ 3,453,727

Key definitions are as follows:

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

Beginning 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.

The Young, Beginning, and Small farmer and rancher categories are not mutually exclusive, therefore, certain farmers and ranchers may be classified in more than one category in the tables above.

Beyond providing appropriate wholesale lending for Association YBS farmers and ranchers programs and submitting reports to our regulator, CoBank has partnered with Associations on successful financing programs designed to attract quality farm operations, meeting the intended purpose of providing vital capital to start-up farming operations and promoting the flow of capital into rural areas. CoBank also has its own programs to serve the credit needs of agribusiness cooperatives and rural infrastructure providers of all sizes as well as rural communities using our mission-related investments authorities. CoBank has also reached out to non-traditional forms of agricultural production, such as local foods, community supported agriculture, and urban agriculture, to better understand their financing needs and provide support within the legal constraints of CoBank lending authorities.

Unincorporated Business Entities

CoBank, ACB

CoBank holds investments in various unincorporated business entities (UBEs), as defined by FCA regulation. We hold these investments for two primary purposes: to acquire and manage unusual or complex collateral associated with loan workouts and to make mission-related investments.

Our UBEs are displayed in the table below.

Unincorporated Business Entities

Name	Entity Type	Level of Ownership	Scope of Activities
CoBank - Farm Credit Holdings, LLC	Limited Liability Company	100 %	Holds acquired property
Farm Credit FCB Holdings, LLC	Limited Liability Company	100	Holds acquired property
FarmStart, LLP	Limited Liability Partnership	45	Provides needed funding to operations with farm resources, farm-related expertise and good business plans, but limited access to capital in the Northeast.
Midwest Growth Partners, LLLP	Limited Liability Limited Partnership	49	Invests in entities with operations located in rural areas in the upper Midwest that are seeking to either launch a new business, grow an existing business or recapitalize an existing business.
Ponderosa Holdings, LLC	Limited Liability Company	12	Holds acquired property
Growing Rural America Investments, LLLP	Limited Liability Limited Partnership	100	Holds allowable FCS investments. Currently holds the Bank's investment in FarmStart, LLP.

CERTIFICATION

I, Thomas E. Halverson, Chief Executive Officer of CoBank, ACB (CoBank or the Bank), a federally chartered instrumentality under the Farm Credit Act of 1971, as amended, certify that:

(1) I have reviewed this annual report of CoBank;

(2) Based on my knowledge, this 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 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 CoBank as of, and for, the periods presented in this report;

(4) CoBank's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures and internal control over financial reporting for CoBank 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, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this 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 report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d. disclosed in this report any change in the Bank's internal control over financial reporting that occurred during the Bank's most recent fiscal quarter (the Bank's fourth fiscal quarter in the case of this annual report) that has materially affected, or is reasonably likely to materially affect, the Bank's internal control over financial reporting; and

(5) CoBank'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 audit committee of the Bank's Board of Directors (or persons performing the equivalent functions):

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.

Tom Halverson

Thomas E. Halverson
Chief Executive Officer

Dated: March 7, 2017

CERTIFICATION

I, David P. Burlage, Chief Financial Officer of CoBank, ACB (CoBank or the Bank), a federally chartered instrumentality under the Farm Credit Act of 1971, as amended, certify that:

(1) I have reviewed this annual report of CoBank;

(2) Based on my knowledge, this 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 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 CoBank as of, and for, the periods presented in this report;

(4) CoBank's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures and internal control over financial reporting for CoBank 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, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this 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 report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d. disclosed in this report any change in the Bank's internal control over financial reporting that occurred during the Bank's most recent fiscal quarter (the Bank's fourth fiscal quarter in the case of this annual report) that has materially affected, or is reasonably likely to materially affect, the Bank's internal control over financial reporting; and

(5) CoBank'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 audit committee of the Bank's Board of Directors (or persons performing the equivalent functions):

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.

David P. Burlage
Chief Financial Officer

Dated: March 7, 2017

Senior Management
CoBank, ACB

Thomas E. Halverson, Chief Executive Officer

Robert B. Engel, Senior Advisor to the CEO

Agribusiness
Amy H. Gales, Regional Agribusiness Banking Group [1]
Leili Ghazi, Regional Agribusiness Banking Group – West
Michael W. Hechtner, Regional Agribusiness Banking Group – Central
Lynn M. Scherler, Strategic Relationships Division
G. David Sparks, Regional Agribusiness Banking Group – East
Jonathan B. Logan, Corporate Agribusiness Banking Group
Karen S. Lowe, Agricultural Export Finance Division

Rural Infrastructure
Robert F. West, Infrastructure Banking Group
Nivin A. Elgohary, Electric Distribution, Water and Community Facilities Banking Division
William D. LaDuca, Electric Distribution Division
Christopher M. Shaffner, Water and Community Facilities Division
Brian A. Goldstein, Project Finance Banking Division
Theodore R. Koerner, Communications Banking Division
Todd E. Telesz, Power, Energy and Utilities Banking Division

Antony M. Bahr, Banking Services Group [2]
Michael A. Romanowski, Farm Credit Leasing Services Corporation [3]
Leonard G. Sahling, Knowledge Exchange Division

David P. Burlage, Chief Financial Officer
Timothy D. Steidle, Treasury Division
Michael R. Vestal, Controller Division

F. William Davis, Chief Credit Officer - Elect (will become Chief Credit Officer effective April 1, 2017)

Andrew D. Jacob, Chief Regulatory, Legislative and Compliance Officer and Interim Chief Risk Officer
Brian Cavey, Government Affairs Division
Arthur C. Hodges, Jr., Corporate Communications Division
Katia V. Hoffer, Enterprise Risk Management Division

Daniel L. Key, Chief Credit Officer (through retirement on March 31, 2017)
S. Richard Dill, Special Assets Division

M. Mashenka Lundberg, Chief Legal Officer and General Counsel
Christian J. Clayton, Legal and Loan Processing Division

Robert L. O'Toole, Chief Human Resources Officer and CEO Chief of Staff

John Svisco, Chief Business Services Officer
Matthew H. Cammer, Digital Business Solutions Division

Ann E. Trakimas, Chief Operating Officer
James R. Bernsten, Information Technology Division
Michael Hernandez, Data Strategy
Horst G. Kisch, Operations Division
Todd E. Wilson, Enterprise Solutions and Services Division

Steven W. Wittbecker, Internal Audit Division
Timothy A. Green, Asset Review Division

(1) The Strategic Relationships operating segment is included in the Regional Agribusiness Banking Group.
(2) The Banking Services Group also includes the Bank's Capital Markets Division.
(3) Farm Credit Leasing Services Corporation is included in our Agribusiness operating segment.

Customer Privacy

Your financial privacy and the security of your other non-public information are important to us. We, therefore, hold your financial and other non-public information in strictest confidence. Federal regulations allow disclosure of such information by us only in certain situations. Examples of these situations include law enforcement or legal proceedings or when such information is requested by a Farm Credit System institution with which you do business. In addition, as required by Federal laws targeting terrorism funding and money laundering activities, we collect information and take actions necessary to verify your identity.

CoBank's 2017 Quarterly and Annual Reports to Shareholders are available free of charge on request by calling or visiting one of our banking center locations and through our website at www.cobank.com on approximately May 9, 2017, August 9, 2017, November 9, 2017, and March 7, 2018 (Annual Report).

OFFICE LOCATIONS

AS OF 01/10/17

COBANK NATIONAL OFFICE

6340 S. Fiddlers Green Circle
Greenwood Village, CO 80111
(303) 740-4000
(800) 542-8072

FARM CREDIT LEASING SERVICES CORPORATION

600 Highway 169 South, Suite 300
Minneapolis, MN 55426
(952) 417-7800
(800) 444-2929

WASHINGTON, D.C. OFFICE

50 F Street, N.W., Suite 900
Washington, DC 20001
(202) 650-5860

U.S. REGIONAL OFFICES

AMES BANKING CENTER

2515 University Boulevard
Suite 104
Ames, IA 50010
(515) 292-8828

ATLANTA BANKING CENTER*

2300 Windy Ridge Parkway
Suite 370S
Atlanta, GA 30339
(770) 618-3200
(800) 255-7429
FCL: (770) 618-3226

AUSTIN BANKING CENTER

4801 Plaza on the Lake Drive
Austin, TX 78746
(855) 738-6606

ENFIELD BANKING CENTER*

240B South Road
Enfield, CT 06082-4451
(860) 814-4043
(800) 876-3227
FCL: (860) 814-4049

FARGO BANKING CENTER

4143 26th Avenue South
Suite 101
Fargo, ND 58104
(701) 277-5007
(866) 280-2892

FLORIDA FARM CREDIT LEASING OFFICE**

3594 Maribella Drive
New Smyrna Beach, FL 32168
(678) 592-5394

LOUISVILLE BANKING CENTER*

1601 UPS Drive
Suite 102
Louisville, KY 40223
(502) 423-5650
(800) 262-6599
FCL: (800) 942-3309

LUBBOCK BANKING CENTER*

5715 West 50th
Lubbock, TX 79414
(806) 788-3700
FCL: (806) 788-3705

MINNEAPOLIS BANKING CENTER*

600 Highway 169 South
Suite 300
Minneapolis, MN 55426
(952) 417-7900
(800) 282-4150
FCL: (800) 444-2929

OHIO FARM CREDIT LEASING OFFICE**

1225 Irmscher Boulevard
Celina, OH 45822
(855) 838-9961 ext. 23969

OMAHA BANKING CENTER*

13810 FNB Parkway
Suite 301
Omaha, NE 68154
(402) 492-2000
(800) 346-5717

SACRAMENTO BANKING CENTER*

3755 Atherton Road
Rocklin, CA 95765
(916) 380-3524
(800) 457-0942
FCL: (800) 289-7080

SPOKANE BANKING CENTER

2001 South Flint Road
Suite 102
Spokane, WA 99224
(509) 363-8700
(800) 378-5577

STERLING BANKING CENTER

229 South 3rd Street
Sterling, CO 80751
(970) 521-2774

ST. LOUIS BANKING CENTER*

635 Maryville Centre Drive
Suite 130
St. Louis, MO 63141
(314) 835-4200
(800) 806-4144
FCL: (800) 853-5480

WICHITA BANKING CENTER*

245 North Waco
Suite 130
Wichita, KS 67202
(316) 290-2000
(800) 322-3654
FCL: (800) 322-6558

* Farm Credit Leasing office within this CoBank location

** Farm Credit Leasing office only

INTERNATIONAL REPRESENTATIVE OFFICE

10 Hoe Chiang Road
#05-01 Keppel Towers
Singapore 089315
(65) 6534-5261

COOPERATIVE. CONNECTED. COMMITTED.

6340 SOUTH FIDDLERS GREEN CIRCLE
GREENWOOD VILLAGE, COLORADO 80111

800-542-8072