2022 Quarterly Report
JUNE 30, 2022

Dear CoBank Customer-Owner:

We are pleased to report that CoBank recorded another period of strong financial performance in the second quarter of 2022. Though net income declined slightly from the second quarter of 2021, lending increased across all three of our operating segments, while credit quality continued to be favorable. CoBank remains well-positioned to meet the financial needs of our customers as we navigate the impacts of inflation, higher interest rates, weakening economic conditions and the continuing effects of the pandemic and Ukraine war on agricultural and energy markets.

Average loan volume increased 12 percent in the second quarter of 2022 to $139.2 billion, from $124.4 billion in the second quarter last year. For the first six months of 2022, average loan volume rose by 11 percent to $138.5 billion, from $125.1 billion in the same period last year. Loan growth in both periods was driven predominantly by lending to grain and farm supply cooperatives and food and agribusiness customers in our Agribusiness operating segment, affiliated Associations in our Farm Credit Banking operating segment and electric distribution customers in our Rural Infrastructure operating segment.

Net income for the second quarter of 2022 decreased 1 percent to $353.1 million, compared to $358.3 million in the second quarter of 2021. The decrease in quarterly net income resulted primarily from a higher provision for loan losses in the current quarter. For the first six months of 2022, net income grew 7 percent to $730.3 million, compared to $682.3 million in the same period last year. The increase in net income for the first six months of 2022 resulted primarily from increases in net interest income and noninterest income somewhat offset by a higher provision for loan losses and an increase in operating expenses.

Net interest income for the second quarter of 2022 increased 13 percent to $504.5 million, from $447.0 million in the same period last year. For the first six months of 2022, net interest income grew 11 percent to $992.2 million, compared to $890.1 million in the same period last year. The increase in both periods was primarily driven by higher average loan volume and to a lesser extent higher earnings on balance sheet positioning.

Operating expenses increased by $25.6 million for the quarter and increased $33.6 million compared to the first six months of last year. The higher level of operating expenses was primarily driven by an increase in Insurance Fund premium expense due to higher insured debt obligations and a premium rate increase announced by the Farm Credit System Insurance Corporation in June 2022 that was retroactive to the beginning of the year. With the retroactive increase, premium rates were 20 basis points of adjusted insured debt obligations in the first six months of 2022 compared to 16 basis points in the same period of the prior year. Also contributing to higher operating expenses were increases in information services, general and administrative and other expenses.

The bank's provision for loan losses was $59.0 million for the second quarter in 2022, compared to no provision for loan losses in the second quarter of 2021. The prior year quarter included improvements in credit quality in certain portfolios fully offset by increased lending volume. The bank's provision for loan losses was $105.0 million for the six months ended June 30, 2022 compared to $55.0 million in the same period last year. The increase in the provision for loan losses in both periods primarily relates to increased lending activity and to a lesser extent higher reserves in the current quarter for a power infrastructure customer that was subsequently charged off.

CoBank's capital and liquidity levels remain in excess of regulatory minimums. The bank's total capital ratio was 13.62 percent at June 30, 2022, compared with the 8.0 percent regulatory minimum (10.5 percent inclusive of the capital conservation buffer) established by the Farm Credit Administration, the bank's independent regulator. At June 30, 2022, the bank held approximately $45.2 billion in cash, investments and overnight funds and had 180 days of liquidity, which was double the regulatory days of liquidity requirement.

The table below contains key financial data for the three- and six-month periods ended June 30, 2022 and 2021. Complete financial information is provided in Management's Discussion and Analysis and the financial statements and footnotes that follow this letter.

KEY FINANCIAL DATA

($ in millions)	Three Months Ended June 30,		Six Months Ended June 30,	
INCOME STATEMENT	**2022**	**2021**	**2022**	**2021**
Net interest income	$505	$447	$992	$890
Provision for loan losses	59	-	105	55
Noninterest income	83	64	172	146
Operating expenses	148	122	268	234
Net income	353	358	730	682

BALANCE SHEET (period-end)	**June 30, 2022**	**December 31, 2021**
Total loans	$135,255	$128,529
Less: allowance for loan losses[(1)]	730	651
Net loans	134,525	127,878
Total assets	181,779	170,306
Total shareholders' equity	10,815	12,234

($ in millions)	Six Months Ended June 30,	
PROFITABILITY METRICS	**2022**	**2021**
Net interest margin	1.13%	1.14%
Return on average common equity	14.35%	12.46%
Return on average assets	0.82%	0.86%
Operating expense ratio	17.96%	18.55%
Average total loans	$138,497	$125,132
Average earning assets	176,728	158,109
Average total assets	179,440	160,870

[(1)] Excludes our reserve for unfunded commitments of $109 at June 30, 2022 and $106 at December 31, 2021 which is classified in liabilities in our balance sheet.

Looking forward, we expect the second half of 2022 to present continued volatility in financial markets as well as the marketplace for commodities in the agriculture and energy sectors where many of our customers operate. CoBank remains focused on supporting our customers and their evolving needs during this time. Our financial condition remains strong and we are committed to serving as a reliable source of credit and financial services for our customers.

On behalf of our board, management team and associates, we value the trust you place in us and deeply appreciate the opportunity to serve as your trusted financial partner.

Kevin A. Still
Chair of the Board

Thomas E. Halverson
President and Chief Executive Officer

August 8, 2022

Management's Discussion and Analysis of Financial Condition and Results of Operations
CoBank, ACB

Business Overview

CoBank, ACB (CoBank or the Bank) is one of the four banks in 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. The System was established in 1916 by the U.S. Congress, and is a government-sponsored enterprise. 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).

Our customers consist of agricultural cooperatives; other food and agribusiness companies; rural power, communications and water cooperatives and companies; rural community facilities; Agricultural Credit Associations (Associations), which are regulated, farmer-owned financial institutions and members of the System; and other businesses that serve agriculture and rural communities. We provide a broad range of loans and other financial services through three operating segments: Agribusiness, Farm Credit Banking and Rural Infrastructure.

The following discussion and analysis should be read in conjunction with the accompanying condensed consolidated quarterly financial statements and related notes, the accompanying regulatory capital disclosures and our 2021 Annual Report to Shareholders.

Consolidated Results of Operations

CoBank's loans outstanding grew 5 percent to $135.3 billion as of June 30, 2022, compared to $128.5 billion at December 31, 2021. Average loan volume increased 11 percent to $138.5 billion during the first six months of 2022 compared to $125.1 billion in the same prior-year period. The increase in loan volume reflected growth in lending across all three of our operating segments. Loan growth occurred predominantly in lending to grain and farm supply cooperatives and food and agribusiness customers in our Agribusiness operating segment, affiliated Associations in our Farm Credit Banking operating segment and, to a lesser extent, electric distribution customers in our Rural Infrastructure operating segment.

Our investment securities, federal funds sold and other overnight funds increased to $44.9 billion at June 30, 2022 from $37.3 billion at December 31, 2021. Average investment securities, federal funds sold and other overnight funds increased 16 percent to $38.2 billion during the first six months of 2022 compared to $33.0 billion in the same prior-year period. The increase in our investments was required to maintain our liquidity reserve associated with the higher loan volume we experienced during the first six months of 2022 and to take advantage of favorable investment spread opportunities in the marketplace.

Net income increased $48.0 million to $730.3 million for the six-month period ended June 30, 2022, compared to $682.3 million during the same period in 2021. The 7 percent increase in earnings resulted primarily from increases in net interest income and noninterest income somewhat offset by a higher provision for loan losses and an increase in operating expenses.

Net Interest Margin and Net Interest Income						
For the Six Months Ended June 30,		**2022**			**2021**	
($ in Millions)	**Average Balance**	**Average Rate**	**Interest Income/ Expense**	**Average Balance**	**Average Rate**	**Interest Income/ Expense**
Interest-earning Assets[(1)]						
Loans	**$ 138,497**	**2.16 %**	**$ 1,485**	$ 125,132	2.01 %	$ 1,250
Investment Securities, Federal Funds Sold and Other Overnight Funds	**38,231**	**1.43**	**272**	32,977	1.38	225
Total Interest-earning Assets[(1)]	**176,728**	**2.00**	**1,757**	158,109	1.88	1,475
Total Interest-bearing Liabilities	**164,944**	**0.93**	**765**	146,398	0.80	585
Interest Rate Spread		**1.07**			1.08	
Impact of Equity Financing	**11,323**	**0.06**		11,880	0.06	
Net Interest Margin and Net Interest Income		**1.13 %**	**$ 992**		1.14 %	$ 890

[(1)] Interest-earning assets exclude cash and cash equivalents.

Net interest income increased $102.1 million to $992.2 million for the six months ended June 30, 2022, compared to $890.1 million for the same prior-year period. The 11 percent increase in net interest income was primarily driven by higher average loan volume in our Agribusiness operating segment resulting from sharply higher commodity prices which drove higher seasonal financing requirements at many of our grain and farm supply cooperative customers as well as increased lending to customers that use commodities as inputs to their businesses. Loan growth also included increased lending to food and agribusiness customers. Higher earnings on balance sheet positioning also contributed to increased net interest income in the current period.

Net interest margin decreased slightly to 1.13 percent for the first six months of 2022 compared to 1.14 percent for the same period in 2021. The decrease in net interest margin was primarily driven by lower spreads in certain lending portfolios within our Rural Infrastructure operating segment and higher levels of investment securities which have lower spreads commensurate with lower risk. Partially offsetting these items was increased lending to agribusiness customers which carry higher spreads than many of our other lending portfolios.

We recorded a $105.0 million provision for loan losses in the six-month period ended June 30, 2022, which included a $79.0 million provision in our Agribusiness operating segment and a $26.0 million provision in our Rural Infrastructure operating segment. The 2022 provision for loan losses in our Agribusiness operating segment primarily relates to increased lending activity and to a lesser extent higher specific reserves for a small number of customers. The 2022 provision for loan losses in our Rural Infrastructure operating segment primarily related to a reserve for a power infrastructure customer that was subsequently charged off. We recorded a $55.0 million provision for loan losses in the six-month period ended June 30, 2021. The 2021 provision primarily related to increased lending activity in our Agribusiness operating segment and an increase in specific reserves for a small number of customers in our Rural Infrastructure operating segment impacted by the severe winter storms that occurred in Texas in early 2021. Overall credit quality remained strong and adversely classified loans and accrued interest decreased to 0.70 percent of total loans and accrued interest at June 30, 2022 from 0.72 percent at December 31, 2021 due to slight improvement in credit quality for a small number of customers in our Agribusiness operating segment. Nonaccrual loans increased $30.6 million to $153.2 million at June 30, 2022 from $122.6 million at December 31, 2021 due to a small number of agribusiness and communications loans transferred to nonaccrual status partially offset by the charge-off of a power infrastructure loan. Gross charge-offs were $23.5 million for the first six months of 2022, compared to $3.0 million for the same period in 2021. The 2022 charge-offs related primarily to a power infrastructure customer that experienced financial difficulty and to lesser extent a small number of other agribusiness and rural infrastructure customers. The 2021 charge-offs related to a small number of agribusiness and leasing customers. Gross recoveries were $0.7 million for the first six months of 2022, compared to $10.7 million for the same period in 2021. The 2021 period included a significant recovery from a rural power customer that was previously charged off.

Noninterest income increased $25.2 million to $171.7 million for the first six months of 2022 from $146.5 million for the same prior-year period. Noninterest income is primarily composed of fee income, patronage income, loan prepayment income and miscellaneous gains and losses, offset by losses on early extinguishments of debt. Net fee income was $67.0 million for the six months ended June 30, 2022 and was relatively unchanged from the prior-year period. Patronage income increased $12.4 million for the six months ended June 30, 2022 due to a greater level of loans sold to affiliated Associations and other System institutions as well as a higher level of patronage received from other System institutions. Prepayment income decreased $28.0 million in the 2022 period resulting from a lower level of customer refinancing activity and lower prepayment fees from certain of our affiliated Associations driven by the rising interest rate environment. Losses on early extinguishments of debt decreased $28.8 million compared to the 2021 period and are generally incurred to offset the current and prospective impact of prepayments in our loan and investment portfolios. The availability in the market of similarly tenored debt, coupled with the timing of prepayments, does not always allow us to fully offset the impact of prepayments in the same period. Other noninterest income, net, increased $10.0 million for the six months ended June 30, 2022 due largely to income related to the redemption of allocated equities from the Federal Farm Credit Banks Funding Corporation (Funding Corporation) and gains on our investments in Rural Business Investment Companies (RBICs).

Total operating expenses for the six-month period ended June 30, 2022 increased $33.6 million to $267.9 million from $234.3 million for the same period in 2021. The higher level of operating expenses was primarily driven by increases in Farm Credit Insurance Fund (Insurance Fund) premium, information services, general and administrative and other expenses. Insurance Fund premium expense increased $21.0 million in the first six months of 2022 compared to the 2021 period due to higher insured debt obligations and an increase in the Insurance Fund premium rate announced by the Farm Credit System Incorporation (Insurance Corporation) in early June 2022 that was retroactive to the beginning of the year. With the retroactive increase, Insurance Fund premium rates were 20 basis points of adjusted insured debt obligations in the first six months of 2022 compared to 16 basis points in the same period of 2021. Information services expense increased $6.3 million in the first six months of 2022 compared to the 2021 period due to greater expenditures to enhance our service offerings and technology platforms. General and administrative expenses increased $3.1 million in 2022 driven by higher insurance expenses, temporary labor and other administrative costs. Other operating expenses increased $7.9 million in the first six months of 2022 compared to the 2021 period due to increases in travel and customer meeting expenses resulting from reductions in COVID restrictions. These increases in operating expenses were partially offset by a decrease in employee compensation expense of $6.7 million for the first six months of 2022 due primarily to a lower level of accrued incentive compensation, lower pension expense and a decline in the number of employees. As of June 30, 2022 and 2021, we had 1,103 and 1,117 employees, respectively.

Our income tax expense decreased by $4.4 million to $60.6 million for the first six months of 2022, compared to $65.0 million for the same prior-year period. Our effective tax rates were 7.7 percent and 8.7 percent for the six-month periods ended June 30, 2022 and 2021, respectively. The decreases in our income tax expense and the effective tax rate were primarily due to an increase in earnings attributable to non-taxable business activities and higher levels of accrued patronage.

Our annualized return on average common shareholders' equity increased to 14.35 percent for the six months ended June 30, 2022 from 12.46 percent for the same period in 2021. The increase was due to lower average total capital resulting from unrealized losses on investment securities described on page 12 and a higher level of earnings in the first six months of 2022. Our annualized return on average assets decreased to 0.82 percent for the six-month period ended June 30, 2022 from 0.86 percent for the same period in 2021 due in part to changes in asset mix and the higher provision for loan losses and operating expenses in the current period, described above.

For the three months ended June 30, 2022, net income decreased $5.2 million to $353.1 million, compared to $358.3 million for the same prior-year period. The decrease in quarterly net income included a higher provision for loan losses and an increase in operating expenses mostly offset by higher net interest income and noninterest income. The second quarter of 2022 provision for loan losses was $59.0 million and primarily relates to

increased lending activity and higher specific reserves in our Agribusiness operating segment and a higher reserve for a power infrastructure customer in our Rural Infrastructure operating segment that was subsequently charged off. There was no provision for loan losses in the second quarter of 2021 as improvements in credit quality in certain loan portfolio sectors fully offset increased lending volume in the prior period. Operating expenses increased $25.6 million during the three months ended June 30, 2022 compared to the same period in 2021 primarily due to an increase in the Insurance Fund premium rate and higher insured debt obligations as described above. Net interest income increased $57.5 million for the three months ended June 30, 2022 compared to same prior-year period due to higher average loan volume and higher earnings on balance sheet positioning. Noninterest income also increased by $19.6 million during the second quarter of 2022 due to higher levels of patronage income and net fee income.

Operating Segment Financial Review

We provide financial services to agricultural cooperatives; other food and agribusiness companies; rural power, communications and water cooperatives and companies; rural community facilities; farmer-owned financial institutions and other businesses that serve agriculture and rural communities. We conduct lending operations through three operating segments: Agribusiness, Farm Credit Banking and Rural Infrastructure.

Loans outstanding and the allowance for loan losses by operating segment at June 30, 2022 and 2021 are reported in Notes 3 and 11 to the accompanying condensed consolidated financial statements. All customer activity, including loans and leases and related income, is specifically assigned to the business units that comprise 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 attributed to the operating segments. Net income by operating segment is summarized in the following table and is more fully detailed in Note 11 to the accompanying condensed consolidated financial statements.

Net Income by Operating Segment ($ in Thousands)				
For the Six Months Ended June 30,		**2022**		**2021**
Operating Segment:				
Agribusiness	**$**	**406,584**	$	360,987
Farm Credit Banking		**135,464**		125,176
Rural Infrastructure		**188,254**		196,152
Total	**$**	**730,302**	$	682,315

Agribusiness

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. A large portion of agribusiness loan volume financing grain and farm supply cooperatives is seasonal. This seasonal loan volume typically peaks early in the year and 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 loans outstanding totaled $42.6 billion at June 30, 2022, compared to $38.1 billion at December 31, 2021. The increase in outstanding loan volume primarily resulted from higher commodity prices which drove higher than normal seasonal financing requirements at many of our grain and farm supply cooperative customers as well as increased lending to other customers that use commodities as inputs to their businesses. Commodity prices for wheat, corn and soybeans increased sharply from year-end due to strong global demand, supply shortages, drought and other weather-related events, as well as the Russia/Ukraine war. Loan growth also included increased lending to food and agribusiness customers. The Agribusiness segment includes our Agricultural Export Finance Division, which provides trade finance to support U.S. exporters of agricultural products. The Agricultural Export Finance

Division had $7.3 billion and $6.1 billion in loans outstanding as of June 30, 2022 and December 31, 2021, respectively. The increase primarily was driven by higher demand for export financing of U.S. agricultural products during the first six months of 2022. At June 30, 2022 and December 31, 2021, 22 and 19 percent, respectively, of the loans in the Agricultural Export Finance Division were guaranteed by the U.S. government. Our Agribusiness segment also includes Farm Credit Leasing Services Corporation (FCL), a wholly-owned subsidiary, which provides lease products and related services to Association partners, agribusinesses, agricultural producers and rural infrastructure companies. As of June 30, 2022 and December 31, 2021, FCL had $3.7 billion and $3.9 billion in leases outstanding, respectively.

Agribusiness average loan volume increased 16 percent to $47.1 billion for the first six months of 2022 from $40.5 billion for the same period in 2021. Growth in Agribusiness average loan volume also resulted from higher commodity prices which drove higher levels of seasonal financing at many of our grain and farm supply cooperative customers. Commodity prices for wheat, corn and soybeans increased even more significantly in the six-month period ended June 30, 2022 compared to the same prior-year period for the reasons described above. Loan growth also included increased lending to food and agribusiness customers.

Agribusiness net income increased $45.6 million in the first six months of 2022 to $406.6 million from $361.0 million for the same period in 2021. The increase was primarily due to increases in net interest income and noninterest income somewhat offset by increases in the provision for loan losses and operating expenses.

Net interest income increased by $83.6 million to $581.3 million for the six-month period ended June 30, 2022, from $497.7 million for the 2021 period. This increase was primarily due to higher average loan volume driven by higher commodity prices and, to a lesser extent, higher earnings on balance sheet positioning.

Agribusiness recorded a $79.0 million provision for loan losses during the first six months of 2022 compared to $45.9 million in the same prior-year period. The 2022 provision for loan losses primarily relates to increased lending activity and to a lesser extent higher specific reserves for a small number of customers. The 2021 provision primarily reflected increased lending activity. Nonaccrual loans in Agribusiness increased $39.6 million to $113.5 million at June 30, 2022, as compared to $73.9 million at December 31, 2021 primarily due to a limited number of customers transferred to nonaccrual status during 2022. Gross charge-offs were $4.5 million for the first six months of 2022, compared to $3.0 million for the same period in 2021. The 2022 and 2021 charge-offs related to a small number of agribusiness and leasing customers. Gross recoveries were $0.2 million for the first six months of 2022, compared to $2.4 million for the same period in 2021.

Noninterest income increased $17.1 million to $105.4 million in the first six months of 2022 from $88.3 million for the 2021 period. The increase in noninterest income for the period is primarily due to higher patronage income.

Agribusiness operating expenses increased $22.2 million to $167.2 million for the first six months of 2022 from $145.0 million in the same prior-year period primarily due to the increases in Insurance Fund premium, information services, general and administrative and other expenses, partially offset by a decrease in employee compensation expense, all of which are described on page 5.

Farm Credit Banking

The Farm Credit Banking operating segment includes wholesale loans from the direct funding relationships we have with our 19 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. As of June 30, 2022, the Farm Credit Banking loan portfolio totaled $67.4 billion, compared to $65.6 billion at December 31, 2021. At June 30, 2022 and December 31, 2021, loans outstanding included $62.3 billion and $60.5 billion, respectively, in wholesale loans to our affiliated Associations and $5.1 billion of participations in wholesale loans made by other System banks to certain of their affiliated Associations. These participations included $3.9 billion as of June 30, 2022 and December 31, 2021 in wholesale loans made by the Farm Credit Bank of

Texas (FCBT). The balance of participations of $1.2 billion as of June 30, 2022 and December 31, 2021, represent wholesale loans made by AgFirst Farm Credit Bank.

Farm Credit Banking average loan volume increased 10 percent to $66.4 billion for the six-month period ended June 30, 2022, compared to $60.2 billion for the same prior-year period. The increase resulted from greater overall lending by our affiliated Associations to agricultural producers and processors and our affiliated Associations funding a higher level of syndicated loans and participations.

Farm Credit Banking net income increased $10.3 million to $135.5 million for the first six months of 2022, as compared to $125.2 million for the same prior-year period. The increase resulted primarily from higher net interest income somewhat offset by lower noninterest income and slightly higher operating expenses.

Net interest income increased $12.3 million to $154.4 million in the first six months of 2022 compared to $142.1 million for the same period in 2021 primarily due to growth in average loan volume.

As a wholesale lender to Associations, we benefit from the diversification provided by 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 Farm Credit Banking operating segment are commensurate with the lower risk profile and lower regulatory capital requirements. Notwithstanding the Special Mention credit quality classification of an affiliated Association wholesale loan as discussed on page 11, loan quality in Farm Credit Banking remains strong. No provision for loan losses or allowance for credit losses have been recorded related to any of our wholesale loans to Associations.

Farm Credit Banking noninterest income decreased $1.2 million to $4.6 million in the first six months of 2022 from $5.8 million in the 2021 period. The decrease primarily resulted from lower gains on sales of investments in the current period partially offset by slightly higher prepayment income from certain Associations net of losses on extinguishments of debt in the 2022 period. We generally offset the impact of prepayment fees with losses on similarly tenored debt instruments; however, the market availability of similarly tenored debt, coupled with the timing of prepayments, do not always allow us to fully offset the impact of prepayments in the same period.

Operating expenses increased $0.8 million to $23.5 million for the first six months of 2022 from $22.7 million for the same prior-year period. Farm Credit Banking has no income tax expense as the earnings on its business activities are statutorily tax-exempt.

Rural Infrastructure

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 industries as well as to community facilities in rural America. Power and energy industry customers include rural electric generation and transmission cooperatives, midstream energy and gas pipeline providers, electric distribution cooperatives, renewable energy providers, independent power producers, regulated utilities and investor-owned utilities. Communications industry customers include companies providing local wireline broadband services, long-haul and middle-mile fiber transport, and data center and cloud-based products to rural communities. Our customers also include regional and national communications providers with networks that are globally interconnected, who are essential to bringing services to rural America through their partnerships and contractual relationships with our rural customers. In addition, the Bank serves customers in the water industry, including rural water and waste companies, as well as rural health care and other community facilities. We also make investments in RBICs which focus on small and middle market companies that create jobs and promote commerce in rural America. Rural Infrastructure loans outstanding totaled $25.3 billion and $24.8 billion at June 30, 2022 and December 31, 2021, respectively.

Rural Infrastructure average loan volume increased 2 percent to $25.0 billion for the first six months of 2022, compared to $24.4 billion for the same prior-year period. The increase in loan volume was primarily related to electric distribution customers.

Rural Infrastructure net income decreased $7.9 million to $188.3 million for the first six months of 2022, compared to $196.2 million for the same prior-year period. The decrease was primarily driven by increases in the provision for loan losses and operating expenses somewhat offset by an increase in net interest income and noninterest income.

Net interest income increased $6.2 million to $256.5 million for the six-month period ended June 30, 2022, compared to $250.3 million in the 2021 period. This increase was primarily due to higher average loan volume and higher earnings on balance sheet positioning partially offset by lower spreads in certain lending portfolios.

Rural Infrastructure recorded a provision for loan losses of $26.0 million during the first six months of 2022 compared $9.1 million for the same period in 2021. The 2022 provision for loan losses primarily related to a reserve for a power infrastructure customer that was subsequently charged off. The 2021 provision primarily reflected the adverse impacts on a limited number of our electric power infrastructure customers impacted by the severe winter storms that occurred in Texas in early 2021 as well as a specific reserve related to a rural energy customer. Nonaccrual loans in Rural Infrastructure decreased $9.0 million to $39.7 million at June 30, 2022, compared to $48.7 million at December 31, 2021 primarily due to a charge-off of a power infrastructure loan described above, somewhat offset by a communications loan that was transferred to nonaccrual status during 2022. Gross charge-offs were $19.0 million for the first six months of 2022. There were no charge-offs in the same period in 2021. The 2022 charge-offs related to a power infrastructure customer that experienced financial difficulty and to lesser extent a small number of other rural infrastructure customers. Gross recoveries were $0.4 million for the first six months of 2022, compared to $8.3 million for the same period in 2021. The 2021 period included a significant recovery from a rural power customer that was previously charged off.

Noninterest income increased $9.2 million to $61.6 million for the six-month period ended June 30, 2022, compared to $52.4 million for the same period in 2021 primarily driven by higher patronage income and gains on our investments in RBICs.

Rural Infrastructure operating expenses increased $10.7 million to $77.2 million for the first six months of 2022 compared to $66.5 million for the same prior-year period primarily due to the increases in Insurance Fund premium, information services, general and administrative and other expenses, partially offset by a decrease in employee compensation expense, all of which are described on page 5.

Credit Quality, Liquidity, Capital Resources and Other

Loan Quality

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

	June 30, 2022			December 31, 2021		
	Wholesale Loans [1]	Commercial Loans [2]	Total Bank	Wholesale Loans [1]	Commercial Loans [2]	Total Bank
Acceptable	**97.71 %**	**96.70 %**	**97.21 %**	97.67 %	96.19 %	96.94 %
Special Mention	**2.29**	**1.90**	**2.09**	2.33	2.35	2.34
Substandard	**-**	**1.36**	**0.68**	-	1.46	0.72
Doubtful	**-**	**0.04**	**0.02**	-	- [3]	- [3]
Loss	**-**	**-**	**-**	-	-	-
Total	**100.00 %**	**100.00 %**	**100.00 %**	100.00 %	100.00 %	100.00 %

[1] Represents loans in our Farm Credit Banking operating segment

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

[3] Represents less than 0.01 percent of total bank loans and accrued interest

Our overall loan quality measures remain strong at June 30, 2022. Special Mention loans and accrued interest improved to 2.09 percent of total loans and accrued interest at June 30, 2022 compared to 2.34 percent at December 31, 2021. The level of adversely classified loans ("Substandard", "Doubtful" and "Loss") and related accrued interest as a percent of total loans and accrued interest was 0.70 percent at June 30, 2022, compared to 0.72 percent at December 31, 2021.

We recorded a $105.0 million provision for loan losses in the six–month period ended June 30, 2022, which included a $79.0 million provision in our Agribusiness operating segment and a $26.0 million provision in our Rural Infrastructure operating segment. The 2022 provision for loan losses in our Agribusiness operating segment primarily relates to increased lending activity and to a lesser extent higher specific reserves for a small number of customers. The 2022 provision for loan losses in our Rural Infrastructure operating segment primarily related to a reserve for a power infrastructure customer that was subsequently charged off. We recorded a $55.0 million provision for loan losses in the six-month period ended June 30, 2021. The 2021 provision primarily related to increased lending activity in our Agribusiness operating segment, and to a lesser extent, adverse impacts on a limited number of our electric power infrastructure customers resulting from severe winter storms that occurred in Texas in early 2021. Gross charge-offs were $23.5 million for the first six months of 2022, compared to $3.0 million for the same period in 2021. The 2022 charge-offs related to a power infrastructure customer that experienced financial difficulty and to a lesser extent a small number of agribusiness and rural infrastructure customers. The 2021 charge-offs related to a small number of agribusiness and leasing customers. Gross recoveries were $0.7 million for the first six months of 2022, compared to $10.7 million for the same period in 2021. The 2021 period included a significant recovery from a power infrastructure customer that was previously charged off. Nonaccrual loans increased $30.6 million to $153.2 million at June 30, 2022, from $122.6 million at December 31, 2021 due to a small number of agribusiness and communications loans transferred to nonaccrual status partially offset by the charge-off of a power infrastructure loan. Our total allowance for credit losses (ACL), which includes the allowance for loan losses and the reserve for unfunded commitments, was $839.0 million at June 30, 2022, compared to $756.8 million at December 31, 2021. Our ACL, as a percent of total loans, was 0.62 percent and 0.59 percent at June 30, 2022 and December 31, 2021, respectively. As a percent of non-guaranteed loans outstanding and excluding loans to Associations, our ACL was 1.26 percent and 1.22 percent at June 30, 2022 and December 31, 2021, respectively.

At June 30, 2022, Special Mention loans included a $1.5 billion wholesale loan to one of our affiliated Associations. Pursuant to our regulatory requirements, we classify our wholesale loans using the same Uniform Loan Classification System used for our commercial loans. Our loans to Associations are collateralized by substantially all of the Association assets. In addition, the earnings, capital and loan loss reserves of the Associations provide additional layers of protection against losses in their retail loan portfolios. While the Special Mention classification primarily reflects internal control and other operational weaknesses at this Association, as a result of the collateralization and other mitigants described above we do not anticipate any losses related to this wholesale loan. As of June 30, 2022, CoBank has not made any provision for loan loss or recorded any allowance for credit loss related to any of our wholesale loans to Associations.

The overall credit quality of our loan portfolio remains strong at June 30, 2022. We believe credit quality deterioration in the future is possible due to market factors impacting our customers, including an ongoing volatile agricultural commodity price environment, supply chain disruptions, labor shortages, inflation, higher interest rates, weather related events, trade uncertainty and global economic uncertainty. While the Russia/Ukraine war has created agricultural commodity price volatility in the marketplace and has had implications for grain and farm supply cooperatives, we have not experienced any significant unfavorable credit quality impacts in this sector at this time. In addition, concentrations within our loan portfolio can cause the level of our loan quality, nonaccrual loans, charge-offs and provisions for loan losses or loan loss reversals to vary significantly from period to period.

Liquidity and Investments

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 fund operations on a cost effective basis.

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, the volatility of our loan volume and customer cash flow requirements causes our liquidity needs to vary significantly from day to day.

One of the ways we measure and monitor our liquidity position is 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 June 30, 2022 and December 31, 2021, our liquidity was 180 days.

We hold cash, investment securities, federal funds sold and other overnight funds primarily to maintain a liquidity reserve and manage short-term surplus funds. Cash, federal funds sold and other overnight funds totaled $11.1 billion and $8.7 billion as of June 30, 2022 and December 31, 2021, respectively. Our investment securities were $34.1 billion at June 30, 2022, compared to $31.8 billion at December 31, 2021. The increase in our investments was required to maintain our liquidity reserve associated with the higher loan volume we experienced during the first six months of 2022 and to take advantage of favorable investment spread opportunities in the marketplace.

The table below summarizes our investment securities and related unrealized gains (losses) by asset class.

Investment Securities ($ in Millions)	June 30, 2022			December 31, 2021		
	Amortized Cost	**Fair Value**	**Net Unrealized Losses**	**Amortized Cost**	**Fair Value**	**Net Unrealized Gains (Losses)**
U.S. Treasury Debt	**$ 17,142**	**$ 16,700**	**$ (442)**	$ 15,531	$ 15,716	$ 185
U.S. Agency Debt	**2,048**	**2,000**	**(48)**	1,997	2,077	80
Residential Mortgage-Backed:						
Ginnie Mae	**1,090**	**980**	**(110)**	1,205	1,200	(5)
U.S. Agency	**1,219**	**1,171**	**(48)**	1,214	1,220	6
Commercial Mortgage-Backed:						
U.S. Agency	**13,015**	**12,426**	**(589)**	11,237	11,225	(12)
Corporate Bonds	**495**	**476**	**(19)**	361	383	22
Asset-Backed and Other	**309**	**306**	**(3)**	22	21	(1)
Total	**$ 35,318**	**$ 34,059**	**$ (1,259)**	$ 31,567	$ 31,842	$ 275

Credit risk in our investment portfolio primarily exists in investment securities that are not guaranteed by the U.S. government or a government-sponsored enterprise (U.S. Agency), which currently include asset-backed securities (ABS) backed by pools of prime auto loans and corporate bonds of midstream energy companies. The midstream energy corporate bonds are purchased under our lending authorities and not held for liquidity purposes. Our ABS and midstream energy corporate bonds collectively total $782.5 million or approximately 2 percent of our total investment portfolio as of June 30, 2022. Credit risk in our investment portfolio also arises in a portion of our short-term investments, which include overnight bank deposits and federal funds sold instruments which are transacted with highly-rated commercial bank counterparties. We held overnight bank deposits totaling $855.0 million and $500.0 million at June 30, 2022 and December 31, 2021, respectively. The remainder of our short-term investments include reverse repurchase agreements with the Federal Reserve Bank totaling $10.0 billion and $5.0 billion at June 30, 2022 and December 31, 2021, respectively, and have minimal credit risk. We recorded no other-than-temporary impairment losses on investment securities during the first six months of 2022 or 2021.

Pursuant to FCA regulations, certain securities must be excluded from our liquidity reserve, which would include ABS that are no longer rated triple-A by at least one major rating agency, corporate bonds that do not 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 of June 30, 2022, $540.3 million of such securities were excluded from our liquidity reserve, the most significant of which were our corporate bonds of midstream energy companies that are not held for liquidity purposes.

In the first six months of 2022, we sold a U.S. Treasury debt security for total proceeds of $495.6 million and two corporate bonds for total proceeds of $17.5 million to take advantage of favorable market conditions. The resulting gains from these investment sales of $1.5 million are recorded in noninterest income in the accompanying condensed consolidated statement of income for the six months ended June 30, 2022. In the first six months of 2021, we sold five U.S. Treasury debt securities for total proceeds of $1.1 billion and four U.S. Agency debentures for total proceeds of $480.9 million resulting in gains of $1.7 million.

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 net unrealized losses of $1.5 billion and $340.0 million for the first six months of 2022 and 2021, respectively. The unrealized losses recorded in both periods primarily reflect the impact of market interest rate changes on the fair value of fixed rate securities.

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 $595.0 million and $702.4 million for the first six months of 2022 and 2021, respectively.

Notwithstanding the various sources of liquidity discussed above, if no other sources existed to repay maturing Federal Farm Credit Banks Consolidated Systemwide bonds, medium term notes and discount notes (collectively referred to as Systemwide Debt Securities), the assets of the Insurance Fund would be used 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 that threaten the Banks' ability to pay maturing debt obligations. The agreement provides for advances of up to $10 billion and terminates on September 30, 2022 unless otherwise renewed. 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.

Included in our bonds and notes at June 30, 2022 and December 31, 2021 was $500.0 million and $350.0 million, respectively, of funding pursuant to a bond guarantee program offered by the Rural Utilities Service (RUS) agency of the United States Department of Agriculture. The funding is provided by the Federal Financing Bank and guaranteed by RUS. As part of the bond guarantee agreement with RUS, we are required to pledge collateral in an amount equal to at least 110% of the principal balance of all RUS bonds outstanding. As of June 30, 2022, we had $250.0 million outstanding on each of the Series D and Series E funding from RUS. The Series D facility was fully drawn at June 30, 2022 and the Series E facility allows us to access an additional $125.0 million of funding for certain rural infrastructure loans through July 2025. In April 2022, we closed on an additional $200.0 million of Series F funding with RUS, which allows us to access funding through July 2026.

Interest Rate Swaps and Other Derivatives

We use interest rate swaps and other derivatives as an integral part of our market risk management activities. Interest rate swaps and other derivatives are used to manage liquidity and the market risk arising from maturity and repricing mismatches between assets and liabilities. We also hedge cap and floor risk embedded within our floating-rate investments and loans by entering into derivative transactions. 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. 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.

Interest rate swaps and other derivatives are recorded at fair value as assets or liabilities in the accompanying condensed consolidated balance sheets. Interest rate swaps and other derivative assets totaled $680.1 million at June 30, 2022 compared to $486.7 million at December 31, 2021. Interest rate swaps and other derivative liabilities totaled $778.2 million at June 30, 2022 compared to $371.7 million at December 31, 2021. The increases in derivative assets and derivative liabilities at June 30, 2022 are primarily the result of changes in market interest rates during the first six months of 2022.

Changes in the fair value of our interest rate swaps and other 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 designated as hedging instruments are recorded in interest income and interest expense in the accompanying condensed consolidated statements of income and totaled net losses of $3.3 million and $5.6 million for the first six months of 2022 and 2021, respectively. Net changes in the fair value of derivatives not designated as hedging instruments are recorded in noninterest income in the

accompanying condensed consolidated statements of income and totaled net gains of $9.0 million and $7.1 million for the first six months of 2022 and 2021, respectively. Changes in the fair value of derivatives recorded as other comprehensive income (loss) totaled net gains of $60.5 million and $3.9 million for the first six months of 2022 and 2021, respectively.

Capital Resources

We believe that a sound capital position is critical to our long-term financial success and future growth. Our shareholders' equity is composed of preferred and common stock, retained earnings and accumulated other comprehensive income (loss), and totaled $10.8 billion and $12.2 billion at June 30, 2022 and December 31, 2021, respectively. The decrease in shareholders' equity during the first six months of 2022 resulted from a decrease in accumulated other comprehensive income primarily resulting from increases in net unrealized losses on investment securities driven by market interest rate changes, redemptions of preferred stock and retirements of common stock partially offset by current period earnings.

In June 2022, CoBank stockholders approved board-recommended amendments to the Bank's capitalization bylaws lowering target equity ranges for customer-owners. Under the approved amendments, the target equity range for cooperatives and other patronage-eligible commercial borrowers will move to 4-10 percent, from the previous range of 7-13 percent. For direct loans with Farm Credit System institutions, the target equity range will move to 2-5 percent from the previous range of 4-6 percent. The target equity levels for customer-owners are set within the ranges established in the bylaws and are included in the capital plans approved by the CoBank Board of Directors.

On January 1, 2022, we redeemed all of our outstanding Series G non-cumulative perpetual preferred stock totaling $200.0 million. The dividend rate for our Series G preferred stock was 6.125 percent through the date of redemption.

During the first six months of 2022, we retired $59.9 million of our outstanding Series E non-cumulative perpetual preferred stock in a series of open market purchase transactions. The retired Series E preferred stock was purchased at a discount from par value resulting in a modest gain on retirement recorded in unallocated retained earnings.

In June 2021, the CoBank Board of Directors approved changes to certain of its capital plans and patronage programs which included a change in the loan base period used for determining target equity levels for our affiliated Associations from a one-year average to a five-year trailing average. This change reduced the required amount of common stock investment of our affiliated Associations in CoBank and resulted in common stock retirements of $114.5 million to our affiliated Associations that were paid in March 2022.

At June 30, 2022 and December 31, 2021, our capital and leverage ratios exceeded regulatory minimums, as shown in the following table.

Regulatory Capital Requirements and Ratios

		June 30, 2022		December 31, 2021		
	Regulatory Minimums	Actual	Actual Buffer	Actual	Actual Buffer	Required Buffer
Common Equity Tier 1 Capital Ratio	4.5 %	**10.99 %**	**6.49 %**	12.74 %	8.24 %	2.5 %
Tier 1 Capital Ratio	6.0	**12.76**	**6.76**	14.70	8.70	2.5
Total Capital Ratio	8.0	**13.62**	**5.62**	15.63	7.63	2.5
Tier 1 Leverage Ratio[1]	4.0	**6.57**	**2.57**	7.47	3.47	1.0
Permanent Capital Ratio	7.0	**12.88**	**n/a**	14.81	n/a	n/a
Unallocated Retained Earnings (URE) and URE Equivalents Leverage Ratio	1.5	**2.93**	**n/a**	3.36	n/a	n/a

[1] At least 1.5 percent must be URE and URE equivalents.

As more fully described on page 6, we experience seasonality in a large portion of our agribusiness loan volume throughout the year. Due to the significant increase in agribusiness seasonal loan volume we experienced during the first six months of 2022, our capital and leverage ratios declined from December 31, 2021 to June 30, 2022. We believe our regulatory capital and leverage ratios will increase during the third quarter of 2022 as we expect agribusiness loan volume to decline following its seasonal cycle. See pages 56 through 65 for more information on required regulatory capital disclosures, including the components of the ratios displayed above.

We may from time to time seek to retire our outstanding debt or equity securities, including preferred stock, through calls, tender offers and/or exchanges, open market purchases, privately negotiated transactions or otherwise. We may also issue new debt or equity securities, including preferred stock. Such calls, tender offers, exchanges, open market purchases or new issuances, 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.

LIBOR Transition

On March 5, 2021, the United Kingdom's Financial Conduct Authority (UKFCA) and the ICE Benchmark Administrator (IBA) formally announced that all LIBOR tenors will either be discontinued or no longer be representative immediately after December 31, 2021 for the GBP, JPY, CHF, EUR, and the 1-week and 2-month USD tenors, and immediately after June 30, 2023 for the remaining USD tenors. The UKFCA does not expect that any LIBOR tenors will become unrepresentative before these respective dates; however, publication by the IBA of most of the LIBOR tenors is expected to cease immediately after these dates. The UKFCA has worked closely with market participants and regulatory authorities around the world to ensure that alternatives to LIBOR are available and that existing contracts can be transitioned onto these alternatives to safeguard financial stability and market integrity.

On March 9, 2021, the Federal Reserve's Alternative Reference Rate Committee (ARRC) released a statement of clarification related to the UKFCA and IBA announcements. The ARRC confirmed a "Benchmark Transition Event" occurred under ARRC and International Swaps and Derivatives Association (ISDA) recommended fallback language as a result of the announcements on March 5, 2021. The ARRC also confirmed that March 5, 2021 is the date which the spread adjustments were determined for the ISDA fallbacks but will not be effective until the next repricing of instruments after June 30, 2023.

On July 29, 2021, the ARRC formally announced that CME Term SOFR is an appropriate fallback to LIBOR to be used for certain types of currently outstanding loans, floating rate notes (which would include certain outstanding Systemwide Debt Securities) and derivatives based on LIBOR when LIBOR is discontinued or

deemed unrepresentative, and, in more limited circumstances, for new loans, floating rate notes and other transactions, including certain derivatives. CME Term SOFR are forward-looking rates published by CME Group Benchmark Administration Limited for 1-month, 3-month, 6-month and 12-month tenors. The ARRC's support of CME Term SOFR is expected to increase the volume of transactions quoted in SOFR, supporting the transition away from LIBOR.

On October 20, 2021, the Prudential Regulators (Federal Reserve, Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency) issued a statement to reemphasize the expectation that supervised institutions with LIBOR exposure continue to progress towards an orderly transition away from LIBOR. Given LIBOR's discontinuance, the agencies believe that entering into new contracts, including derivatives, that use LIBOR as a reference rate after December 31, 2021, would create safety and soundness risks, including litigation, operational, and consumer protection risks. The Prudential Regulators further clarified a new contract would include an agreement that creates additional LIBOR exposure for a supervised institution or extends the term of an existing LIBOR contract. A draw on an existing agreement that is legally enforceable, for example, a committed credit facility would not be viewed as a new contract.

On December 8, 2021, the FCA issued an informational memorandum to provide additional guidance to Farm Credit System institutions on their transition away from LIBOR. The guidance encourages Farm Credit System institutions to stop entering into new contracts that reference LIBOR as soon as practicable and in any event no later than December 31, 2021. Entering into new LIBOR-referenced contracts after that date would present safety and soundness risk. The guidance also provides clarity on what the FCA considers a new LIBOR-indexed contract; whether purchases of legacy LIBOR-indexed loans and investments are deemed new contracts; limited exceptions for entering into new LIBOR contracts that reduce or hedge risk in legacy LIBOR contracts; and the due diligence and other procedures required before using other benchmark/reference rate alternatives to LIBOR (beyond SOFR), including credit-sensitive alternative rates.

On March 15, 2022, the U.S. government passed the Consolidated Appropriations Act of 2022, which includes federal legislation regarding the LIBOR transition. The legislation provides a statutory fallback mechanism to replace LIBOR with a benchmark rate, selected by the Federal Reserve Board and based on SOFR, for certain contracts that reference LIBOR and contain no or insufficient fallback provisions. The law also provides a safe harbor for parties who select the statutory benchmark replacement rate. The federal legislation also preempts state law passed by New York and Alabama that relates to the selection or use of a benchmark rate replacement or limits the manner of calculating interest.

CoBank recognizes the discontinuance of LIBOR presents significant risks and challenges that could have an impact on our business and our customers. Accordingly, CoBank has established a LIBOR governance and implementation program that includes senior management and has taken various actions to mitigate our risks to the LIBOR transition. Through June 30, 2022, we have implemented fallback language in a substantial majority of our loan agreements. We have commenced issuance of SOFR loan products for our wholesale lending to Association customers and to our commercial loan customers. We have also implemented changes to a number of our systems to support SOFR indexed transactions.

We have exposure to various LIBOR-indexed financial instruments that mature after June 30, 2022. This exposure includes loans that we make to our customers, investment securities that we purchase, Systemwide Debt Securities that are issued by the Funding Corporation on the Bank's behalf, preferred stock that we issue and our derivative transactions. Alternative reference rates that replace LIBOR may not yield the same or similar economic results over the terms of the financial instruments, which could adversely affect the value of, and return on, instruments held by us. The transition from LIBOR could result in us paying higher interest rates on our current LIBOR-indexed Systemwide Debt Securities, adversely affect the yield on, and fair value of, the instruments we hold that reference LIBOR, and increase the costs of, or affect our ability to effectively use, derivative instruments to manage interest rate risk. In addition, to the extent that we cannot successfully transition our LIBOR-indexed financial instruments to an alternative rate-based index that is endorsed or supported by regulators and generally accepted by the market as a replacement to LIBOR, there could be other

ramifications including those that may arise as a result of the need to redeem or terminate such instruments. Disputes and litigation with counterparties, investors and borrowers relating to the transition are also possible. Due to the uncertainty regarding the transition from LIBOR-indexed financial instruments, including when it will happen, the manner in which an alternative reference rate will apply, and the mechanisms for transitioning our LIBOR-indexed instruments to instruments with an alternative rate, we cannot yet reasonably estimate the expected financial impact of the LIBOR transition.

The following table represents our LIBOR-indexed financial instruments by contractual maturity.

LIBOR-Indexed Financial Instruments at June 30, 2022 ($ in Millions)

	Due in 2022	Due in 2023 on or before June 30, 2023	Due after June 30, 2023	Total
Commercial Loans [1]	$ 2,756	$ 1,036	$ 15,951	$ 19,743
Wholesale Loans [2]	2,445	552	-	2,997
Investment Securities	1	76	2,973	3,050
Debt	500	171	785	1,456
Derivatives (Notional Amounts)	13,973	6,225	28,268	48,466
Preferred Stock [3]	-	-	1,218	1,218

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

[2] Represents loans in our Farm Credit Banking operating segment.

[3] Represents our non-cumulative perpetual preferred stock with a fixed-to floating rate dividend feature indexed to 3-month USD LIBOR, which does not have a contractual maturity date. Includes $143 million that pays a dividend currently indexed to 3-month USD LIBOR plus a spread as of June 30, 2022. Dividends on an additional $400 million, $300 million, and $375 million of preferred stock convert from a fixed rate to 3-month USD LIBOR plus a spread in 2022, 2025, and 2026, respectively.

We continue to analyze potential risks associated with the LIBOR transition, including financial, market, accounting, operational, legal, tax, reputational and compliance risks. In light of the announcements by the UKFCA, the IBA and Prudential Regulators noted above, USD LIBOR, except in very limited circumstances, was or will be discontinued or declared unrepresentative (depending on the tenor) as of either immediately after December 31, 2021 or June 30, 2023. Because we formerly engaged in transactions involving financial instruments that referenced LIBOR, these developments may have a material impact on us, our borrowers, investors, customers and counterparties as we transition these LIBOR instruments to SOFR or another alternative rate-based index over time.

Other Regulatory Matters

On July 8, 2021, the FCA announced a proposed rule that would amend the Tier 1/Tier 2 capital framework to define and establish a risk weight for high-volatility commercial real estate exposures by assigning a 150% risk-weighting to such exposures, instead of the current 100% risk-weighting. The proposed rule focuses on changes that are comparable with the capital rules of other federal banking regulatory agencies and recognize the increased risk posed by high-volatility commercial real estate exposures. The public comment period on the proposed rule ended on January 24, 2022.

On April 14, 2022, the FCA issued a final rule to address changes to its capital regulations and certain other regulations in response to the current expected credit losses (CECL) accounting standard. The regulation reflects the CECL methodology, which revises the accounting for credit losses in accordance with accounting principles generally accepted in the United States of America (GAAP), as well as conforming amendments to other regulations to accurately reference credit losses. Specifically, the regulation identifies which credit loss allowances under CECL are eligible for inclusion in a System institution's regulatory capital. Credit loss allowances related to loans, lessor's net investments in leases, and held-to-maturity debt securities would be included in a System institution's tier 2 capital up to 1.25 percent of the System institution's total risk-weighted assets. Credit loss allowances for available-for-sale debt securities and purchased credit impaired assets would

not be eligible for inclusion in a System institution's tier 2 capital. In addition, the regulation does not include a transition phase-in period for the CECL day 1 cumulative effect adjustment to retained earnings on a System institution's regulatory capital ratios. The final rule is effective on January 1, 2023. At this time we do not believe the regulation will have a material impact on our regulatory capital.

Business Outlook

The effects of the COVID-19 pandemic and Ukraine/Russia war continue to present challenges across the global economy. Worldwide food and energy prices remain high although underlying commodity prices have begun to decline from the peak levels experienced earlier this year. The U.S. economy is challenged by inflation, higher interest rates and weakening economic conditions that are creating uncertainty and a higher likelihood of an economic recession. Labor markets are presently strong and unemployment and underemployment statistics are back to pre-pandemic levels. Consumers continue to spend although higher prices are eroding consumer purchasing power and severe supply chain disruptions continue to cause supply and demand imbalances. From a monetary policy perspective, the Federal Reserve Bank has sharply raised interest rates in the first half of 2022 and has announced plans to increase interest rates several more times during the remainder of the year to further combat inflation. Anticipation of tighter monetary policy is contributing to a stronger dollar and changes in the shape of the yield curve. Equity markets have declined in 2022 from their peak levels in recent years. The details and timing of proposed changes to U.S. tax laws, including the federal corporate income tax rate, also remain uncertain at this time. Market conditions in many sectors of the agricultural and rural infrastructure industries we serve remain generally favorable and stable although are impacted by the challenges of the broader economy.

The rural economy in the U.S. continues to benefit from higher levels of spending and investment by businesses and consumers. Agricultural commodity prices remain highly volatile and while prices decreased in recent months, certain agricultural commodity prices are expected to increase during the remainder of 2022 due to tight global supply and steady demand. The Russia/Ukraine war has also impacted certain agricultural commodity prices and created additional volatility and uncertainty in the markets. The historic drought in the western United States is projected to continue through 2022, which is creating heightened regional concerns across various agricultural sectors as well as challenges for water resources. Higher input costs and supply chain disruptions are also impacting certain sectors of the agricultural economy. The power and energy industries face challenges from higher natural gas and other energy prices, however, the outlook in these sectors remains favorable over the long-term to upgrade and maintain the energy grid and higher infrastructure spending due to the passage of the Infrastructure Investment and Jobs Act.

Although challenges across our industry sectors could reduce credit quality and impact the level of loan demand, CoBank believes it remains well positioned to assist our customers and to continue to serve rural America.

Under the guidance of our Board of Directors and our experienced executive management team, we remain focused on achieving continued success through execution of our business strategies. This includes, among other objectives, creating mutually beneficial partnerships with other System institutions, maintaining effective access to the agency debt capital markets, opportunistically accessing the preferred stock capital markets, educating policy makers and other key stakeholders about the critical mission of CoBank and the System, prudently optimizing current lending authorities and maintaining compliance with laws and regulations. We continue to collaborate with our affiliated Associations on business model enhancements that further strengthen the ability to fulfill our collective mission, including through the more efficient use of capital. We will also continue to explore strategic alliances and other opportunities with our customers, other System institutions, financial service providers and other public and private entities as we strive to fulfill our mission in rural America in a safe and sound manner.

Forward-Looking Statements

Certain of the statements contained in this quarterly 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 and adversely from our expectations expressed in any forward-looking statements. Forward-looking statements are typically identified by words such as “believe,” “expect,” “anticipate,” “intend,” “estimate,” “plan,” “project,” “target,” “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:

- Uncertainty of the extent, duration and effects of the COVID-19 pandemic and related business or supply chain disruptions;
- The Russia/Ukraine war and its role in global trade for grain, fertilizer and other commodities and its impact on economic conditions and global food supply;
- Government trade policies in the United States and other countries, including tariffs and other restrictions that impact markets for agricultural and other products;
- Changes in the economic environment that negatively impact the agricultural, power, communications, water and leasing industries;
- Changes in inflation, 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;
- Replacement of LIBOR and the implementation of SOFR or another benchmark rate index;
- 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;
- Catastrophic events such as wildfires, floods and other natural disasters, pandemic health events, political unrest or other similar occurrences, which may have a direct or indirect impact on certain of our borrowers;
- Changes in levels of global crop production, exports, imports, 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;
- Weakening domestic and global economic conditions;
- Volatility in energy prices including oil and other fuel prices;
- Geopolitical uncertainties, conflicts and government policy developments in the United States and throughout the world that may impact the industries we lend to, or, economic, fiscal or monetary conditions;
- The growing impact of the environmental, social and governance (ESG) trend in the financial services industry globally, including policies directed toward measuring the carbon impact from lending activities and efforts focused on reducing the impact of climate change;
- 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;
- Actions taken by the U.S. government to manage U.S. immigration policies;
- Actions taken by the U.S. Congress to fund infrastructure improvements;
- Changes to tax laws;

- A decrease in the credit outlook or ratings of U.S. government debt and agency debt, including our securities and Systemwide Debt Securities;
- Our ability to attract and retain employees in light of the ongoing labor shortage across the United States;
- Compliance with potential vaccine or testing mandates to us and our customers, including employee reactions to potential mandates;
- 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;
- Disruptive technologies impacting the banking and financial services industries or implemented by our competitors which negatively impact our ability to compete in the marketplace;
- Changes in assumptions underlying the valuations of financial instruments;
- Changes in estimates underlying the allowance for credit losses, including the implementation of the CECL accounting standard;
- Failure of our investment portfolio to perform as expected or deterioration in the credit quality of such investments;
- Legal proceedings, judgments, settlements and related matters;
- Environmental-related conditions or laws impacting our lending activities;
- Nonperformance by counterparties under our derivative and vendor contracts;
- Success of business model solutions focused on strengthening our ability to fulfill the System's collective mission, including through the more efficient use of capital; 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.

Condensed Consolidated Balance Sheets
CoBank, ACB

($ in Thousands)

		June 30, 2022 (Unaudited)		December 31, 2021
Assets				
Total Loans	**$**	**135,254,779**	$	128,529,146
Less: Allowance for Loan Losses		**730,115**		650,690
Net Loans		**134,524,664**		127,878,456
Cash and Cash Equivalents		**255,164**		3,196,869
Federal Funds Sold and Other Overnight Funds		**10,855,000**		5,500,000
Investment Securities		**34,059,060**		31,841,596
Interest Rate Swaps and Other Derivatives		**680,129**		486,654
Accrued Interest Receivable and Other Assets		**1,404,782**		1,402,349
Total Assets	**$**	**181,778,799**	$	170,305,924
Liabilities				
Bonds and Notes	**$**	**168,344,679**	$	154,949,979
Interest Rate Swaps and Other Derivatives		**778,228**		371,684
Reserve for Unfunded Commitments		**108,866**		106,148
Patronage Payable		**368,702**		742,746
Accrued Interest Payable and Other Liabilities		**1,363,121**		1,901,006
Total Liabilities	**$**	**170,963,596**	$	158,071,563
Commitments and Contingent Liabilities (Note 9)				
Shareholders' Equity				
Preferred Stock	**$**	**1,642,645**	$	1,902,500
Common Stock		**3,930,829**		4,012,706
Unallocated Retained Earnings		**6,402,939**		6,163,747
Accumulated Other Comprehensive (Loss) Income		**(1,161,210)**		155,408
Total Shareholders' Equity	**$**	**10,815,203**	$	12,234,361
Total Liabilities and Shareholders' Equity	**$**	**181,778,799**	$	170,305,924

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

Condensed Consolidated Statements of Income

CoBank, ACB

($ in Thousands) (Unaudited)

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2022	**2021**	**2022**	**2021**
Interest Income				
Loans	**$ 811,674**	$ 621,297	**$ 1,485,099**	$ 1,250,528
Investment Securities, Federal Funds Sold and Other Overnight Funds	**159,704**	110,057	**271,754**	224,931
Total Interest Income	**971,378**	731,354	**1,756,853**	1,475,459
Interest Expense	**466,831**	284,336	**764,695**	585,392
Net Interest Income	**504,547**	447,018	**992,158**	890,067
Provision for Loan Losses	**59,000**	-	**105,000**	55,000
Net Interest Income After Provision for Loan Losses	**445,547**	447,018	**887,158**	835,067
Noninterest Income (Expense)				
Net Fee Income	**33,895**	31,851	**66,950**	66,695
Patronage Income	**41,997**	34,692	**76,511**	64,080
Prepayment Income	**1,221**	10,529	**4,904**	32,865
Losses on Early Extinguishments of Debt	**(1,427)**	(16,441)	**(2,295)**	(31,120)
Gains on Interest Rate Swaps and Other Derivatives	**5,850**	3,115	**8,983**	7,101
Gains on Sales of Investment Securities	**337**	4	**1,451**	1,677
Other, Net	**1,323**	(109)	**15,148**	5,171
Total Noninterest Income	**83,196**	63,641	**171,652**	146,469
Operating Expenses				
Employee Compensation	**54,605**	59,937	**108,899**	115,560
Insurance Fund Premium	**47,480**	27,865	**77,720**	56,732
Information Services	**15,774**	12,424	**30,502**	24,214
General and Administrative	**8,504**	7,586	**14,817**	11,673
Occupancy and Equipment	**4,337**	3,909	**8,904**	7,941
Farm Credit System Related	**4,504**	4,298	**9,119**	8,807
Purchased Services	**4,309**	3,599	**7,306**	6,615
Other	**7,783**	2,033	**10,644**	2,712
Total Operating Expenses	**147,296**	121,651	**267,911**	234,254
Income Before Income Taxes	**381,447**	389,008	**790,899**	747,282
Provision for Income Taxes	**28,384**	30,724	**60,597**	64,967
Net Income	**$ 353,063**	$ 358,284	**$ 730,302**	$ 682,315

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

Condensed Consolidated Statements of Comprehensive (Loss) Income
CoBank, ACB

($ in Thousands) (Unaudited)

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2022	**2021**	**2022**	**2021**
Net Income	**$ 353,063**	$ 358,284	**$ 730,302**	$ 682,315
Other Comprehensive (Loss) Income, Net of Tax:				
Net Change in Unrealized (Losses) Gains on Investment Securities Not Other-Than-Temporarily Impaired	**(480,622)**	52,510	**(1,379,416)**	(302,208)
Net Change in Unrealized Gains (Losses) on Interest Rate Swaps and Other Derivatives	**22,989**	(7,367)	**60,539**	3,883
Net Pension Adjustment	**1,130**	2,004	**2,259**	4,010
Other Comprehensive (Loss) Income	**(456,503)**	47,147	**(1,316,618)**	(294,315)
Comprehensive (Loss) Income	**$ (103,440)**	$ 405,431	**$ (586,316)**	$ 388,000

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

Condensed Consolidated Statements of Changes in Shareholders' Equity
CoBank, ACB

($ in Thousands) (Unaudited)

For the Six Months Ended June 30,	2022	2021
Balance at Beginning of Period	**$ 12,234,361**	$ 11,909,605
Comprehensive (Loss) Income	**(586,316)**	388,000
Preferred Stock:		
Dividends	**(43,985)**	(41,214)
Redemptions	**(259,855)**	-
Gain on Partial Redemptions of Series E Preferred Stock	**11,125**	-
Common Stock:		
Issuances	**32**	32
Retirements	**(156,730)**	(32,934)
Cash Patronage Accrued	**(383,429)**	(322,721)
Balance at End of Period	**$ 10,815,203**	$ 11,900,768

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

Condensed Consolidated Statements of Cash Flows
CoBank, ACB

($ in Thousands) (Unaudited)

For the Six Months Ended June 30,		2022		2021
Cash Flows Provided by Operating Activities				
Net Income	**$**	**730,302**	$	682,315
Adjustments to Reconcile Net Income to Net Cash Provided by Operating Activities:				
Provision for Loan Losses		**105,000**		55,000
Deferred Income Taxes		**13,387**		12,128
Depreciation and Amortization/Accretion, Net		**24,609**		30,182
Losses on Early Extinguishments of Debt		**2,295**		31,120
Gains on Sales of Investment Securities		**(1,451)**		(1,677)
Increase in Accrued Interest Receivable and Other Assets		**(199,452)**		(31,108)
Decrease in Accrued Interest Payable and Other Liabilities		**(34,984)**		(78,141)
Net (Gains) Losses on Interest Rate Swaps and Other Derivatives		**(2,730)**		9,482
Payments on Termination of Interest Rate Swaps		**(34,767)**		-
Payments on Operating Lease Liabilities		**(5,230)**		(5,103)
Other, Net		**(1,976)**		(1,759)
Net Cash Provided by Operating Activities		**595,003**		702,439
Cash Flows Used in Investing Activities				
Net Increase in Loans		**(6,752,308)**		(458,565)
Net Increase in Investment Securities		**(4,101,155)**		(550,091)
Net Increase in Federal Funds Sold and Other Overnight Funds		**(5,355,000)**		(1,265,000)
Other, Net		**109,266**		109,670
Net Cash Used in Investing Activities		**(16,099,197)**		(2,163,986)
Cash Flows Provided by Financing Activities				
Net Issuances of Bonds and Notes		**13,481,262**		405,247
Payments on Early Extinguishments of Debt		**(2,295)**		(31,120)
Preferred Stock Retired		**(248,730)**		-
Preferred Stock Dividends Paid		**(43,639)**		(41,239)
Net Retirements of Common Stock		**(156,698)**		(32,902)
Cash Patronage Distribution Paid		**(632,113)**		(489,757)
Special Cash Patronage Distribution Paid		**(125,360)**		(106,603)
Cash Collateral Received from Derivative Counterparties, Net		**458,760**		119,690
Variation Margin Paid on Cleared Derivatives, Net		**(168,698)**		(14,579)
Net Cash Provided by Financing Activities		**12,562,489**		(191,263)
Net Decrease in Cash		**(2,941,705)**		(1,652,810)
Cash at Beginning of Period		**3,196,869**		2,335,212
Cash at End of Period	**$**	**255,164**	$	682,402
Supplemental Disclosures:				
Schedule of Noncash Investing and Financing Activities				
Net Change in Accrued Securities Purchases	**$**	**350,382**	$	533,960
Net Change in Receivables from Investment Securities		**5,142**		(433)
Net Change in Unrealized Losses on Investment Securities, Before Taxes		**(1,533,676)**		(340,047)
Net Change in Unrealized Gains on Interest Rate Swaps and Other Derivatives and Hedged Items, Before Taxes		**60,639**		4,018
Patronage in Common Stock		**74,821**		61,901
Change in Cash Patronage Payable		**383,429**		322,721
Supplemental Noncash Information Related to Leases				
Right-of-Use Assets Obtained in Exchange for Operating Lease Liabilities		**4,308**		4,155

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

Notes to Condensed Consolidated Financial Statements

CoBank, ACB

(Unaudited) ($ in Thousands, Except Share and Per Share Amounts and as Noted)

Note 1 – Organization, Lending Authority and Significant Accounting Policies

The accompanying condensed consolidated financial statements include the accounts of CoBank, ACB and its wholly-owned subsidiaries, CoBank, FCB and Farm Credit Leasing Services Corporation (FCL), collectively hereinafter referred to as CoBank or the Bank. All material inter-company accounts and transactions have been eliminated. In our opinion, all adjustments considered necessary for a fair presentation of the interim financial condition, results of operations and cash flows have been made. These adjustments are of a normal recurring nature, unless otherwise disclosed. Certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted (GAAP) in the United States of America have been condensed or omitted.

CoBank is a member of the Farm Credit System (System). We provide loans, leases and other financial services to support agriculture, rural infrastructure and rural communities across the United States. We are cooperatively owned by our eligible 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; Agricultural Credit Associations (Associations), which are regulated, farmer-owned financial institutions and members of the System; and other businesses that serve agriculture and rural communities.

These unaudited quarterly condensed consolidated financial statements should be read in conjunction with the 2021 Annual Report, which includes a description of our organization and lending authority. Also included in the 2021 Annual Report is a summary of significant accounting policies. These quarterly condensed consolidated financial statements have been prepared in accordance with these same accounting policies.

CoBank is the funding bank for certain System Associations, which are collectively referred to as our "affiliated Associations." The accompanying condensed consolidated financial statements exclude financial information of our affiliated Associations. CoBank and our affiliated Associations are collectively referred to as the "District." Additional information about our affiliated Associations is contained in Note 12 to these condensed consolidated financial statements.

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.

Note 2 – Recently Issued or Adopted Accounting Pronouncements

In March 2022, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU), "Financial Instruments – Credit Losses (Topic 326): Troubled Debt Restructurings and Vintage Disclosure." This ASU responds to feedback received during the post-implementation review of ASU 2016-13, "Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments." The amendments in this ASU eliminate the accounting guidance for troubled debt restructurings (TDRs) by creditors in Subtopic 310-40, Receivables – Troubled Debt Restructurings by Creditors, while enhancing disclosure requirements for certain loan refinancings and restructurings by creditors when a borrower is experiencing financial difficulty. The amendments in this ASU also require that an entity disclose current-period gross writeoffs by year of origination for financing receivables and net investments in leases within the scope of Subtopic 326-20, Financial Instruments—Credit Losses—Measured at Amortized Cost. For entities that have not yet adopted the amendments in ASU 2016-13, the effective dates for the amendments

in this ASU are the same as the effective dates in ASU 2016-13. CoBank has not and does not intend to early adopt this ASU prior to the required effective date of January 1, 2023.

In March 2022, the FASB issued ASU, "Derivatives and Hedging (Topic 815): Fair Value Hedging – Portfolio Layer Method." Under current guidance, the last-of-layer method enables an entity to apply fair value hedging to a stated amount of a closed portfolio of prepayable financial assets (or one or more beneficial interests secured by a portfolio of prepayable financial instruments) without having to consider prepayment risk or credit risk when measuring those assets. This ASU expands the scope of this guidance to allow entities to apply the portfolio layer method to portfolios of all financial assets, including both prepayable and nonprepayable financial assets. This scope expansion is consistent with the FASB's efforts to simplify hedge accounting and allows entities to apply the same method to similar hedging strategies. For public business entities, the amendments in this ASU are effective for fiscal years beginning after December 15, 2022, and interim periods within those fiscal years. For all other entities, the amendments are effective for fiscal years beginning after December 15, 2023, and interim periods within those fiscal years. Early adoption is permitted on any date on or after the issuance of this ASU for any entity that has adopted the amendments in ASU 2017-12 for the corresponding period. Although CoBank does not have a current derivative hedging strategy in which the last-of-layer method is used, we are currently evaluating the impact of this ASU on future derivative hedging strategies.

In March 2020, the FASB issued ASU, "Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting." The ASU provides optional expedients and exceptions for applying generally accepted accounting principles to contracts, hedging relationships, and other transactions affected by reference rate reform. The ASU simplifies the accounting evaluation of contract modifications that replace a reference rate affected by reference rate reform and contemporaneous modifications of other contract terms related to the replacement of the reference rate. With respect to hedge accounting, the ASU allows amendment of formal designation and documentation of hedging relationships in certain circumstances as a result of reference rate reform and provides additional expedients for different types of hedges, if certain criteria are met. The optional amendments were effective for all entities as of March 12, 2020, through December 31, 2022. We applied the optional expedients available under this ASU to our debt and derivative contract modifications related to LIBOR transition in the fourth quarter of 2020 as more fully described in the 2021 Annual Report. We have also elected the optional expedients to our loans as we incorporate fallback language into these agreements. In January 2021, the FASB issued ASU 2021-01, "Reference Rate Reform (Topic 848): Scope." The ASU allows certain derivative instruments to be modified to change the rate used for margining, discounting, or contract price alignment. An entity may elect to apply the optional amendments from March 12, 2020 to December 31, 2022. We adopted ASU 2021-01 on January 7, 2021 and the adoption did not have an impact on our consolidated financial position, results of operations or 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 (CECL). 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 (SEC) filers the ASU was to become effective in fiscal years beginning after December 15, 2020, including interim periods within those fiscal years, and early application is permitted. In October 2019, the FASB deferred the effective date of the ASU by two years to fiscal years beginning after December 15, 2022 for business entities that do not meet the definition of an SEC filer. CoBank has not and does not intend to early adopt this ASU prior to the required effective date of January 1, 2023. While we continue to develop our CECL models and process framework, we believe the ASU may result in a change in the allowance for credit losses given the change to estimated losses over the contractual life with an anticipated impact from longer duration portfolios, as well as the addition of an allowance for investment securities and other financial instruments. The amount of the increase or decrease, if any, will be impacted by the composition of our portfolios and credit

quality at the adoption date, as well as economic conditions and forecasts at that time. In addition, we are required to adopt certain new loan and allowance for credit losses disclosures upon adopting the new ASU.

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

Loans Outstanding

Loans outstanding by operating segment are shown below.

($ in Millions)

	June 30, 2022		December 31, 2021	
Agribusiness	$	**42,593**	$	38,094
Farm Credit Banking		**67,350**		65,632
Rural Infrastructure		**25,312**		24,803
Total	$	**135,255**	$	128,529

Allowance for Credit Losses

The following tables present the changes in the components of our allowance for credit losses and details of 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		Farm Credit Banking[1]		Rural Infrastructure		Total
June 30, 2022								
Allowance for Loan Losses								
Beginning Balance at January 1, 2022	$	499,085	$	-	$	151,605	$	650,690
Charge-offs		(4,540)		-		(19,000)		(23,540)
Recoveries		238		-		445		683
Provision for Loan Losses		79,000		-		26,000		105,000
Transfers to Reserve for Unfunded Commitments[2]		(2,599)		-		(119)		(2,718)
Ending Balance at June 30, 2022		571,184		-		158,931		730,115
Reserve for Unfunded Commitments								
Beginning Balance at January 1, 2022		87,912		-		18,236		106,148
Transfers from Allowance for Loan Losses[2]		2,599		-		119		2,718
Ending Balance at June 30, 2022		90,511		-		18,355		108,866
Allowance for Credit Losses	$	661,695	$	-	$	177,286	$	838,981
Allowance for Credit Losses								
Ending Balance, Allowance for Credit Losses Related to Loans and Unfunded Commitments:								
Individually Evaluated for Impairment	$	30,496	$	-	$	10,925	$	41,421
Collectively Evaluated for Impairment		631,199		-		166,361		797,560
Total	$	661,695	$	-	$	177,286	$	838,981
Loans								
Ending Balance for Loans and Related Accrued Interest:								
Individually Evaluated for Impairment	$	113,494	$	67,471,726	$	39,740	$	67,624,960
Collectively Evaluated for Impairment		42,621,200		-		25,351,811		67,973,011
Total	$	42,734,694	$	67,471,726	$	25,391,551	$	135,597,971

[1] As a result of a strong collateral position with respect to loans to Associations, along with the earnings, capital, portfolio diversification and loss reserves of Associations that serve as an additional layer of protection against losses, no allowance for credit losses is recorded in our Farm Credit Banking operating segment.

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

	Agribusiness	Farm Credit Banking[1]	Rural Infrastructure	Total
June 30, 2021				
Allowance for Loan Losses				
Beginning Balance at January 1, 2021	$ 489,424	$ -	$ 146,002	$ 635,426
Charge-offs	(3,025)	-	-	(3,025)
Recoveries	2,405	-	8,328	10,733
Provision for Loan Losses	45,900	-	9,100	55,000
Transfers to Reserve for Unfunded Commitments[2]	(3,964)	-	(733)	(4,697)
Ending Balance at June 30, 2021	530,740	-	162,697	693,437
Reserve for Unfunded Commitments				
Beginning Balance at January 1, 2021	80,917	-	15,852	96,769
Transfers from Allowance for Loan Losses[2]	3,964	-	733	4,697
Ending Balance at June 30, 2021	84,881	-	16,585	101,466
Allowance for Credit Losses	$ 615,621	$ -	$ 179,282	$ 794,903
Allowance for Credit Losses				
Ending Balance, Allowance for Credit Losses Related to Loans and Unfunded Commitments:				
Individually Evaluated for Impairment	$ 21,706	$ -	$ 12,300	$ 34,006
Collectively Evaluated for Impairment	593,915	-	166,982	760,897
Total	$ 615,621	$ -	$ 179,282	$ 794,903
Loans				
Ending Balance for Loans and Related Accrued Interest:				
Individually Evaluated for Impairment	$ 94,533	$ 60,527,956	$ 45,373	$ 60,667,862
Collectively Evaluated for Impairment	36,528,410	-	24,373,011	60,901,421
Total	$ 36,622,943	$ 60,527,956	$ 24,418,384	$ 121,569,283

[1] As a result of a strong collateral position with respect to loans to Associations, along with the earnings, capital, portfolio diversification and loss reserves of Associations that serve as an additional layer of protection against losses, no allowance for credit losses is recorded in our Farm Credit Banking 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.

June 30, 2022	Agribusiness Non-Guaranteed	Agribusiness Guaranteed	Farm Credit Banking	Rural Infrastructure	Total
Acceptable	**$ 39,060,973**	**$ 1,634,526**	**$ 65,924,643**	**$ 25,189,238**	**$ 131,809,380**
Special Mention	**1,188,987**	**-**	**1,547,083**	**103,338**	**2,839,408**
Substandard	**830,060**	**-**	**-**	**94,768**	**924,828**
Doubtful	**20,148**	**-**	**-**	**4,207**	**24,355**
Loss	**-**	**-**	**-**	**-**	**-**
Total	**$ 41,100,168**	**$ 1,634,526**	**$ 67,471,726**	**$ 25,391,551**	**$ 135,597,971**
December 31, 2021					
Acceptable	$ 34,823,345	$ 1,185,750	$ 64,188,986	$ 24,661,098	$ 124,859,179
Special Mention	1,381,925	-	1,528,088	101,482	3,011,495
Substandard	805,578	-	-	114,537	920,115
Doubtful	2,010	-	-	-	2,010
Loss	-	-	-	-	-
Total	$ 37,012,858	$ 1,185,750	$ 65,717,074	$ 24,877,117	$ 128,792,799

Aging Analysis

The following table presents an aging of past due loans and accrued interest.

June 30, 2022	Agribusiness Non-Guaranteed	Agribusiness Guaranteed	Farm Credit Banking	Rural Infrastructure	Total
30-89 Days Past Due	**$ 63,235**	**$ -**	**$ -**	**$ -**	**$ 63,235**
90 Days Past Due	**31,904**	**-**	**-**	**19,982**	**51,886**
Total Past Due	**$ 95,139**	**$ -**	**$ -**	**$ 19,982**	**$ 115,121**
Current	**41,005,029**	**1,634,526**	**67,471,726**	**25,371,569**	**135,482,850**
Total	**$ 41,100,168**	**$ 1,634,526**	**$ 67,471,726**	**$ 25,391,551**	**$ 135,597,971**
Accruing Loans 90 Days or More Past Due	**$ 19,531**	**$ -**	**$ -**	**$ -**	**$ 19,531**
December 31, 2021					
30-89 Days Past Due	$ 57,032	$ -	$ -	$ 1,219	$ 58,251
90 Days Past Due	20,091	-	-	19,982	40,073
Total Past Due	$ 77,123	$ -	$ -	$ 21,201	$ 98,324
Current	36,935,735	1,185,750	65,717,074	24,855,916	128,694,475
Total	$ 37,012,858	$ 1,185,750	$ 65,717,074	$ 24,877,117	$ 128,792,799
Accruing Loans 90 Days or More Past Due	$ 2,738	$ -	$ -	$ -	$ 2,738

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.

June 30, 2022	Agribusiness Non-Guaranteed	Agribusiness Guaranteed[1]	Farm Credit Banking[1]	Rural Infrastructure	Total
Nonaccrual Loans[2]	**$ 113,494**	**$ -**	**$ -**	**$ 39,740**	**$ 153,234**
Accruing Loans 90 Days or More Past Due	**19,531**	**-**	**-**	**-**	**19,531**
Accruing Restructured Loans	**5,518**	**-**	**-**	**-**	**5,518**
Total Impaired Loans	**$ 138,543**	**$ -**	**$ -**	**$ 39,740**	**$ 178,283**
December 31, 2021					
Nonaccrual Loans[2]	$ 73,944	$ -	$ -	$ 48,687	$ 122,631
Accruing Loans 90 Days or More Past Due	2,738	-	-	-	2,738
Accruing Restructured Loans	-	-	-	-	-
Total Impaired Loans	$ 76,682	$ -	$ -	$ 48,687	$ 125,369

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

[2] Included in nonaccrual loans at June 30, 2022 and December 31, 2021 were $5.6 million and $11.5 million, respectively, of loans that qualified as troubled debt restructurings.

The following table presents information on impaired loans and related amounts in the allowance for loan losses.

June 30, 2022	Agribusiness Non-Guaranteed	Agribusiness Guaranteed[(1)]	Farm Credit Banking[(1)]	Rural Infrastructure	Total
Impaired Loans With No Related Allowance for Loan Losses					
Carrying Amount	$ 57,353	$ -	$ -	$ 4,206	$ 61,559
Unpaid Principal	83,624	-	-	23,984	107,608
Average Balance	47,753	-	-	11,396	59,149
Interest Income Recognized	2,001	-	-	33	2,034
Impaired Loans With Related Allowance for Loan Losses					
Carrying Amount	81,190	-	-	35,534	116,724
Unpaid Principal	84,397	-	-	35,811	120,208
Allowance for Loan Losses	30,496	-	-	10,925	41,421
Average Balance	46,554	-	-	42,102	88,656
Interest Income Recognized	-	-	-	-	-
Total Impaired Loans					
Carrying Amount	138,543	-	-	39,740	178,283
Unpaid Principal	168,021	-	-	59,795	227,816
Allowance for Loan Losses	30,496	-	-	10,925	41,421
Average Balance	94,307	-	-	53,498	147,805
Interest Income Recognized	2,001	-	-	33	2,034
December 31, 2021					
Impaired Loans With No Related Allowance for Loan Losses					
Carrying Amount	$ 35,647	$ -	$ -	$ -	$ 35,647
Unpaid Principal	57,565	-	-	-	57,565
Average Balance	44,336	-	-	7,814	52,150
Interest Income Recognized	18,001	-	-	273	18,274
Impaired Loans With Related Allowance for Loan Losses					
Carrying Amount	41,035	-	-	48,687	89,722
Unpaid Principal	44,002	-	-	49,191	93,193
Allowance for Loan Losses	19,785	-	-	11,125	30,910
Average Balance	51,467	-	-	35,431	86,898
Interest Income Recognized	-	-	-	-	-
Total Impaired Loans					
Carrying Amount	76,682	-	-	48,687	125,369
Unpaid Principal	101,567	-	-	49,191	150,758
Allowance for Loan Losses	19,785	-	-	11,125	30,910
Average Balance	95,803	-	-	43,245	139,048
Interest Income Recognized	18,001	-	-	273	18,274

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

Commitments on Impaired Loans

There were $2.8 million in commitments available to be drawn by borrowers whose loans were classified as impaired at June 30, 2022.

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, interest rate reductions, and/or forgiveness of principal or interest. 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 our 2021 Annual Report. During the six months ended June 30, 2022 and 2021, there were no modifications that qualified as TDRs. Included in nonaccrual loans at June 30, 2022 and December 31, 2021 were $5.6 million and $11.5 million, respectively, of loans that qualified as TDRs.

Note 4 – Investment Securities, Federal Funds Sold and Other Overnight Funds

Investment Securities

A summary of the amortized cost and fair value of investment securities available-for-sale is as follows:

($ in Millions)

June 30, 2022	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. Treasury Debt	**$ 17,142**	**$ 7**	**$ (449)**	**$ 16,700**
U.S. Agency Debt	**2,048**	**1**	**(49)**	**2,000**
Residential Mortgage-Backed Securities (MBS):				
Ginnie Mae	**1,090**	**-**	**(110)**	**980**
U.S. Agency	**1,219**	**3**	**(51)**	**1,171**
Commercial MBS:				
U.S. Agency	**13,015**	**3**	**(592)**	**12,426**
Corporate Bonds	**495**	**-**	**(19)**	**476**
Asset-Backed and Other	**309**	**-**	**(3)**	**306**
Total	**$ 35,318**	**$ 14**	**$ (1,273)**	**$ 34,059**
December 31, 2021				
U.S. Treasury Debt	$ 15,531	$ 218	$ (33)	$ 15,716
U.S. Agency Debt	1,997	81	(1)	2,077
Residential MBS:				
Ginnie Mae	1,205	3	(8)	1,200
U.S. Agency	1,214	15	(9)	1,220
Commercial MBS:				
U.S. Agency	11,237	64	(76)	11,225
Corporate Bonds	361	22	-	383
Asset-Backed and Other	22	-	(1)	21
Total	$ 31,567	$ 403	$ (128)	$ 31,842

A summary of the contractual maturity, amortized cost, fair value and weighted average yield of investment securities by type at June 30, 2022 is as follows:

($ in Millions)

	Contractual Maturity				
June 30, 2022	In One Year or Less	One to Five Years	Five to Ten Years	After Ten Years	Total
U.S. Treasury Debt Securities					
Amortized Cost	$ 4,477	$ 9,948	$ 2,717	$ -	$ 17,142
Fair Value	4,469	9,725	2,506	-	16,700
Weighted Average Yield	1.72 %	1.82 %	1.63 %	- %	1.76 %
U.S. Agency Debt Securities					
Amortized Cost	$ 236	$ 1,315	$ 351	$ 146	$ 2,048
Fair Value	236	1,292	338	134	2,000
Weighted Average Yield	2.16 %	2.38 %	2.59 %	2.48 %	2.40 %
Ginnie Mae Residential MBS					
Amortized Cost	$ -	$ 1	$ 1	$ 1,088	$ 1,090
Fair Value	-	1	1	978	980
Weighted Average Yield	- %	2.07 %	1.93 %	1.62 %	1.63 %
U.S. Agency Residential MBS					
Amortized Cost	$ -	$ 3	$ 531	$ 685	$ 1,219
Fair Value	-	3	501	667	1,171
Weighted Average Yield	- %	1.80 %	2.00 %	2.04 %	2.02 %
U.S. Agency Commercial MBS					
Amortized Cost	$ 59	$ 2,163	$ 10,632	$ 161	$ 13,015
Fair Value	59	2,120	10,101	146	12,426
Weighted Average Yield	1.72 %	1.90 %	1.55 %	0.99 %	1.60 %
Corporate Bonds					
Amortized Cost	$ 10	$ 243	$ 242	$ -	$ 495
Fair Value	10	238	228	-	476
Weighted Average Yield	3.63 %	3.99 %	4.00 %	- %	3.99 %
Asset-Backed and Other					
Amortized Cost	$ 43	$ 255	$ -	$ 11	$ 309
Fair Value	42	254	-	10	306
Weighted Average Yield	1.35 %	1.47 %	- %	5.50 %	1.60 %
Total					
Amortized Cost	$ 4,825	$ 13,928	$ 14,474	$ 2,091	$ 35,318
Fair Value	4,816	13,633	13,675	1,935	34,059
Weighted Average Yield	1.74 %	1.91 %	1.66 %	1.77 %	1.78 %

While the substantial majority of our residential mortgage-backed securities (MBS) have contractual maturities in excess of 10 years, expected maturities for these securities are shorter than contractual maturities because borrowers have the right to call or prepay obligations with or without penalties.

The following table shows the fair value and gross unrealized losses for investments in a loss position aggregated by investment category, and the length of time the securities have been in a continuous unrealized loss position at June 30, 2022 and December 31, 2021. The continuous loss position is based on the date the impairment first occurred.

	Less Than 12 Months		Greater Than 12 Months	
($ in Millions)	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
June 30, 2022				
U.S. Treasury Debt	**$ 11,624**	**$ (424)**	**$ 386**	**$ (25)**
U.S. Agency Debt	**1,476**	**(49)**	**104**	**-**
Residential MBS:				
Ginnie Mae	**934**	**(110)**	**-**	**-**
U.S. Agency	**888**	**(43)**	**64**	**(8)**
Commercial MBS:				
U.S. Agency	**8,830**	**(403)**	**2,638**	**(189)**
Corporate Bonds	**463**	**(19)**	**-**	**-**
Asset-Backed and Other	**195**	**(2)**	**3**	**(1)**
Total	**$ 24,410**	**$ (1,050)**	**$ 3,195**	**$ (223)**
December 31, 2021				
U.S. Treasury Debt	$ 3,838	$ (33)	$ -	$ -
U.S. Agency Debt	41	(1)	174	-
Residential MBS:				
Ginnie Mae	992	(8)	-	-
U.S. Agency	186	(3)	77	(6)
Commercial MBS:				
U.S. Agency	2,480	(11)	2,890	(65)
Asset-Backed and Other	5	-	9	(1)
Total	$ 7,542	$ (56)	$ 3,150	$ (72)

As of June 30, 2022, 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, nor is it 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.

Federal Funds Sold and Other Overnight Funds

Federal funds sold transactions involve lending excess cash reserve balances on a short-term basis, generally overnight. Other overnight funds include deposits with commercial banks and reverse repurchase agreements with the Federal Reserve Bank. In each of these transactions, funds are returned to the Bank the following day and earn interest overnight. Such investments are reported at fair value, which is generally their face value. We held $855.0 million and $500.0 million of overnight bank deposits at June 30, 2022 and December 31, 2021, respectively. In addition, we held $10.0 billion and $5.0 billion of reverse repurchase agreements at June 30, 2022 and December 31, 2021, respectively.

Note 5 – Changes in Accumulated Other Comprehensive Income (Loss)

Changes in accumulated other comprehensive income (loss) for the six months ended June 30, 2022 and 2021 are presented in the following table.

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

	Unrealized Gains (Losses) on Investment Securities Non-OTTI	Unrealized Gains (Losses) on Interest Rate Swaps and Other Derivatives	Net Pension Adjustment	Total
Balance at January 1, 2022	**$ 232,314**	**$ (35,702)**	**$ (41,204)**	**$ 155,408**
Other comprehensive (loss) income before reclassifications	**(1,378,318)**	**56,872**	**-**	**(1,321,446)**
Amounts reclassified from accumulated other comprehensive income (loss) to net income	**(1,098)**	**3,667**	**2,259**	**4,828**
Net current-period other comprehensive (loss) income	**(1,379,416)**	**60,539**	**2,259**	**(1,316,618)**
Balance at June 30, 2022	**$ (1,147,102)**	**$ 24,837**	**$ (38,945)**	**$ (1,161,210)**
Balance at January 1, 2021	$ 799,538	$ (43,353)	$ (68,243)	$ 687,942
Other comprehensive loss before reclassifications	(300,493)	(2,254)	-	(302,747)
Amounts reclassified from accumulated other comprehensive income (loss) to net income	(1,715)	6,137	4,010	8,432
Net current-period other comprehensive (loss) income	(302,208)	3,883	4,010	(294,315)
Balance at June 30, 2021	$ 497,330	$ (39,470)	$ (64,233)	$ 393,627

[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 loss.

The following table presents the effect of reclassifications from accumulated other comprehensive income (loss) to net income for the six-month periods ended June 30, 2022 and 2021.

Reclassifications from Accumulated Other Comprehensive Income (Loss) to Net Income

For the Six Months Ended June 30, 2022	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	**$ 1,451**	Noninterest Income - Other, Net
Tax effect	**(353)**	Provision for Income Taxes
Unrealized gains (losses) on interest rate swaps and other derivatives:		
Interest rate contracts	**(4,818)**	Interest Expense
Foreign exchange contracts	**1,425**	Interest Income
Tax effect	**(274)**	Provision for Income Taxes
Pension and other benefit plans:		
Net actuarial loss	**(2,685)**	Operating Expenses - Employee Compensation
Prior service cost	**(298)**	Operating Expenses - Employee Compensation
Tax effect	**724**	Provision for Income Taxes
Total reclassifications	**$ (4,828)**	
For the Six Months Ended June 30, 2021		
Unrealized gains (losses) on available-for-sale investment securities:		
Sales gains and losses	$ 1,677	Noninterest Income - Other, Net
Tax effect	38	Provision for Income Taxes
Unrealized gains (losses) on interest rate swaps and other derivatives:		
Interest rate contracts	(7,700)	Interest Expense
Foreign exchange contracts	1,929	Interest Income
Tax effect	(366)	Provision for Income Taxes
Pension and other benefit plans:		
Net actuarial loss	(4,810)	Operating Expenses - Employee Compensation
Prior service cost	(487)	Operating Expenses - Employee Compensation
Tax effect	1,287	Provision for Income Taxes
Total reclassifications	$ (8,432)	

Note 6 – Derivatives and Hedging Activities

Risk Management Objectives and Strategies

We maintain an overall interest rate risk management strategy that incorporates the use of interest rate swaps and other derivatives 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, fixed-rate for floating-rate swaps and floating-rate for floating-rate swaps with payment obligations tied to specific indices. In the course of managing risk in our investment and loan portfolios, we also periodically hedge cap and floor risk embedded within our floating-rate investments and loans by entering into derivative transactions. 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 of derivatives at June 30, 2022 and related activity for the first six months of 2022 are shown in the following table.

Activity in the Notional Amounts of Derivatives

($ in Millions)	Swaps	Caps / Floors	Spots / Forwards	Total
December 31, 2021	**$ 54,939**	**$ 4,530**	**$ 179**	**$ 59,648**
Additions /Accretion	**68,277**	**117**	**804**	**69,198**
Maturities /Amortization	**(50,015)**	**(557)**	**(847)**	**(51,419)**
Terminations	**(2,663)**	**-**	**-**	**(2,663)**
June 30, 2022	**$ 70,538**	**$ 4,090**	**$ 136**	**$ 74,764**

The notional amounts of derivatives at June 30, 2021 and related activity for the first six months of 2021 are shown in the following table.

Activity in the Notional Amounts of Derivatives

($ in Millions)	Swaps	Caps / Floors	Spots / Forwards	Total
December 31, 2020	$ 46,666	$ 6,435	$ 157	$ 53,258
Additions /Accretion	40,367	181	863	41,411
Maturities /Amortization	(39,191)	(42)	(790)	(40,023)
Terminations	(686)	-	-	(686)
June 30, 2021	$ 47,156	$ 6,574	$ 230	$ 53,960

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 comprehensive 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.

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 for our equity positioning strategy and low interest rate hedging strategy. For fair value hedges, the amount of hedge ineffectiveness is recognized as net interest income in current period earnings.

Cash Flow Hedges

Our cash flow hedges include interest rate caps and floors to hedge cap and floor risk embedded within a portion of our floating-rate investment securities and loans. Interest rate caps and interest rate floors are an integral part of our interest rate hedging strategies. 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. The interest rate floors hedge cash flows from floating-rate loans. If market index rates underlying our floating rate loans decline below strike levels, we receive cash flows on the derivative. 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 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. For cash flow hedges in which the forecasted transaction is not probable of occurring, the amounts reclassified from accumulated other comprehensive income (loss) are reflected in current period earnings. At June 30, 2022, we expect that $9.7 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 14 years.

Derivatives Not Designated as Hedges

Derivative agreements with our customers and the related offsetting derivative agreements with counterparties as well as our short-term interest rate swaps indexed to the Secured Overnight Financing Rate (SOFR) are not designated as hedging instruments and do not receive hedge accounting treatment. Changes in the fair value of customer-related derivatives are recognized immediately as noninterest income/expense in current period earnings. Changes in the fair value of short-term SOFR interest rate swaps are recognized immediately as interest 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. When the fair value of a derivative contract is negative, the counterparty is exposed to us.

Derivative transactions with our customers are typically secured through our loan agreements. As of June 30, 2022 and December 31, 2021, the notional amount of derivatives with our customers totaled $12.6 billion and $13.1 billion, respectively.

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 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 margin and variation margin or settlement payments that are required to be posted by participants. FCMs prequalify counterparties to all cleared swaps, set exposure limits for each counterparty and collect initial margin and variation margin or settlement payments daily for changes in the value of cleared derivatives. The margin and settlement payments collected from both parties to the swap protect against credit risk in the event of a counterparty default. As of June 30, 2022 and December 31, 2021, the notional amount of our cleared derivatives was $50.6 billion and $36.8 billion, respectively. Initial margin and settlement payments totaling $145.2 million and $118.6 million, respectively, as of June 30, 2022 and $110.7 million and $50.1 million, respectively, as of December 31, 2021 were held by our CCP for our cleared derivatives.

Our remaining 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 credit risk with these counterparties due to the timing of daily margining activities. As of June 30, 2022 and December 31, 2021, the notional amount of derivatives with our non-customer counterparties, excluding cleared derivatives, totaled $9.4 billion and $9.8 billion, respectively.

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 June 30, 2022 our non-customer counterparties had posted $378.9 million in cash as collateral with us.

The fair value of our derivatives to all of our dealer counterparties was an asset at June 30, 2022 and was offset by the collateral we received from our dealer counterparties. At December 31, 2021, the fair value of our derivatives to all of our dealer counterparties was a liability and was offset by the collateral we posted to our dealer counterparties. The amount of losses related to derivatives we are exposed to in the event of nonperformance by dealer counterparties to our derivative positions is mitigated by collateral posted or held by us.

Hedge Terminations

During the six months ended June 30, 2022, we terminated $1.1 billion in notional value of interest rate swaps which hedged the fair value of certain of our fixed-rate debt. The swaps were previously accounted for as fair value hedges and the $34.4 million of hedged item basis adjustment upon termination will be amortized to earnings over the remaining life of the original hedging relationships. We did not terminate any derivatives designated as fair value hedges or cash flow hedges during the first six months of 2021.

We terminated interest rate swaps with customers and offsetting dealer counterparties totaling notional value of $1.5 billion and $686.0 million during the first six months of 2022 and 2021, respectively. Proceeds from the customer terminations were offset by payments for the offsetting dealer terminations.

A summary of the impact of interest rate swaps and other derivatives on our condensed consolidated balance sheets as of June 30, 2022 and December 31, 2021 is shown in the following tables.

Fair Value of Derivatives

	Fair Value of Derivative Assets[1]	Fair Value of Derivative Liabilities[2]
As of June 30, 2022		
Derivatives Designated as Hedging Instruments		
Interest Rate Contracts	**$ 84,094**	**$ 366,274**
Foreign Exchange Contracts	**2,016**	**201**
Total Derivatives Designated as Hedging Instruments	**$ 86,110**	**$ 366,475**
Derivatives Not Designated as Hedging Instruments		
Interest Rate Contracts	**$ 594,011**	**$ 530,329**
Foreign Exchange Contracts	**8**	**7**
Total Derivatives Not Designated as Hedging Instruments	**$ 594,019**	**$ 530,336**
Settlement Payments	**-**	**(118,583)**
Total Derivatives	**$ 680,129**	**$ 778,228**
As of December 31, 2021		
Derivatives Designated as Hedging Instruments		
Interest Rate Contracts	$ 141,904	$ 36,745
Foreign Exchange Contracts	891	615
Total Derivatives Designated as Hedging Instruments	$ 142,795	$ 37,360
Derivatives Not Designated as Hedging Instruments		
Interest Rate Contracts	$ 393,873	$ 334,223
Foreign Exchange Contracts	102	101
Total Derivatives Not Designated as Hedging Instruments	$ 393,975	$ 334,324
Settlement Payments	(50,116)	-
Total Derivatives	$ 486,654	$ 371,684

[1] These assets make up the interest rate swaps and other derivatives in the condensed consolidated balance sheets as of June 30, 2022 and December 31, 2021.

[2] These liabilities make up the interest rate swaps and other derivatives in the condensed consolidated balance sheets as of June 30, 2022 and December 31, 2021.

A summary of the impact of interest rate swaps and other derivatives on our condensed consolidated statements of income and comprehensive income for the six months ended June 30, 2022 and 2021 is shown below.

Effect of Fair Value and Cash Flow Hedge Accounting on the Condensed Consolidated Statement of Income

	Interest Income Loans	Interest Income Investments	Total Interest Income	Interest Expense	Net Interest Income
Six Months Ended June 30, 2022					
Total Amount of Line Items Presented in Condensed Consolidated Statement of Income	**$ 1,485,099**	**$ 271,754**	**$ 1,756,853**	**$ (764,695)**	**$ 992,158**
Gain (Loss) on Fair Value Hedge Relationships:					
Interest Rate Contracts:					
Recognized on Derivatives	**$ -**	**$ -**	**$ -**	**$ (445,003)**	**$ (445,003)**
Recognized on Hedged Items	**-**	**-**	**-**	**446,562**	**446,562**
Net Income (Expense) Recognized on Fair Value Hedges	**$ -**	**$ -**	**$ -**	**$ 1,559**	**$ 1,559**
Gain (Loss) on Cash Flow Hedge Relationships:					
Interest Rate Contracts:					
Amount of Gain (Loss) Reclassified from Accumulated Other Comprehensive Income (Loss) into Income (Loss)	**$ 1,568**	**$ -**	**$ 1,568**	**$ (6,386)**	**$ (4,818)**
Foreign Exchange Contracts:					
Amount of Gain Reclassified from Accumulated Other Comprehensive Income (Loss) into Income (Loss)(1)	**1,425**	**-**	**1,425**	**-**	**1,425**
Amount Excluded from Effectiveness Testing Recognized in Earnings Based on an Amortization Approach	**132**	**-**	**132**	**-**	**132**
Net Income (Expense) Recognized on Cash Flow Hedges	**$ 3,125**	**$ -**	**$ 3,125**	**$ (6,386)**	**$ (3,261)**
Six Months Ended June 30, 2021					
Total Amount of Line Items Presented in Condensed Consolidated Statement of Income	$ 1,250,528	$ 224,931	$ 1,475,459	$ (585,392)	$ 890,067
Gain (Loss) on Fair Value Hedge Relationships:					
Interest Rate Contracts:					
Recognized on Derivatives	$ -	$ -	$ -	$ (124,940)	$ (124,940)
Recognized on Hedged Items	-	-	-	124,305	124,305
Net Income (Expense) Recognized on Fair Value Hedges	$ -	$ -	$ -	$ (635)	$ (635)
Gain (Loss) on Cash Flow Hedge Relationships:					
Interest Rate Contracts:					
Amount of Gain (Loss) Reclassified from Accumulated Other Comprehensive Income (Loss) into Income (Loss)	$ (716)	$ -	$ (716)	$ (6,984)	$ (7,700)
Foreign Exchange Contracts:					
Amount of Gain (Loss) Reclassified from Accumulated Other Comprehensive Income (Loss) into Income (Loss)(2)	1,929	-	1,929	-	1,929
Amount Excluded from Effectiveness Testing Recognized in Earnings Based on an Amortization Approach	158	-	158	-	158
Net Income (Expense) Recognized on Cash Flow Hedges	$ 1,371	$ -	$ 1,371	$ (6,984)	$ (5,613)

(1) Fully offset by a $1,425 loss on foreign currency denominated loans (hedged items) which is also located in interest income - loans in the condensed consolidated statement of income for the six months ended June 30, 2022.

(2) Fully offset by a $1,929 loss on foreign currency denominated loans (hedged items) which is also located in interest income - loans in the condensed consolidated statement of income for the six months ended June 30, 2021.

Effect of Cash Flow Hedge Accounting on the Condensed Consolidated Balance Sheet		
	Amount of Gain (Loss) Recognized in Accumulated Other Comprehensive Income (Loss) on Derivatives	
Six Months Ended June 30,	**2022**	**2021**
Interest Rate Contracts	**$ 55,708**	$ (3,814)
Foreign Exchange Contracts	**1,539**	2,061
Total	**$ 57,247**	$ (1,753)

Effect of Derivatives Not Designated as Hedging Relationships on the Condensed Consolidated Statements of Income		
	Net Amount of Gain (Loss) Recognized	
Six Months Ended June 30,	**2022**	**2021**
Interest Rate Contracts	**$ 3,251** (1)	$ 1,943 (2)
Foreign Exchange Contracts	**-**	-
Total	**$ 3,251**	$ 1,943

(1) Includes $3,791 gain on short-term derivatives indexed to SOFR and recognized in interest expense and $540 loss on derivatives with customers and related offsetting derivatives with counterparties including credit valuation adjustments and recognized in noninterest income/expense for the three months ended June 30, 2022.

(2) Includes $220 loss on short-term derivatives indexed to SOFR and recognized in interest expense and $2,163 gain on derivatives with customers and related offsetting derivatives with counterparties including credit valuation adjustments and recognized in noninterest income/expense for the three months ended June 30, 2021.

A summary of the cumulative basis adjustment for fair value hedging relationships included in the carrying amount of hedged liabilities as of June 30, 2022 and December 31, 2021 is shown in the following table.

Derivatives in Fair Value Hedging Relationships			
		Cumulative Basis Adjustment Included in the Carrying Amount of Hedged Liabilities	
	Carrying Amount of Hedged Liabilities	Hedged Items Currently Designated	Hedged Items No Longer Designated
As of June 30, 2022			
Bonds and Notes	**$ 22,849,278**	**$ (365,101)**	**$ (31,020)**
As of December 31, 2021			
Bonds and Notes	$ 18,030,275	$ 81,461	$ -

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 are collateralized through loan agreements. Notwithstanding collateral and netting provisions, our derivative assets and liabilities are not offset in the accompanying condensed consolidated balance sheets. The amount of collateral received or pledged is calculated on a net basis, by counterparty.

The following table summarizes derivative assets and liabilities, related accrued interest and amounts of collateral exchanged pursuant to our agreements.

Offsetting of Derivatives and Collateral

	Gross Amounts of Assets/ Liabilities Presented in the Condensed Consolidated Balance Sheets	Amounts Not Offset In the Condensed Consolidated Balance Sheets		Net Amount
		Cash Collateral Received/Pledged[1]	Investments Securities Received/Pledged as Collateral	
As of June 30, 2022				
Assets:				
Interest Rate Swaps and Other Derivatives:				
Dealer	**$ 341,567**	**$ (378,910)**	**$ -**	**$ (37,343)**
Customer	**55,982**	**-**	**-**	**55,982**
Clearinghouse	**282,580**	**-**	**-**	**282,580**
Accrued Interest Receivable on Derivative Contracts	**33,108**	**-**	**-**	**33,108**
Liabilities:				
Interest Rate Swaps and Other Derivatives:				
Dealer	**3,104**	**-**	**-**	**3,104**
Customer	**476,637**	**-**	**-**	**476,637**
Clearinghouse	**298,487**	**-**	**(145,217)**	**153,270**
Accrued Interest Payable on Derivative Contracts	**10,630**	**-**	**-**	**10,630**
As of December 31, 2021				
Assets:				
Interest Rate Swaps and Other Derivatives:				
Dealer	$ 57,212	$ (1,270)	$ -	$ 55,942
Customer	307,358	-	-	307,358
Clearinghouse	122,084	-	-	122,084
Accrued Interest Receivable on Derivative Contracts	44,157	-	-	44,157
Liabilities:				
Interest Rate Swaps and Other Derivatives:				
Dealer	143,740	(81,120)	-	62,620
Customer	68,628	-	-	68,628
Clearinghouse	159,316	-	(110,723)	48,594
Accrued Interest Payable on Derivative Contracts	6,484	-	-	6,484

(1) Cash collateral received is recognized in the condensed consolidated balance sheets whereas investment securities received are not recognized in the condensed consolidated balance sheets.

Note 7 – Fair Value Measurements

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 independent sources. 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 June 30, 2022 consist of assets held in a trust fund related to deferred compensation and nonqualified retirement plans. The trust fund 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 June 30, 2022 include our derivative contracts, collateral balances related to derivative contracts, federal funds sold and other overnight funds, U.S. Treasury and agency debt investment securities, Ginnie Mae MBS, corporate bonds, and the substantial majority of agency MBS and asset-backed securities (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 interest rate swaps and other derivatives 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 and discounting (primarily the Overnight Index Swap rate for collateralized non-customer derivative contracts, SOFR for collateralized cleared derivative contracts and the USD LIBOR/swap curve for non-collateralized customer derivative contracts), 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
Investment Securities	Third-Party Pricing Service	Prepayment Rate
		Lifetime Default Rate
		Loss Severity
		Benchmark Yield Curve
		Quoted Prices
Interest Rate Swaps and Other Derivatives	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 June 30, 2022 include 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 Level 3 agency MBS is estimated through a third-party pricing service that uses valuation models to estimate current market prices. Fair value for our Level 3 ABS is calculated internally using third-party models. 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 June 30, 2022 also include $81.1 million of loans originally measured at cost, which were written down to fair value as a result of impairment. The valuation of these assets is based on either the fair value of the underlying collateral, if the loan is collateral dependent, or the present value of expected future cash flows. Such valuations 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 'Assets and Liabilities Measured at Fair Value on a Recurring Basis' tables on pages 48 and 49 because they are not measured on a recurring basis.

Our Level 3 liabilities at June 30, 2022 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.

No transfers into or out of Level 3 assets or liabilities occurred during the six months ended June 30, 2022 and 2021.

The following table presents quantitative information about Level 3 fair value measurements as of June 30, 2022.

Quantitative Information About Valuation Techniques and Unobservable Inputs to Level 3 Fair Value Measurements				
($ in Millions)	Fair Value	Valuation Technique	Unobservable Inputs	Range (Weighted Average)
Assets				
Investment Securities:				
U.S. Agency MBS	$ 64	Third-Party Pricing Service	Prepayment Rate	*
			Lifetime Default Rate	*
			Loss Severity	*
Other (included in Asset-Backed)	19	Discounted Cash Flow	Prepayment Rate	0% (0%)
Impaired Loans	81	Appraisal /	Income/Expense Data	**
		Discounted Cash Flow	Comparable Sales	**
			Replacement Cost	**
Liabilities				
Standby Letters of Credit	16	Discounted Cash Flow	Mark-to-Market Spread	0.1-1.3% (0.9%)

* 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 June 30, 2022 and December 31, 2021 for each of the fair value hierarchy levels.

Assets and Liabilities Measured at Fair Value on a Recurring Basis				
June 30, 2022				
($ in Millions)	Level 1	Level 2	Level 3	Total
Assets				
Federal Funds Sold and Other Overnight Funds	$ -	$ 10,855	$ -	$ 10,855
Investment Securities:				
U.S. Treasury Debt	-	16,700	-	16,700
U.S. Agency Debt	-	2,000	-	2,000
Residential MBS:				
Ginnie Mae	-	980	-	980
U.S. Agency	-	1,107	64	1,171
Commercial MBS:				
U.S. Agency	-	12,426	-	12,426
Corporate Bonds	-	476	-	476
Asset-Backed and Other	-	287	19	306
Interest Rate Swaps and Other Derivatives	-	680	-	680
Assets Held in Trust (included in Other Assets)	112	-	-	112
Total Assets	$ 112	$ 45,511	$ 83	$ 45,706
Liabilities				
Interest Rate Swaps and Other Derivatives	$ -	$ 778	$ -	$ 778
Standby Letters of Credit (included in Other Liabilities)	-	-	16	16
Total Liabilities	$ -	$ 778	$ 16	$ 794

Assets and Liabilities Measured at Fair Value on a Recurring Basis				
December 31, 2021				
($ in Millions)	**Level 1**	**Level 2**	**Level 3**	**Total**
Assets				
Federal Funds Sold and Other Overnight Funds	$ -	$ 5,500	$ -	$ 5,500
Investment Securities:				
U.S. Treasury Debt	-	15,716	-	15,716
U.S. Agency Debt	-	2,077	-	2,077
Residential MBS:				
Ginnie Mae	-	1,200	-	1,200
U.S. Agency	-	1,148	72	1,220
Commercial MBS:				
U.S. Agency	-	11,225	-	11,225
Corporate Bonds	-	383	-	383
Asset-Backed and Other	-	1	20	21
Interest Rate Swaps and Other Derivatives	-	487	-	487
Assets Held in Trust (included in Other Assets)	121	-	-	121
Collateral Assets (included in Other Assets)	-	81	-	81
Total Assets	$ 121	$ 37,818	$ 92	$ 38,031
Liabilities				
Interest Rate Swaps and Other Derivatives	$ -	$ 372	$ -	$ 372
Standby Letters of Credit (included in Other Liabilities)	-	-	16	16
Total Liabilities	$ -	$ 372	$ 16	$ 388

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**	**Asset-Backed Securities and Other**	**Standby Letters of Credit**
Balance at December 31, 2021	**$ 72**	**$ 20**	**$ 16**
Total Gains or Losses (Realized/Unrealized)			
Included in Other Comprehensive Income	**(1)**	**(2)**	**-**
Purchases	**-**	**10**	**-**
Issuances	**-**	**-**	**8**
Settlements	**(7)**	**(9)**	**(8)**
Balance at June 30, 2022	**$ 64**	**$ 19**	**$ 16**
Balance at December 31, 2020	$ 84	$ 13	$ 13
Total Gains or Losses (Realized/Unrealized):			
Included in Other Comprehensive Income	-	(1)	-
Purchases	-	4	-
Issuances	-	-	8
Settlements	(7)	-	(5)
Accretion	1	-	-
Balance at June 30, 2021	$ 78	$ 16	$ 16

Estimated Fair Value of Certain Other Financial Instruments

The following table presents the estimated fair value of financial instruments that are recorded in the condensed consolidated balance sheets at cost, as well as certain off-balance sheet financial instruments, as of June 30, 2022 and December 31, 2021.

($ in Millions)

	June 30, 2022			December 31, 2021		
	Carrying Amount	**Estimated Fair Value**	**Fair Value Hierarchy**	**Carrying Amount**	**Estimated Fair Value**	**Fair Value Hierarchy**
Financial Assets:						
Net Loans	**$ 134,525**	**$ 130,848**	**Level 3**	$ 127,878	$ 129,847	Level 3
Financial Liabilities:						
Bonds and Notes	**$ 168,345**	**$ 164,892**	**Level 3**	$ 154,950	$ 156,357	Level 3
Off-Balance Sheet Financial Instruments:						
Commitments to Extend Credit	**$ -**	**$ (123)**	**Level 3**	$ -	$ (130)	Level 3

Commitments to Extend Credit

The fair value of commitments to extend credit is estimated using a discounted cash flow method by applying a risk-adjusted spread percentage to these obligations.

Note 8 – Employee Benefit Plans

We have employer-funded, qualified defined benefit pension plans, which are noncontributory and cover employees hired prior to January 1, 2007. We also have noncontributory, unfunded nonqualified supplemental executive retirement plans covering certain senior officers and specified other senior managers, as well as a noncontributory, unfunded nonqualified executive retirement plan covering certain former senior officers. We have a 401(k) retirement 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. 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.

All retirement-eligible employees 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 these other postretirement health care benefits. Participant contributions are adjusted annually.

We contributed $1.3 million to our funded qualified defined benefit pension plans during the six months ended June 30, 2022, and anticipate that we will contribute approximately $1.6 million more to such plans during the remainder of 2022. We expect to contribute a total of $0.3 million, net of collected retiree premiums, to our other postretirement benefit plans in 2022. We have not made any contributions to our trust funds related to our nonqualified retirement plans during the six months ended June 30, 2022. Our actual contributions could differ from the estimates noted above.

Note 9 – Commitments and Contingent Liabilities

Due to the often volatile seasonal borrowing requirements of our Agribusiness customers, which are impacted by changing commodity prices, farmer delivery patterns, weather, environmental and other factors, we provide a significant amount of revolving loan commitments. We also provide revolving loan commitments to other customers including those in the electric distribution and power supply industries. At June 30, 2022, commitments to extend credit and commercial letters of credit were $49.2 billion and $93.9 million, respectively.

Under the Farm Credit Act, we are primarily liable for the portion of outstanding Federal Farm Credit Banks Consolidated Systemwide bonds, medium term notes and discount notes (collectively referred to as Systemwide Debt Securities) issued by CoBank. Additionally, we are contingently liable by statute for the outstanding Systemwide Debt Securities issued by the other System banks. Total Systemwide Debt Securities of the System were $374.8 billion at June 30, 2022.

There are several mechanisms in place affecting exposure to statutory joint and several liabilities. System banks are statutorily required to maintain eligible unencumbered 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 June 30, 2022, the aggregated assets of the Insurance Fund totaled $6.3 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. In such cases, there may be an exposure to loss in excess of any amounts accrued. For other matters, where a loss is not probable or the amount of the loss is not estimable, we will not accrue legal reserves.

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 the consolidated financial position, consolidated results of operations or consolidated cash flows of the Bank. 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, consolidated results of operations or consolidated cash flows.

Note 10 – Leased Property

We have operating leases for our corporate headquarters, banking center offices, certain equipment and vehicles. We determine if an arrangement is a lease and the related lease classification at inception. Right-of-use (ROU) assets and lease liabilities are recognized based on the present value of the future minimum lease payments over the lease term at commencement date. If available, we use the implicit rate in the lease in determining the present value of future payments. We use our incremental borrowing rate based on the information available at commencement date when the implicit rate in the lease is not available. ROU assets and lease liabilities are included in accrued interest receivable and other assets and accrued interest payable and other liabilities, respectively, in our condensed consolidated balance sheets. These operating lease rentals are expensed on a straight-line basis over the life of the lease beginning on the date we take possession of the property. We determine the lease term by assuming the exercise of renewal and termination options that are reasonably certain. Our leases have remaining minimum lease terms of 1 year to 10 years, some of which include options to extend the leases for up to an additional 15 years. Rent expense for leases is reflected in occupancy and equipment expense in the accompanying condensed consolidated statements of income.

Additionally, the depreciable life of leased assets and leasehold improvements is limited by the expected lease term.

Other information related to our operating leases is as follows:

Operating Leases				
		June 30, 2022		December 31, 2021
Right-of-Use Assets	$	**59,397**	$	62,521
Lease Liabilities		**63,129**		66,217
Six Months Ended June 30,		**2022**		**2021**
Operating Lease Cost	$	**7,984**	$	7,106
Weighted Average Remaining Lease Term		**8 years**		9 years
Weighted Average Discount Rate		**2.98%**		2.96%

Future minimum lease payments under non-cancellable operating leases as of June 30, 2022 were as follows:

Future Minimum Lease Payments		
Year Ending June 30,		
2023	$	9,808
2024		8,828
2025		8,654
2026		8,536
2027		8,517
Thereafter		27,498
Total future minimum lease payments	$	71,841
Less imputed interest		8,712
Lease liabilities reported as of June 30, 2022	$	63,129

Note 11 – Segment Financial Information

We conduct our business through three operating segments: Agribusiness, Farm Credit Banking and Rural Infrastructure.

The accompanying tables present condensed disaggregated information for the operating 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 attributed to the operating segments. 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 22 percent of these loans are guaranteed by the U.S. government.

For the six-month periods ended June 30, 2022 and 2021, no customer made up 10 percent or more of our gross or net interest income.

Segment Financial Information

For the Three Months Ended June 30, 2022

	Agribusiness	Farm Credit Banking	Rural Infrastructure	Total CoBank
Results of Operations ($ in Thousands):				
Net Interest Income	**$ 294,985**	**$ 78,111**	**$ 131,451**	**$ 504,547**
Provision for Loan Losses	**29,000**	**-**	**30,000**	**59,000**
Noninterest Income	**52,357**	**2,577**	**28,262**	**83,196**
Operating Expenses	**91,738**	**12,282**	**43,276**	**147,296**
Provision for Income Taxes	**19,859**	**-**	**8,525**	**28,384**
Net Income	**$ 206,745**	**$ 68,406**	**$ 77,912**	**$ 353,063**

For the Three Months Ended June 30, 2021

	Agribusiness	Farm Credit Banking	Rural Infrastructure	Total CoBank
Results of Operations ($ in Thousands):				
Net Interest Income	$ 248,510	$ 72,001	$ 126,507	$ 447,018
(Loan Loss Reversal) Provision for Loan Losses	(900)	-	900	-
Noninterest Income (Expense)	42,066	(3,380)	24,955	63,641
Operating Expenses	75,096	12,520	34,035	121,651
Provision for Income Taxes	20,251	-	10,473	30,724
Net Income	$ 196,129	$ 56,101	$ 106,054	$ 358,284

Segment Financial Information

For the Six Months Ended June 30, 2022

	Agribusiness	Farm Credit Banking	Rural Infrastructure	Total CoBank
Results of Operations ($ in Thousands):				
Net Interest Income	$ 581,293	$ 154,403	$ 256,462	$ 992,158
Provision for Loan Losses	79,000	-	26,000	105,000
Noninterest Income	105,439	4,594	61,619	171,652
Operating Expenses	167,212	23,533	77,166	267,911
Provision for Income Taxes	33,936	-	26,661	60,597
Net Income	$ 406,584	$ 135,464	$ 188,254	$ 730,302
Selected Financial Information at June 30, 2022 ($ in Millions):				
Loans	$ 42,593	$ 67,350	$ 25,312	$ 135,255
Less: Allowance for Loan Losses	(571)	-	(159)	(730)
Net Loans	$ 42,022	$ 67,350	$ 25,153	$ 134,525
Accrued Interest Receivable and Other Assets	664	336	778	1,778
Total Segment Assets	$ 42,686	$ 67,686	$ 25,931	$ 136,303
Federal Funds Sold and Other Overnight Funds				10,855
Investment Securities				34,059
Other Assets				562
Total Assets	$ 42,686	$ 67,686	$ 25,931	$ 181,779

For the Six Months Ended June 30, 2021

	Agribusiness	Farm Credit Banking	Rural Infrastructure	Total CoBank
Results of Operations ($ in Thousands):				
Net Interest Income	$ 497,735	$ 142,060	$ 250,272	$ 890,067
Provision for Loan Losses	45,900	-	9,100	55,000
Noninterest Income	88,288	5,814	52,367	146,469
Operating Expenses	145,008	22,698	66,548	234,254
Provision for Income Taxes	34,128	-	30,839	64,967
Net Income	$ 360,987	$ 125,176	$ 196,152	$ 682,315
Selected Financial Information at June 30, 2021 ($ in Millions):				
Loans	$ 36,522	$ 60,448	$ 24,346	$ 121,316
Less: Allowance for Loan Losses	(531)	-	(162)	(693)
Net Loans	$ 35,991	$ 60,448	$ 24,184	$ 120,623
Accrued Interest Receivable and Other Assets	501	239	673	1,413
Total Segment Assets	$ 36,492	$ 60,687	$ 24,857	$ 122,036
Federal Funds Sold and Other Overnight Funds				2,100
Investment Securities				32,500
Other Assets				1,150
Total Assets	$ 36,492	$ 60,687	$ 24,857	$ 157,786

Note 12 – 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 June 30, 2022, we have 19 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 and other purposes to full- and part-time farmers. Associations may also make loans to, among others, processing and marketing entities, farm-related businesses, and rural residents for home purchase and improvements. 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.

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 condensed consolidated financial statements. We separately publish certain unaudited combined financial information of the District, including a condensed statement of condition and statement of income, which can be found on our website at www.cobank.com.

On October 28, 2021, Farm Credit of Western Oklahoma, ACA and Farm Credit of Enid, ACA approved a letter of intent to pursue a merger. Subject to various approvals, the target date for the merger to become effective is November 1, 2022.

Effective January 1, 2022, Farm Credit East, ACA and Yankee Farm Credit, ACA merged and are doing business as Farm Credit East, ACA.

On February 2, 2022, Northwest Farm Credit Services, ACA entered into a non-binding letter of intent to pursue a merger with Farm Credit West, ACA. Subject to various approvals, the target date for the merger to become effective is no earlier than January 1, 2023.

On May 4, 2022, American AgCredit, ACA entered into a non-binding letter of intent to pursue a merger with Farm Credit of New Mexico, ACA. Subject to various approvals, the target date for the merger is July 1, 2023, or as soon as practicable thereafter.

Note 13 – Subsequent Events

We have evaluated subsequent events through August 8, 2022, which is the date the financial statements were issued and determined that there were no other events requiring disclosure.

Regulatory Capital Disclosures

CoBank, ACB

(Unaudited) ($ in Thousands, Except as Noted)

Overview

These quarterly regulatory capital disclosures (set forth in Title 12 of the Code of Federal Regulations parts 628.61 through 628.63) should be read in conjunction with our 2021 Annual Report to Shareholders, which includes additional qualitative disclosures. Unless otherwise noted, there have been no material changes to the qualitative disclosures contained in our 2021 Annual Report.

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

Disclosure Requirement	Description	Q2 2022 Quarterly Report Reference
Scope of Application	Corporate entity and consolidated subsidiaries	Page 56
Capital Structure	Regulatory capital components	Pages 56 through 57
Capital Adequacy	Risk-weighted assets	Pages 58 through 59
	Regulatory capital ratios	Page 15
Capital Buffers	Quantitative disclosures	Pages 15, 58
Credit Risk	Summary of exposures	Page 59
	Geographic distribution	Page 60 through 61
	Industry distribution	Page 61
	Contractual maturity	Page 62
	Impaired loans and allowance for credit losses	Note 3
Counterparty Credit Risk-Related Exposures	Counterparty exposures	Note 6, Page 62
Credit Risk Mitigation	Exposures with reduced capital requirements	Pages 7, 62 through 63
Securitization	Securitization exposures	Notes 4 and 7, Pages 11 through 14, 63 through 64
Equities	General description	Page 64
Interest Rate Risk for Non-Trading Activities	Interest rate sensitivity	Note 6, Pages 64 through 65

Scope of Application

The disclosures contained herein relate to CoBank, ACB and its wholly-owned subsidiaries, CoBank, FCB and Farm Credit Leasing Services Corporation (FCL), collectively hereinafter referred to as CoBank or the Bank. These entities are also consolidated in our financial statements prepared in accordance with accounting principles generally accepted in the United States of America (GAAP).

Capital Structure

Common equity tier 1, which includes common stock and retained earnings, is the largest component of the Bank's capital structure. Preferred stock is included in tier 1 regulatory capital, subject to certain limitations. In addition, our allowance for credit losses is included in tier 2 regulatory capital, subject to certain limitations.

The following table provides a summary of the Bank's regulatory capital components.

Regulatory Capital Components		
Three Months Ended June 30, 2022		**Average Balance**
Common Equity Tier 1 Capital (CET1)		
Common Cooperative Equities:		
Statutory Minimum Purchased Borrower Stock	$	2,454
Other Required Member Purchased Stock		1,006,835
Allocated Equities:		
Qualified Allocated Equities Subject to Retirement		2,847,034
Nonqualified Allocated Equities Subject to Retirement		-
Nonqualified Allocated Equities Not Subject to Retirement		3,284,986
Unallocated Retained Earnings		3,129,772
Paid-In Capital		-
Regulatory Adjustments and Deductions Made to CET1		82,977
Total CET1	$	10,354,058
Tier 1 Capital		
Non-Cumulative Perpetual Preferred Stock	$	1,667,810
Regulatory Adjustments and Deductions Made to Tier 1 Capital		-
Total Additional Tier 1 Capital		1,667,810
Total Tier 1 Capital	$	12,021,868
Tier 2 Capital		
Common Cooperative Equities Not Included in CET1	$	-
Tier 2 Capital Elements:		
Allowance for Credit Losses		815,484
Regulatory Adjustments and Deductions Made to Tier 2 Capital		-
Total Tier 2 Capital	$	815,484
Total Capital	$	12,837,352

Capital Adequacy and Capital Buffers

Our risk-adjusted regulatory capital ratios are calculated by dividing the relevant total capital elements (e.g. Total CET1) by risk-weighted assets. The following table presents information on the components of risk-weighted assets included in the calculation of regulatory capital ratios.

Risk-Weighted Assets

Three Months Ended June 30, 2022		Average Balance	
On-Balance Sheet Assets:			
Exposures to Sovereign Entities	$	-	
Exposures to Supranational Entities and Multilateral Development Banks		205,020	
Exposures to Government-Sponsored Enterprises		16,422,231	(1)
Exposures to Depository Institutions, Foreign Banks, and Credit Unions		4,420,221	(2)
Exposures to Public Sector Entities		88,747	
Corporate Exposures, including Borrower Loans and Leases		59,863,963	
Residential Mortgage Exposures		-	
Past Due and Nonaccrual Exposures		231,143	
Securitization Exposures		176,791	
Equity Investment Exposures		77,329	
Other Assets		994,928	
Off-Balance Sheet:			
Unfunded Loan Commitments		9,981,635	
Equity Investment Commitments		39,891	
Over-the-Counter Derivatives		112,518	
Cleared Derivative Transactions		1,205	
Letters of Credit		1,591,798	
Reverse Repurchase Transactions		-	
Unsettled Transactions		48,178	
Total Risk-Weighted Assets Before Additions (Deductions)	$	94,255,598	
Additions:			
Intra-System Equity Investments	$	118,492	
Other Regulatory Adjustments and Additions		(228,144)	
Deductions:			
Regulatory Adjustments and Deductions Made to CET1		82,977	
Regulatory Adjustments and Deductions Made to Additional Tier 1 Capital		-	
Regulatory Adjustments and Deductions Made to Tier 2 Capital		-	
Total Risk-Weighted Assets	$	94,228,923	(3)

(1) Includes exposures to Farm Credit System entities.

(2) Also includes exposures to other financial institutions that are risk weighted as exposures to U.S. depository institutions and credit unions.

(3) For purposes of calculating the permanent capital ratio, average risk-weighted assets for the three months ended June 30, 2022 was $93.5 billion.

As shown on page 15 of this quarterly report, the Bank exceeded all capital requirements as of June 30, 2022 to which it was subject, including applicable capital buffers. Because capital exceeded the buffer requirements, the Bank currently has no limitations on its distributions and discretionary bonus payments. The aggregate amount of eligible retained income was $530.0 million as of June 30, 2022.

Credit Risk

The following table summarizes credit exposures related to loans, unfunded loan commitments, investment securities, letters of credit, equity investments and reverse repurchase transactions. The contractual amount of a commitment to extend credit represents our maximum exposure to credit loss in the event of default by the borrower, if the borrower were to fully draw against the commitment.

Major Credit Exposures - Lending and Investments

Three Months Ended June 30, 2022	Average Balance	End of Period
Loans Outstanding	$ 139,187,964	$ 135,254,779
Unfunded Loan Commitments	38,627,728	49,103,658
Investment Securities	34,669,006	34,059,060
Letters of Credit	1,966,429	1,910,100
Equity Investments Outstanding	76,820	80,849
Equity Investment Commitments	94,075	90,645
Reverse Repurchase Transactions	33,290	56,485

The table below shows derivatives by underlying exposure type, segregated between contracts traded in over-the-counter markets and those cleared through a central clearinghouse. Gross positive fair value represents the credit exposure attributed to derivatives before the mitigating effects of counterparty collateral.

Major Credit Exposures - Derivatives

Three Months Ended and As of June 30, 2022	Average Balance		End of Period	
	Notional Amount	Gross Positive Value	Notional Amount	Gross Positive Value
Over-the-Counter Derivatives:				
Interest Rate Contracts	$ 21,687,696	$ 405,960	$ 21,859,117	$ 395,525
Foreign Exchange Contracts	90,074	1,545	135,509	2,024
Total Over-the-Counter Derivatives	21,777,770	407,506	21,994,626	397,549
Cleared Derivatives:				
Interest Rate Contracts	42,344,605	254,372	52,768,911	282,580
Total Derivatives	$ 64,122,375	$ 661,878	$ 74,763,537	$ 680,129

The following table illustrates the geographic distribution of our total loan commitments as of June 30, 2022.

Total Lending Portfolio - Geographic Distribution

As of June 30, 2022	Wholesale Loans[1]	Commercial Loans
California	47 %	7 %
Washington	17	1
Connecticut	12	1
Texas	4 [2]	7
Kansas	5	5
Illinois	-	7
Iowa	-	6
Colorado	3	3
Minnesota	-	5
Oklahoma	4	2
Ohio	-	4
Nebraska	-	3
Latin America	-	3
Missouri	-	3
Asia	-	3
New York	-	3
Georgia	-	3
Wisconsin	-	3
Florida	-	3
New Mexico	2	-
Mississippi	1 [2]	2
Indiana	-	2
North Dakota	-	2
North Carolina	-	2
South Dakota	-	2
Alabama	1 [2]	1
Maryland	1 [2]	-
Michigan	-	2
Europe, Middle East, and Africa	-	2
Arkansas	-	1
Utah	1	-
Massachusetts	-	1
Virginia	-	1
Tennessee	-	1
South Carolina	-	1
Arizona	-	1
Other	2 [2]	7
Total	100 %	100 %

[1] The distribution of wholesale loan commitments to Associations is based on the state in which the Association is headquartered and may not be representative of their underlying loan portfolio.

[2] Includes participation interests in loan commitments to nonaffiliated Associations.

The following table illustrates the geographic distribution of our impaired loans as of June 30, 2022.

Impaired Loans - Geographic Distribution	
As of June 30, 2022	**Share[1]**
California	15 %
Colorado	15
Washington	13
Texas	12
North Carolina	11
New York	10
Iowa	5
Oregon	2
New Jersey	2
Minnesota	2
Florida	2
Nebraska	2
Arizona	1
Other	8
Total	100 %

[1] The distribution of impaired loans is based on the state in which the borrower is headquartered and may not be representative of their operations and business activities.

The following table illustrates the primary business/commodity distribution of our total loan commitments as of June 30, 2022.

Total Lending Portfolio - Distribution by Primary Business/Commodity	
As of June 30, 2022	**Share**
Affliated Associations	42 %
Farm Supply and Grain Marketing	15
Electric Distribution	8
Agricultural Export Finance	4
Nonaffliated Entities	4
Generation and Transmission	3
Regulated Utilities	3
Fruits, Nuts, Vegetables	3
Fish, Livestock, Poultry	2
Lease Financing (through FCL)	2
Forest Products	2
Dairy	2
Water and Waste	1
Local Exchange Carriers	1
Independent Power Producers	1
Cable	1
Wireless	1
Competitive Local Telephone Exchange Carriers	1
Other	4
Total	100 %

The following table presents a summary of the remaining contractual maturity of our loans, unfunded loan commitments, investment securities, letters of credit, derivatives and equity investments at June 30, 2022.

($ in Millions)

Contractual Maturity

As of June 30, 2022	In One Year or Less	One to Five Years	After Five Years	Total
Loans Outstanding	$ 86,560	$ 21,754	$ 26,941	$ 135,255
Unfunded Loan Commitments	31,075	9,806	8,223	49,104
Investment Securities	4,816	13,633	15,610	34,059
Letters of Credit	439	1,046	425	1,910
Derivatives (Notional Amounts)	40,159	22,148	12,457	74,764
Equity Investments Outstanding	20	49	12	81
Equity Investment Commitments	23	54	14	91

Refer to Note 3 in the condensed consolidated financial statements in this quarterly report for amounts of impaired loans (with or without related allowance for credit loss), loans in nonaccrual status and greater than 90 days past due, loans past due greater than 90 days and still accruing interest, the allowance for credit losses, charge-offs, and changes in components of our allowance for credit losses.

Counterparty Credit Risk

Refer to Note 6 in the condensed consolidated financial statements in this quarterly report for information related to interest rate swaps and other derivatives utilized by CoBank including a summary of the fair value of derivative assets and liabilities, collateral held and net unsecured exposure.

Credit Risk Mitigation

CoBank uses various strategies to mitigate credit risk in its lending, leasing, investing and derivatives activities. The disclosures in this section relate solely to credit risk mitigation instruments and activities that reduce regulatory capital requirements, which include certain guarantees in our lending and investment portfolios, and collateral or settlement payments in our derivatives portfolio.

Loans

Our Agricultural Export Finance Division (AEFD) utilizes the U.S. government-sponsored export loan guarantee General Sales Manager (GSM) program for a portion of its export financing. Refer to the Operating Segment Financial Review section beginning on page 6 of this quarterly report for additional discussion related to our AEFD.

As discussed on page 11 of this quarterly report, our loans to affiliated Associations are collateralized by substantially all of the Association assets. In addition, the earnings, capital and loan loss reserves of the Associations provide additional layers of protection against losses in their respective retail loan portfolios. Lower regulatory capital requirements are commensurate with the lower risk profile associated with our loans to affiliated Associations.

Investments

Credit risk in our investment portfolio is mitigated by investing primarily in securities issued or guaranteed by the U.S. government or a government-sponsored enterprise (U.S. Agency). Credit risk in our investment portfolio primarily exists in the 2 percent of our investments securities that are not guaranteed by the U.S. government or a U.S. Agency, which currently include asset-backed securities (ABS) and corporate bonds of midstream energy companies. Our ABS and midstream energy corporate bonds collectively total $782.5 million of our total investment portfolio as of June 30, 2022. Credit risk in our investment portfolio also arises in a portion of our short-term investments, which include our overnight bank deposits and federal funds sold instruments which are transacted with highly-rated commercial bank counterparties. We held

overnight bank deposits totaling $855.0 million at June 30, 2022. The remainder of our short-term investments include reverse repurchase agreements with the Federal Reserve Bank totaling $10.0 billion at June 30, 2022 and have minimal credit risk. Corporate bonds are risk-weighted based on the corporate counterparty and ABS exposures are captured in the Securitization section below.

The following table summarizes the loan and investment exposures whose capital requirements are reduced as a result of credit risk mitigants.

Loan and Investment Exposures

Three Months Ended June 30, 2022	Average Exposure Amount	Risk Weighted Exposures
Guaranteed Loans	$ 1,452,902	$ -
Loans to Farm Credit System entities	66,915,699	13,383,140
Investment Securities Issued or Guaranteed by U.S. Government	20,081,629	-
Investment Securities Issued or Guaranteed by a U.S. Agency	15,195,456	3,039,091
Total	$ 103,645,686	$ 16,422,231

Derivatives

As described in Note 6 in the condensed consolidated financial statements in this quarterly report, transactions with dealers in our over-the-counter derivative portfolio, as well as those cleared through a clearinghouse, are collateralized or otherwise secured through settlement payments. As a result, at June 30, 2022, we held financial collateral totaling $378.9 million that offset derivative exposure for purposes of calculating risk-weighted assets. Total risk-weighted assets for our over-the-counter derivatives and cleared derivative transactions amounted to $112.5 million and $1.2 million, respectively, for the three-month period ended June 30, 2022.

Securitization

The Bank participates in securitizations as investors through the purchase of MBS and ABS, which are included in our investment portfolio. As of June 30, 2022, CoBank did not retain any resecuritization exposures. The following disclosures relate only to ABS not guaranteed by the U.S. government or a U.S. Agency. The average balance of these unguaranteed securities was $176.8 million for the three-month period ended June 30, 2022.

Below is a summary of our securitization exposures held during the three months ended June 30, 2022 by exposure type and categorized by risk-weight band.

Securitization Exposures

Three Months Ended June 30, 2022	Average Exposure Amount	Risk Weighted Asset (Under Gross Up Approach)
Asset-Backed Securities	$ 176,760	$ 176,791
Total	$ 176,760	$ 176,791

Securitization Risk-Weight Bands

Three Months Ended June 30, 2022	Average Exposure Amount	Risk Weighted Asset (Under Gross Up Approach)
Gross-Up Risk-Weight Bands:		
100% - 125%	$ 176,760	$ 176,791
>125% and <1,250%	-	-
1,250%	-	-
Total	$ 176,760	$ 176,791

For the three-month period ended June 30, 2022, we did not hold any off-balance sheet securitization exposures nor were any securitization exposures deducted from capital.

Refer to Note 4 in the condensed consolidated financial statements in this quarterly report for additional information related to purchases and sales of securitization exposures as well as the amortized cost, unrealized gains (losses) and fair value of ABS held in our investment portfolio. In addition, Note 7 of the quarterly report describes the methods and assumptions, including any changes as applicable, applied in valuing our ABS.

Equities

The Bank has certain exposure to equity investments. We make investments and are a limited partner in certain Rural Business Investment Companies (RBICs). These RBICs focus on small and middle market companies that create jobs and promote commerce in rural America. The Bank also holds investments in various unincorporated business entities (UBEs), as defined by FCA regulation. We hold these investments to acquire and manage unusual or complex collateral associated with loan workouts as well as to make mission-related investments. Our investments in RBICs and UBEs are not publicly traded and are accounted for under the equity method. We also hold an equity investment as a result of the bankruptcy of a former customer which is accounted for at cost less any impairment as there is no readily determinable fair value. There have been no sales or liquidations of these investments during the three months ended June 30, 2022.

Interest Rate Risk

Interest rate risk, also referred to as market risk, is the risk that changes in interest rates may adversely affect operating results and financial condition. 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.

This analysis estimates the effect of immediate and sustained parallel positive (up) and negative (down) shifts in the yield curve (called “shocks”) of down 300, down 200, down 100, up 100, up 200 and up 300 basis points. Pursuant to regulation and our Board policy, when the three-month Treasury rate is below 4 percent, as it was for the period presented, we perform a shock equal to one-half the three-month Treasury rate.

The following tables summarize the impact of interest rate changes on net interest income and the market value of equity.

Net Interest Income at Risk	
June 30, 2022	
Scenario:	
- 300 bp shock	n/a
- 200 bp shock	n/a
- 100 bp shock	n/a
- 85 bp shock	1.9 %
+ 100 bp shock	(1.3)
+ 200 bp shock	(2.1)
+ 300 bp shock	(3.0)

Market Value of Equity at Risk	
June 30, 2022	
Scenario:	
- 300 bp shock	n/a
- 200 bp shock	n/a
- 100 bp shock	n/a
- 85 bp shock	5.1 %
+ 100 bp shock	(5.6)
+ 200 bp shock	(11.0)
+ 300 bp shock	(16.0)

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 quarterly 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 the board of directors, management and other personnel - designed to provide reasonable assurance regarding the achievement of objectives in reliability of financial reporting, the effectiveness and efficiency of operations and compliance with applicable laws and regulations. We continually assess the adequacy of our internal control over financial reporting and enhance our controls in response to internal control assessments and internal and external audit and regulatory requirements and 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.

Certification Required by Farm Credit Administration Regulations

The undersigned have reviewed this quarterly report which has been prepared in accordance with all applicable statutory or regulatory requirements and certify that the information contained herein is true, accurate, and complete to the best of our knowledge and belief.

Signed this 8th day of August, 2022.

/s/ KEVIN A. STILL

Kevin A. Still
Chair of the Board

/s/ THOMAS E. HALVERSON

Thomas E. Halverson
President and Chief Executive Officer

/s/ DAVID P. BURLAGE

David P. Burlage
Chief Financial Officer

CERTIFICATION

I, Thomas E. Halverson, President and 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 quarterly 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 subsidiary, 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 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.

/s/ THOMAS E. HALVERSON

Thomas E. Halverson
President and Chief Executive Officer

Dated: August 8, 2022

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 quarterly 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 subsidiary, 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 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.

/s/ DAVID P. BURLAGE

David P. Burlage
Chief Financial Officer

Dated: August 8, 2022

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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

International

Singapore Representative Office
350 Orchard Road
#17-07 Shaw House
Singapore 238868
(65) 6534-526

* *Farm Credit Leasing office within this CoBank location*

CoBank's 2022 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. Copies of financial reports of our affiliated Associations and the System are available on their respective websites. CoBank's 2022 Quarterly and Annual Reports to Shareholders will be available on approximately May 10, 2022, August 8, 2022, November 9, 2022, and March 1, 2023 (Annual Report).