UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended August 31, 2019

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from ______ to ______

Commission File Number: 1-7102

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
(Exact name of registrant as specified in its charter)

District of Columbia	**52-0891669**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

20701 Cooperative Way, Dulles, Virginia, 20166

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: **(703) 467-1800**

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbol(s)	Name of Each Exchange on Which Registered
7.35% Collateral Trust Bonds, due 2026	NRUC 26	New York Stock Exchange
5.50% Subordinated Notes, due 2064	NRUC	New York Stock Exchange

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☒ Smaller reporting company☐ Emerging growth company☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transaction period for complying with any new or revised financial accounting standards provided pursuant to Section13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

TABLE OF CONTENTS

INDEX OF MD&A TABLES

PART I—FINANCIAL INFORMATION

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A")

FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q (this "Report") contains certain statements that are considered "forward-looking statements" within the Securities Act of 1933, as amended, and the Securities Exchange Act of 1934, as amended. Forward-looking statements, which are based on certain assumptions and describe our future plans, strategies and expectations, are generally identified by our use of words such as "intend," "plan," "may," "should," "will," "project," "estimate," "anticipate," "believe," "expect," "continue," "potential," "opportunity" and similar expressions, whether in the negative or affirmative. All statements about future expectations or projections, including statements about loan volume, the appropriateness of the allowance for loan losses, operating income and expenses, leverage and debt-to-equity ratios, borrower financial performance, impaired loans, and sources and uses of liquidity, are forward-looking statements. Although we believe that the expectations reflected in our forward-looking statements are based on reasonable assumptions, actual results and performance may differ materially from our forward-looking statements due to several factors. Factors that could cause future results to vary from our forward-looking statements include, but are not limited to, general economic conditions, legislative changes including those that could affect our tax status, governmental monetary and fiscal policies, demand for our loan products, lending competition, changes in the quality or composition of our loan portfolio, changes in our ability to access external financing, changes in the credit ratings on our debt, valuation of collateral supporting impaired loans, charges associated with our operation or disposition of foreclosed assets, technological changes within the rural electric utility industry, regulatory and economic conditions in the rural electric industry, nonperformance of counterparties to our derivative agreements, the costs and effects of legal or governmental proceedings involving us or our members and the factors listed and described under "Item 1A. Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended May 31, 2019 ("2019 Form 10-K"). Except as required by law, we undertake no obligation to update or publicly release any revisions to forward-looking statements to reflect events, circumstances or changes in expectations after the date on which the statement is made.

INTRODUCTION

National Rural Utilities Cooperative Finance Corporation ("CFC") is a member-owned cooperative association incorporated under the laws of the District of Columbia in April 1969. CFC's principal purpose is to provide its members with financing to supplement the loan programs of the Rural Utilities Service ("RUS") of the United States Department of Agriculture ("USDA"). CFC makes loans to its rural electric members so they can acquire, construct and operate electric distribution systems, generation and transmission ("power supply") systems and related facilities. CFC also provides its members with credit enhancements in the form of letters of credit and guarantees of debt obligations. As a cooperative, CFC is owned by and exclusively serves its membership, which consists of not-for-profit entities or subsidiaries or affiliates of not-for-profit entities. CFC is exempt from federal income taxes under Section 501(c)(4) of the Internal Revenue Code. As a member-owned cooperative, CFC's objective is not to maximize profit, but rather to offer members cost-based financial products and services. CFC funds its activities primarily through a combination of public and private issuances of debt securities, member investments and retained equity. As a Section 501(c)(4) tax-exempt, member-owned cooperative, we cannot issue equity securities.

Our financial statements include the consolidated accounts of CFC, National Cooperative Services Corporation ("NCSC"), Rural Telephone Finance Cooperative ("RTFC") and subsidiaries created and controlled by CFC to hold foreclosed assets resulting from defaulted loans or bankruptcy. NCSC is a taxable member-owned cooperative that may provide financing to members of CFC, government or quasi-government entities which own electric utility systems that meet the Rural Electrification Act definition of "rural" and for-profit and nonprofit entities that are owned, operated or controlled by, or provide significant benefits to certain members of CFC. RTFC is a taxable Subchapter T cooperative association that provides financing for its rural telecommunications members and their affiliates. CFC did not hold, and did not have any subsidiaries or other entities that held, foreclosed assets as of August 31, 2019 or May 31, 2019. See "Item 1. Business—Overview" in our 2019 Form 10-K for additional information on the business activities of each of these entities. Unless stated otherwise, references to "we," "our" or "us" relate to CFC and its consolidated entities. All references to members within this document include members, associates and affiliates of CFC and its consolidated entities.

Our principal operations are organized for management reporting purposes into three business segments: CFC, NCSC and RTFC. Loans to members totaled $26,300 million as of August 31, 2019, of which 96% was attributable to CFC. We generated total revenue, which consists of net interest income and fee and other income, of $88 million for the three months ended August 31, 2019 ("current quarter"), compared with $72 million for the same prior-year period. The substantial majority of our total revenue is attributable to CFC. We provide information on the financial performance of each of our business segments in "Note 13—Business Segments."

Management monitors a variety of key indicators to evaluate our business performance. The following MD&A is intended to provide the reader with an understanding of our consolidated results of operations, financial condition and liquidity by discussing the factors influencing changes from period to period and the key measures used by management to evaluate performance, such as net interest income, net interest yield, loan growth, debt-to-equity ratio, credit quality metrics and also non-GAAP measures. The MD&A section is provided as a supplement to, and should be read in conjunction with our unaudited condensed consolidated financial statements and related notes in this Report, our audited consolidated financial statements and related notes in our 2019 Form 10-K and additional information contained in our 2019 Form 10-K, including the risk factors discussed under "Part I—Item 1A. Risk Factors," as well as any risk factors identified under "Part II—Item 1A. Risk Factors" in this Report.

SUMMARY OF SELECTED FINANCIAL DATA

Table 1 provides a summary of consolidated selected financial data for the three months ended August 31, 2019 and 2018, and as of August 31, 2019 and May 31, 2019. In addition to financial measures determined in accordance with generally accepted accounting principles in the United States ("GAAP"), management also evaluates performance based on certain non-GAAP measures and metrics, which we refer to as "adjusted" measures. Certain financial covenant provisions in our credit agreements are also based on non-GAAP financial measures. Our key non-GAAP financial measures are adjusted net income, adjusted net interest income, adjusted interest expense, adjusted net interest yield, adjusted times interest earned ratio ("adjusted TIER") and adjusted debt-to-equity ratio. The most comparable GAAP measures are net income, net interest income, interest expense, net interest yield, TIER and debt-to-equity ratio, respectively. The primary adjustments we make to calculate these non-GAAP measures consist of (i) adjusting interest expense and net interest income to include the impact of net periodic derivative cash settlements expense; (ii) adjusting net income, total liabilities and total equity to exclude the non-cash impact of the accounting for derivative financial instruments; (iii) adjusting total liabilities to exclude the amount that funds CFC member loans guaranteed by RUS, subordinated deferrable debt and members' subordinated certificates; and (iv) adjusting total equity to include subordinated deferrable debt and members' subordinated certificates and exclude cumulative derivative forward value gains and losses and accumulated other comprehensive income ("AOCI"). We believe our non-GAAP adjusted measures, which are not a substitute for GAAP and may not be consistent with similarly titled non-GAAP measures used by other companies, provide meaningful information and are useful to investors because management evaluates performance based on these metrics, and certain financial covenants in our committed bank revolving line of credit agreements and debt indentures are based on adjusted measures. See "Non-GAAP Financial Measures" for a detailed reconciliation of these adjusted measures to the most comparable GAAP measures.

Table 1: Summary of Selected Financial Data[1]

(Dollars in thousands)	Three Months Ended August 31, 2019	2018	Change
Statement of operations:			
Interest income	$ **290,015**	$ 278,491	4%
Interest expense	**(213,271)**	(210,231)	1
Net interest income	**76,744**	68,260	12
Fee and other income[1]	**10,941**	3,911	180
Total revenue	**87,685**	72,171	21
Benefit (provision) for loan losses	**(30)**	109	**
Derivative gains (losses)[2]	**(395,725)**	7,183	**
Unrealized gains (losses) on equity securities[1]	**1,620**	(726)	**
Operating expenses[3]	**(25,329)**	(23,205)	9
Other non-interest (expense) income	**7,179**	(7,494)	**
Income (loss) before income taxes	**(324,600)**	48,038	**
Income tax benefit (expense)	**521**	(60)	**
Net income (loss)	$ **(324,079)**	$ 47,978	**
Adjusted operational financial measures			
Adjusted interest expense[4]	$ **(224,314)**	$ (223,060)	1
Adjusted net interest income[4]	**65,701**	55,431	19
Adjusted net income[4]	**60,603**	27,966	117
Selected ratios			
Fixed-charge coverage ratio/TIER[5]	**(0.52)**	1.23	(175) bps
Adjusted TIER[4]	**1.27**	1.13	14
Net interest yield[6]	**1.14%**	1.04%	10
Adjusted net interest yield[4][7]	**0.97**	0.85	12
Net charge-off rate[8]	**0.00**	0.00	—

	August 31, 2019	May 31, 2019	Change
Balance sheet			
Cash, cash equivalents and restricted cash	**$ 240,188**	$ 186,204	29%
Investment securities	**633,497**	652,977	(3)
Loans to members[9]	**26,299,838**	25,916,904	1
Allowance for loan losses	**(17,565)**	(17,535)	—
Loans to members, net	**26,282,273**	25,899,369	1
Total assets	**27,578,756**	27,124,372	2
Short-term borrowings	**4,027,645**	3,607,726	12
Long-term debt	**19,094,236**	19,210,793	(1)
Subordinated deferrable debt	**985,981**	986,020	—
Members' subordinated certificates	**1,356,485**	1,357,129	—
Total debt outstanding	**25,464,347**	25,161,668	1
Total liabilities	**26,660,328**	25,820,490	3
Total equity	**918,428**	1,303,882	(30)
Guarantees[10]	**801,327**	837,435	(4)
Selected ratios period end			
Allowance coverage ratio[11]	**0.07%**	0.07%	— bps
Debt-to-equity ratio[12]	**29.03**	19.80	923
Adjusted debt-to-equity ratio[4]	**5.84**	5.73	11

** Calculation of percentage change is not meaningful.

(1)Certain reclassifications have been made to prior periods to conform to the current period presentation.

(2)Consists of interest rate swap cash settlements income (expense) and forward value gains (losses). Derivative cash settlement amounts represent net periodic contractual interest accruals related to derivatives not designated for hedge accounting. Derivative forward value gains (losses) represent changes in fair value during the period, excluding net periodic contractual interest accruals, related to derivatives not designated for hedge accounting and amounts reclassified into income related to the cumulative transition adjustment recorded in accumulated other comprehensive income as of June 1, 2001, as a result of the adoption of the derivative accounting guidance that required derivatives to be reported at fair value on the balance sheet.

(3)Consists of salaries and employee benefits and the other general and administrative expenses components of non-interest expense, each of which are presented separately on our condensed consolidated statements of operations.

(4)See "Non-GAAP Financial Measures" for details on the calculation of these non-GAAP adjusted measures and the reconciliation to the most comparable GAAP measures.

(5)Calculated based on net income (loss) plus interest expense for the period divided by interest expense for the period. The fixed-charge coverage ratios and TIER were the same during each period presented because we did not have any capitalized interest during these periods.

(6)Calculated based on annualized net interest income for the period divided by average interest-earning assets for the period.

(7)Calculated based on annualized adjusted net interest income for the period divided by average interest-earning assets for the period.

(8)Calculated based on annualized net charge-offs (recoveries) for the period divided by average total outstanding loans for the period.

(9)Consists of the outstanding principal balance of member loans plus unamortized deferred loan origination costs, which totaled $11 million as of both August 31, 2019 and May 31, 2019.

(10)Reflects the total amount of member obligations for which CFC has guaranteed payment to a third party as of the end of each period. This amount represents our maximum exposure to loss, which significantly exceeds the guarantee liability recorded on our consolidated balance sheets. See "Note 11 —Guarantees" for additional information.

(11)Calculated based on the allowance for loan losses at period end divided by total outstanding loans at period end.

(12)Calculated based on total liabilities at period end divided by total equity at period end.

EXECUTIVE SUMMARY

Our primary objective as a member-owned cooperative lender is to provide cost-based financial products to our rural electric members while maintaining a sound financial position required for investment-grade credit ratings on our debt instruments. Our objective is not to maximize profit; therefore, the rates we charge our member-borrowers reflect our funding costs plus a spread to cover our operating expenses, a provision for loan losses and earnings sufficient to achieve interest coverage to meet our financial objectives. Our goal is to earn an annual minimum adjusted TIER of 1.10 and to maintain an adjusted debt-to-equity ratio at approximately or below 6.00-to-1.

We are subject to period-to-period volatility in our reported GAAP results due to changes in market conditions and differences in the way our financial assets and liabilities are accounted for under GAAP. Our financial assets and liabilities expose us to interest-rate risk. We use derivatives, primarily interest rate swaps, as part of our strategy in managing this risk. Our derivatives are intended to economically hedge and manage the interest-rate sensitivity mismatch between our financial assets and liabilities. We are required under GAAP to carry derivatives at fair value on our consolidated balance sheet; however, the financial assets and liabilities for which we use derivatives to economically hedge are carried at amortized cost. Changes in interest rates and the shape of the swap curve result in periodic fluctuations in the fair value of our derivatives, which may cause volatility in our earnings because we do not apply hedge accounting for our interest rate swaps. As a result, the mark-to-market changes in our interest rate swaps are recorded in earnings. Because our derivative portfolio consists of a higher proportion of pay-fixed swaps than receive-fixed swaps, we generally record derivative losses when interest rates decline and derivative gains when interest rates rise. This earnings volatility generally is not indicative of the underlying economics of our business, as the derivative forward fair value gains or losses recorded each period may or may not be realized over time, depending on the terms of our derivative instruments and future changes in market conditions that impact the periodic cash settlement amounts of our interest rate swaps. As such, management uses our adjusted non-GAAP results to evaluate our operating performance. Our adjusted results include realized net periodic interest rate swap settlement amounts but exclude the impact of unrealized forward fair value gains and losses. Our financial debt covenants are also based on our non-GAAP adjusted results, as the forward fair value gains and losses related to our interest rate swaps do not affect our cash flows, liquidity or ability to service our debt.

Financial Performance

Reported Results

We reported a net loss of $324 million for the current quarter, which resulted in a negative TIER of 0.52. In comparison, we reported net income of $48 million and a TIER of 1.23 for the same prior-year quarter. The significant variance between our reported results for the current quarter and the same prior-year period was primarily attributable to mark-to-market changes in the fair value of our derivative instruments. Our debt-to-equity ratio increased to 29.03 as of August 31, 2019, from 19.80 as of May 31, 2019, due to the combined impact of an increase in debt to fund loan growth, an increase in derivative liabilities and a decrease in equity resulting from our reported net loss of $324 million and the authorization by the CFC Board of Directors in the current quarter to retire patronage capital of $63 million, which we returned to members in September 2019.

The variance of $372 million between our reported net loss of $324 million for the current quarter and our reported net income of $48 million for the same prior-year quarter was driven by a shift in derivative fair value changes of $403 million. We recorded derivative losses of $396 million during the current quarter, due to decreases in the fair value of our pay-fixed swaps resulting from a decline in interest rates across the swap curve, with medium- and longer-term interest rates experiencing a steeper decline than short-term rates. The swap curve remained inverted, as short-term interest rates continued to exceed medium- and longer-term interest rates as of the end of the current quarter. In comparison, we recorded derivative gains of $7 million during the comparable prior-year quarter due to a net increase in the fair value of our pay-fixed swaps resulting from a slight rise in medium and longer-term interest rates. Net interest income, which represented 88% and 95% of total revenue for both the current quarter and same prior-year quarter, increased $8 million, or 12%, attributable to the combined impact of an increase in the net interest yield of 10 basis points, or 10%, to 1.14%, and an increase in our average interest-earning assets of $833 million, or 3%. The increase in the net interest yield reflected the combined impact of an increase in the average yield on interest-earning assets of 5 basis points to 4.30% and a reduction in our average cost of funds of 4 basis points to 3.36%. The decrease in our average cost of funds was largely due to the interest savings from the repayment of the 10.375% collateral trust bonds in fiscal year 2019 and the replacement of this debt with lower-cost funding, which more than offset an increase in the average cost of our short-term and variable-rate funding.

Other factors affecting the variance between our current quarter results and the prior-year quarter include an increase in fee income of $7 million due to higher prepayment fees during the current quarter, a gain of $8 million recorded in connection with the July 22, 2019 sale of land and the absence of the loss of $7 million on the early redemption of $300 million of 10.375% collateral trust bonds recorded in the prior-year quarter.

Adjusted Non-GAAP Results

Our adjusted net income totaled $61 million and our adjusted TIER was 1.27 for the current quarter, compared with adjusted net income of $28 million and adjusted TIER of 1.13 for the same prior-year quarter. Our adjusted debt-to-equity ratio increased to 5.84 as of August 31, 2019, from 5.73 as of May 31, 2019, primarily attributable to an increase in debt to fund loan growth.

The increase in adjusted net income of $33 million for the current quarter from the comparable prior-year quarter was attributable to an increase in adjusted net interest income of $10 million, or 19%, the increase in fee income of $7 million due to higher prepayment fees during the current quarter, the gain of $8 million recorded in connection with the sale of land and the absence of the loss of $7 million on the early redemption of the collateral trust bonds recorded in the prior-year quarter. The increase in adjusted net interest income of 19% was driven by an increase in the adjusted net interest yield of 12 basis points, or 14%, to 0.97%, coupled with the increase in average interest-earning assets of 3%. The increase in the adjusted net interest yield reflected the combined impact of an increase in the average yield on interest-earning assets of 5 basis points to 4.30% and a reduction in our adjusted average cost of funds of 8 basis points to 3.53%. This reduction also was largely due to the interest savings from the repayment of the 10.375% collateral trust bonds in fiscal year 2019 and the replacement of this debt with lower-cost funding, which more than offset an increase in the average cost of our short-term and variable-rate funding.

See "Non-GAAP Financial Measures" for additional information on our adjusted measures, including a reconciliation of these measures to the most comparable GAAP measures.

Lending Activity

Loans to members totaled $26,300 million as of August 31, 2019, an increase of $383 million, or 1%, from May 31, 2019. CFC distribution loans, CFC power supply loans and RTFC loans increased by $329 million, $92 million and $6 million, respectively, which was partially offset by a decrease in NCSC loans of $45 million. The increase in loans was driven by a net increase in long-term loans of $479 million, which was offset by a net decrease in revolving line-of-credit loans of $96 million.

Long-term loan advances totaled $888 million during the current quarter, with approximately 73% of those advances for capital expenditures by members and 19% for the refinancing of loans made by other lenders. In comparison, long-term loan advances totaled $468 million during the prior-year quarter, with approximately 71% of those advances for capital expenditures and 25% for refinancing of loans made by other lenders. CFC had long-term fixed-rate loans totaling $110 million that were scheduled to reprice during the current quarter. Of this total, $109 million repriced to a new long-term fixed rate and $1 million was repaid in full. In comparison, CFC had long-term fixed-rate loans totaling $193 million that were scheduled to reprice during the same prior-year quarter, of which $96 million repriced to a new long-term fixed rate, $48 million repriced to a long-term variable rate and $49 million was repaid in full.

Credit Quality

The overall credit quality of our loan portfolio remained high as of August 31, 2019, as evidenced by our continued strong credit performance metrics. We had no delinquent or nonperforming loans as of August 31, 2019, and we have not experienced any loan defaults or charge-offs since fiscal year 2017. Outstanding loans to electric utility organizations represented approximately 99% of total outstanding loan portfolio as of August 31, 2019, unchanged from May 31, 2019. We historically have had limited defaults and losses on loans in our electric utility loan portfolio. We generally lend to members on a senior secured basis, which reduces the risk of loss in the event of a borrower default. Of our total loans outstanding, 93% were secured and 7% were unsecured as of August 31, 2019, compared to 92% secured and 8% unsecured as of May 31, 2019. The allowance for loan losses was $18 million as of both August 31, 2019 and May 31, 2019, and the allowance coverage ratio was 0.07% as of each date.

Financing Activity

We issue debt primarily to fund growth in our loan portfolio. As such, our outstanding debt volume generally increases and decreases in response to member loan demand. Total debt outstanding increased by $303 million, or 1%, to $25,464 million as of August 31, 2019, from May 31, 2019, due to an increase in borrowings to fund the increase in loans to members. The increase was primarily attributable to a net increase in member commercial paper, select notes and daily liquidity fund notes totaling $519 million, which was partially offset by a net decrease in dealer commercial paper of $115 million, a net decrease in Federal Agricultural Mortgage Corporation ("Farmer Mac") notes payable of $92 million and a net decrease in borrowings under USDA's Guaranteed Underwriter Program ("Guaranteed Underwriter Program") of $23 million. Outstanding dealer commercial paper totaled $830 million as of August 31, 2019, below our targeted maximum threshold of $1,250 million.

Outlook for the Next 12 Months

We currently expect that our net interest income, adjusted net interest income, tier, adjusted tier, net interest yield and adjusted net interest yield will increase over the next 12 months, largely due to a projected decrease in our average cost of funds and an increase in average interest-earning assets.

Long-term debt scheduled to mature over the next 12 months totaled $2,218 million as of August 31, 2019, consisting of $2,071 million of fixed-rate debt at a weighted average cost of 2.35% and $147 million of variable-rate debt. We believe we have sufficient liquidity from the combination of existing cash and cash equivalents, member loan repayments, committed bank revolving lines of credit, committed loan facilities under the Guaranteed Underwriter Program, revolving note purchase agreements with Farmer Mac and our ability to issue debt in the capital markets, to our members and in private placements, to meet the demand for member loan advances and satisfy our obligations to repay long-term debt maturing over the next 12 months. As of August 31, 2019, sources of liquidity readily available for access totaled $7,091 million, consisting of (i) $231 million in cash and cash equivalents; (ii) up to $1,350 million available under committed loan facilities under the Guaranteed Underwriter Program; (iii) up to $2,972 million available for access under committed bank revolving line of credit agreements; (iv) up to $2,238 million available under a revolving note purchase agreement with Farmer Mac, subject to market conditions; and (v) up to $300 million available under a committed revolving note purchase agreement with Farmer Mac. On September 25, 2019, we received a commitment letter for the guarantee by RUS of a $500 million loan facility from the Federal Financing Bank under the Guaranteed Underwriter Program.

We believe we can continue to roll over outstanding member short-term debt of $3,198 million as of August 31, 2019, based on our expectation that our members will continue to reinvest their excess cash in our commercial paper, daily liquidity fund notes, select notes and medium-term notes. We expect to continue accessing the dealer commercial paper market as a cost-effective means of satisfying our short-term liquidity needs. Although the intra-period amount of outstanding dealer commercial paper may fluctuate based on our liquidity requirements, we intend to manage our short-term wholesale funding risk by maintaining outstanding dealer commercial paper at an amount near or below $1,250 million for the foreseeable future. We expect to continue to be in compliance with the covenants under our committed bank revolving line of credit agreements, which will allow us to mitigate roll-over risk, as we can draw on these facilities to repay dealer or member commercial paper that cannot be refinanced with similar debt.

While we are not subject to bank regulatory capital rules, we generally aim to maintain an adjusted debt-to-equity ratio at approximately or below 6.00-to-1. Our adjusted debt-to-equity ratio was 5.84 as of August 31, 2019, below our targeted threshold. Based on our projection of loan advances and adjusted equity over the next 12 months, we anticipate that our adjusted debt-to-equity ratio will remain below our target threshold of 6.00-to-1.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The preparation of financial statements in accordance with GAAP requires management to make a number of judgments, estimates and assumptions that affect the amount of assets, liabilities, income and expenses in the consolidated financial statements. Understanding our accounting policies and the extent to which we use management's judgment and estimates in applying these policies is integral to understanding our financial statements. We provide a discussion of our significant accounting policies under "Note 1—Summary of Significant Accounting Policies" in our 2019 Form 10-K.

We have identified certain accounting policies as critical because they involve significant judgments and assumptions about highly complex and inherently uncertain matters, and the use of reasonably different estimates and assumptions could have a material impact on our results of operations or financial condition. Our most critical accounting policies and estimates involve the determination of the allowance for loan losses and fair value. We evaluate our critical accounting estimates and judgments required by our policies on an ongoing basis and update them as necessary based on changing conditions. Management has discussed significant judgments and assumptions in applying our critical accounting policies with the Audit Committee of our board of directors. We provide additional information on our critical accounting policies and estimates under "MD&A—Critical Accounting Policies and Estimates" in our 2019 Form 10-K. See "Item 1A. Risk Factors" in our 2019 Form 10-K for a discussion of the risks associated with management's judgments and estimates in applying our accounting policies and methods.

RECENT ACCOUNTING CHANGES AND OTHER DEVELOPMENTS

Recent Accounting Changes

See "Note 1—Summary of Significant Accounting Policies" for information on accounting standards adopted during the current year, as well as recently issued accounting standards not yet required to be adopted and the expected impact of the adoption of these accounting standards. To the extent we believe the adoption of new accounting standards has had or will have a material impact on our consolidated results of operations, financial condition or liquidity, we also discuss the impact in the applicable section(s) of this MD&A.

CONSOLIDATED RESULTS OF OPERATIONS

The section below provides a comparative discussion of our condensed consolidated results of operations between the three months ended August 31, 2019 and 2018. Following this section, we provide a comparative analysis of our condensed consolidated balance sheets as of August 31, 2019 and May 31, 2019. You should read these sections together with our "Executive Summary—Outlook for the Next 12 Months" where we discuss trends and other factors that we expect will affect our future results of operations.

Net Interest Income

Net interest income represents the difference between the interest income earned on our interest-earning assets, which includes loans and investment securities, and the interest expense on our interest-bearing liabilities. Our net interest yield represents the difference between the yield on our interest-earning assets and the cost of our interest-bearing liabilities plus the impact from non-interest bearing funding. We expect net interest income and our net interest yield to fluctuate based on changes in interest rates and changes in the amount and composition of our interest-earning assets and interest-bearing liabilities. We do not fund each individual loan with specific debt. Rather, we attempt to minimize costs and maximize efficiency by proportionately funding large aggregated amounts of loans.

Table 2 presents average balances for the three months ended August 31, 2019 and 2018, and for each major category of our interest-earning assets and interest-bearing liabilities, the interest income earned or interest expense incurred, and the average yield or cost. Table 2 also presents non-GAAP adjusted interest expense, adjusted net interest income and adjusted net interest yield, which reflect the inclusion of net accrued periodic derivative cash settlements expense in interest expense. We provide reconciliations of our non-GAAP adjusted measures to the most comparable GAAP measures under "Non-GAAP Financial Measures."

Table 2: Average Balances, Interest Income/Interest Expense and Average Yield/Cost

	Three Months Ended August 31,					
(Dollars in thousands)	**2019**			**2018**		
Assets:	**Average Balance**	**Interest Income/ Expense**	**Average Yield/ Cost**	**Average Balance**	**Interest Income/ Expense**	**Average Yield/ Cost**
Long-term fixed-rate loans[(1)]	**$ 23,358,728**	**$ 258,478**	**4.40%**	$ 22,695,516	$ 251,801	4.40%
Long-term variable-rate loans	**993,105**	**9,756**	**3.91**	1,071,550	9,381	3.47
Line of credit loans	**1,712,082**	**16,033**	**3.73**	1,422,853	11,633	3.24
TDR loans[(2)]	**11,786**	**206**	**6.95**	12,552	218	6.89
Other income, net[(3)]	**—**	**(284)**	**—**	—	(325)	—
Total loans	**26,075,701**	**284,189**	**4.34**	25,202,471	272,708	4.29
Cash, time deposits and investment securities	**768,763**	**5,826**	**3.01**	809,409	5,783	2.83
Total interest-earning assets	**$ 26,844,464**	**$ 290,015**	**4.30%**	$ 26,011,880	$ 278,491	4.25%
Other assets, less allowance for loan losses	**605,697**			726,260		
Total assets	**$ 27,450,161**			$ 26,738,140		
Liabilities:						
Short-term borrowings	**$ 3,513,191**	**$ 22,822**	**2.58%**	$ 3,519,995	$ 19,419	2.19%
Medium-term notes	**3,571,967**	**32,076**	**3.57**	3,757,196	32,410	3.42
Collateral trust bonds	**7,385,085**	**65,381**	**3.52**	7,474,361	77,705	4.12
Guaranteed Underwriter Program notes payable	**5,398,324**	**40,433**	**2.98**	4,848,435	35,334	2.89
Farmer Mac notes payable	**3,031,600**	**25,074**	**3.29**	2,790,527	21,111	3.00
Other notes payable	**22,529**	**254**	**4.49**	29,877	322	4.28
Subordinated deferrable debt	**986,014**	**12,882**	**5.20**	742,422	9,417	5.03
Subordinated certificates	**1,356,145**	**14,349**	**4.21**	1,377,954	14,513	4.18
Total interest-bearing liabilities	**$ 25,264,855**	**$ 213,271**	**3.36%**	$ 24,540,767	$ 210,231	3.40%
Other liabilities	**1,012,301**			697,954		
Total liabilities	**26,277,156**			25,238,721		
Total equity	**1,173,005**			1,499,419		
Total liabilities and equity	**$ 27,450,161**			$ 26,738,140		
Net interest spread[(4)]			**0.94%**			0.85%
Impact of non-interest bearing funding[(5)]			**0.20**			0.19
Net interest income/net interest yield[(6)]		**$ 76,744**	**1.14%**		$ 68,260	1.04%
Adjusted net interest income/adjusted net interest yield:						
Interest income		**$ 290,015**	**4.30%**		$ 278,491	4.25%
Interest expense		**213,271**	**3.36**		210,231	3.40
Add: Net accrued periodic derivative cash settlement[(7)]		**11,043**	**0.41**		12,829	0.46
Adjusted interest expense/adjusted average cost[(8)]		**$ 224,314**	**3.53%**		$ 223,060	3.61%
Adjusted net interest spread[(4)]			**0.77%**			0.64%
Impact of non-interest bearing funding[(5)]			**0.20**			0.21
Adjusted net interest income/adjusted net interest yield[(9)]		**$ 65,701**	**0.97%**		$ 55,431	0.85%

---

(1) Interest income on long-term, fixed-rate loans includes loan conversion fees, which are generally deferred and recognized as interest income using the effective interest method.

(2) Troubled debt restructuring ("TDR") loans.

[3]Consists of late payment fees and net amortization of deferred loan fees and loan origination costs.

[4]Net interest spread represents the difference between the average yield on total average interest-earning assets and the average cost of total average interest-bearing liabilities. Adjusted net interest spread represents the difference between the average yield on total average interest-earning assets and the adjusted average cost of total average interest-bearing liabilities.

[5]Includes other liabilities and equity.

[6]Net interest yield is calculated based on annualized net interest income for the period divided by total average interest-earning assets for the period.

[7]Represents the impact of net accrued periodic interest rate swap settlements during the period. This amount is added to interest expense to derive non-GAAP adjusted interest expense. The average (benefit)/cost associated with derivatives is calculated based on annualized net accrued periodic interest rate swap settlements during the period divided by the average outstanding notional amount of derivatives during the period. The average outstanding notional amount of interest rate swaps was $10,752 million and $10,955 million for the three months ended August 31, 2019 and 2018, respectively.

[8]Adjusted interest expense consists of interest expense plus net accrued periodic interest rate swap cash settlements expense during the period. Net accrued periodic derivative cash settlements are reported on our condensed consolidated statements of operations as a component of derivative gains (losses). Adjusted average cost is calculated based on annualized adjusted interest expense for the period divided by total average interest-bearing liabilities during the period.

[9]Adjusted net interest yield is calculated based on annualized adjusted net interest income for the period divided by total average interest-earning assets for the period.

Table 3 displays the change in net interest income between periods and the extent to which the variance is attributable to: (i) changes in the volume of our interest-earning assets and interest-bearing liabilities or (ii) changes in the interest rates of these assets and liabilities. The table also presents the change in adjusted net interest income between periods. Changes that are not solely due to either volume or rate are allocated to these categories on a pro-rata basis based on the absolute value of the change due to average volume and average rate.

Table 3: Rate/Volume Analysis of Changes in Interest Income/Interest Expense

	Three Months Ended August 31, 2019 versus 2018		
	Total	Variance due to:[1]	
(Dollars in thousands)	Variance	Volume	Rate
Interest income:			
Long-term fixed-rate loans	$ 6,677	$ 6,650	$ 27
Long-term variable-rate loans	375	(711)	1,086
Line of credit loans	4,400	2,326	2,074
Restructured loans	(12)	(14)	2
Other income, net	41	—	41
Total loans	11,481	8,251	3,230
Cash, time deposits and investment securities	43	(305)	348
Interest income	11,524	7,946	3,578
Interest expense:			
Short-term borrowings	3,403	(90)	3,493
Medium-term notes	(334)	(1,682)	1,348
Collateral trust bonds	(12,324)	(1,138)	(11,186)
Guaranteed Underwriter Program notes payable	5,099	3,900	1,199
Farmer Mac notes payable	3,963	1,761	2,202
Other notes payable	(68)	(80)	12
Subordinated deferrable debt	3,465	3,056	409
Subordinated certificates	(164)	(269)	105
Interest expense	3,040	5,458	(2,418)
Net interest income	$ 8,484	$ 2,488	$ 5,996
Adjusted net interest income:			
Interest income	$ 11,524	$ 7,946	$ 3,578
Interest expense	3,040	5,458	(2,418)
Net accrued periodic derivative cash settlements expense[2]	(1,786)	(272)	(1,514)
Adjusted interest expense[3]	1,254	5,186	(3,932)
Adjusted net interest income	$ 10,270	$ 2,760	$ 7,510

(1) The changes for each category of interest income and interest expense are divided between the portion of change attributable to the variance in volume and the portion of change attributable to the variance in rate for that category. The amount attributable to the combined impact of volume and rate has been allocated to each category based on the proportionate absolute dollar amount of change for that category.

(2) For net accrued periodic derivative cash settlements, the variance due to average volume represents the change in derivative cash settlements resulting from the change in the average notional amount of derivative contracts outstanding. The variance due to average rate represents the change in derivative cash settlements resulting from the net difference between the average rate paid and the average rate received for interest rate swaps during the period.

(3) See "Non-GAAP Financial Measures" for additional information on our adjusted non-GAAP measures.

Reported Net Interest Income

Reported net interest income of $77 million for the current quarter was up $8 million, or 12%, from the comparable prior-year quarter, driven by an increase in the net interest yield of 10% (10 basis points) to 1.14%, coupled with an increase in average interest-earning assets of 3%.

- *Net Interest Yield:* The increase of 10 basis points in the net interest yield for the current quarter reflected the combined impact of an increase in the average yield on interest-earning assets of 5 basis points to 4.30% and a decrease in the average cost of funds of 4 basis points to 3.36%. The increase in the average yield on interest-earning assets was attributable to higher rates on our line of credit and variable-rate loans due to the overall rise in short-term interest rates during fiscal year 2019. Although medium- and longer-term interest rates experienced a steep decline during the current quarter relative to the same prior-year quarter, the average yield on our long-term fixed rate loan portfolio remained stable. The decrease in our average cost of funds was largely due to the interest cost savings from the repayment of the $1 billion aggregate principal amount of the 10.375% collateral trust bonds in the first half of fiscal year 2019 and the replacement of this debt with lower-cost funding. These amounts more than offset the increase in the average cost of our short-term, variable-rate borrowings resulting from the rise in short-term interest rates during fiscal year 2019 and an increase in the average cost of subordinated deferrable debt resulting from the issuance of $250 million of 5.50% subordinated deferrable debt in May 2019.

- *Average Interest-Earning Assets:* The increase in average interest-earning assets of 3% during the current quarter was driven by growth in average total loans of $873 million, or 3%, as members obtained advances to fund capital investments and refinanced with us loans made by other lenders.

Adjusted Net Interest Income

Adjusted net interest income of $66 million for the current quarter was up $10 million, or 19%, from the comparable prior-year quarter, driven by an increase in the adjusted net interest yield of 12 basis points, or 14%, to 0.97% and the increase in average interest-earning assets of 3%.

- *Adjusted Net Interest Yield*: The increase in the adjusted net interest yield was primarily due to the combined impact of an increase in the average yield on interest-earning assets of 5 basis points to 4.30% and a reduction in our adjusted average cost of funds of 8 basis points to 3.53%. As noted above, the increase in the average yield on interest-earning assets was attributable to higher rates on our line of credit and variable-rate loans due to the overall rise in short-term interest rates during fiscal year 2019. The reduction in our adjusted average cost of funds was also largely attributable to the interest cost savings from the repayment of the $1 billion aggregate principal amount of the 10.375% collateral trust bonds and the replacement of this debt with lower-cost funding, as well as a reduction in net derivative cash settlements expense amounts. Together these amounts more than offset the increase in the average cost of our short-term, variable-rate borrowings resulting from the rise in short-term interest rates during fiscal year 2019 and the increase in the average cost of subordinated deferrable debt resulting from the issuance of $250 million of 5.50% subordinated deferrable debt in May 2019.

- *Average Interest-Earning Assets:* The increase in average interest-earning assets of 3% was driven by the growth in average total loans of $873 million.

We include net accrued periodic derivative cash settlements during the period in the calculation of our adjusted average cost of funds, which, as a result, also impacts the calculation of adjusted net interest income and adjusted net interest yield. Net periodic derivative cash settlement expense totaled $11 million for the current quarter, down from $13 million for the same prior-year quarter. See "Non-GAAP Financial Measures" for additional information on our adjusted measures, including a reconciliation of these measures to the most comparable GAAP measures.

Provision for Loan Losses

Our provision for loan losses in each period is primarily driven by the level of allowance that we determine is necessary for probable incurred loan losses inherent in our loan portfolio as of each balance sheet date. The allowance for loan losses was $18 million as of both August 31, 2019 and May 31, 2019.

We recorded a provision for loan losses of less than $1 million for the current quarter. In comparison, we recorded a benefit for loan losses of less than $1 million for the same prior-year quarter. The credit quality and performance statistics of our loan portfolio remain strong. We had no payment defaults or charge-offs during the quarter, and no delinquent loans or nonperforming loans in our loan portfolio as of August 31, 2019 or May 31, 2019.

We provide additional information on our allowance for loan losses under “Credit Risk—Allowance for Loan Losses” and “Note 5—Allowance for Loan Losses” of this Report. For a description of our methodology for determining the allowance for loan losses, see “MD&A—Critical Accounting Policies and Estimates—Allowance for Loan Losses” and “Note 1—Summary of Significant Accounting Policies—Allowance for Loan Losses” in our 2019 Form 10-K.

Non-Interest Income

Non-interest income consists of fee and other income, gains and losses on derivatives not accounted for in hedge accounting relationships and unrealized gains and losses on equity securities.

Table 4 presents the components of non-interest income for the three months ended August 31, 2019 and 2018.

Table 4: Non-Interest Income

	Three Months Ended August 31,	
(Dollars in thousands)	**2019**	**2018**
Non-interest income:		
Fee and other income	**$ 10,941**	$ 3,911
Derivative gains (losses)	**(395,725)**	7,183
Unrealized gains (losses) on equity securities	**1,620**	(726)
Total non-interest income	**$ (383,164)**	$ 10,368

The significant variance in non-interest income between periods was primarily attributable to changes in the net derivative gains (losses) recognized in our condensed consolidated statements of operations. In addition, fee and other income increased by $7 million due to higher prepayment fees during the current quarter.

Derivative Gains (Losses)

Our derivative instruments are an integral part of our interest rate risk management strategy. Our principal purpose in using derivatives is to manage our aggregate interest rate risk profile within prescribed risk parameters. The derivative instruments we use primarily include interest rate swaps, which we typically hold to maturity. In addition, we may on occasion use treasury locks to manage the interest rate risk associated with debt that is scheduled to reprice in the future. The primary factors affecting the fair value of our derivatives and derivative gains (losses) recorded in our results of operations include changes in interest rates, the shape of the swap curve and the composition of our derivative portfolio. We generally do not designate our interest rate swaps, which currently account for the substantial majority of our derivatives, for hedge accounting. Accordingly, changes in the fair value of interest rate swaps are reported in our condensed consolidated statements of operations under derivative gains (losses). However, we typically designate treasury locks as cash flow hedges. We did not have any derivatives designated as accounting hedges as of August 31, 2019 or May 31, 2019.

We currently use two types of interest rate swap agreements: (i) we pay a fixed rate of interest and receive a variable rate of interest (“pay-fixed swaps”); and (ii) we pay a variable rate of interest and receive a fixed rate of interest (“receive-fixed swaps”). The interest amounts are based on a specified notional balance, which is used for calculation purposes only. The benchmark variable rate for the substantial majority of the floating rate payments under our swap agreements is 3-month London Interbank Offered Rate (“LIBOR”). As interest rates decline, pay-fixed swaps generally decrease in value and result in the recognition of derivative losses, as the amount of interest we pay remains fixed, while the amount of interest we receive declines. In contrast, as interest rates rise, pay-fixed swaps generally increase in value and result in the recognition of derivative gains, as the amount of interest we pay remains fixed, but the amount we receive increases. With a receive-fixed swap, the opposite results occur as interest rates decline or rise. Because our pay-fixed and receive-fixed swaps are referenced to different maturity terms along the swap curve, different changes in the swap curve—parallel, flattening, inversion or steepening—will also impact the fair value of our derivatives.

Table 5 presents the components of net derivative gains (losses) recorded in our results of operations. Derivative cash settlements expense represents the net periodic contractual interest amount for our interest-rate swaps for the reporting period. Derivative forward value gains (losses) represent the change in fair value of our interest rate swaps during the reporting period due to changes in expected future interest rates over the remaining life of our derivative contracts.

Table 5: Derivative Gains (Losses)

	Three Months Ended August 31,	
(Dollars in thousands)	**2019**	**2018**
Derivative gains (losses) attributable to:		
Derivative cash settlements expense	**$ (11,043)**	$ (12,829)
Derivative forward value gains (losses)	**(384,682)**	20,012
Derivative gains (losses)	**$ (395,725)**	$ 7,183

The net derivative losses of $396 million in the current quarter were attributable to a net decrease in the fair value of our pay-fixed swaps resulting from a decline in interest rates across the swap curve, with medium- and longer-term interest rates experiencing a steeper decline than short-term rates. The swap curve remained inverted, as short-term interest rates continued to exceed medium- and longer-term interest rates as of the end of the current quarter, as depicted by the August 31, 2019 and May 31, 2019 swap curves presented in the chart below.

The net derivative gains of $7 million in the same prior-year quarter were attributable to a net increase in the fair value of our pay-fixed swaps resulting from a slight increase in medium-and long-term interest rates, as depicted by the August 31, 2018 and May 31, 2018 swap curves presented in the below chart.

Our derivative portfolio consists of a higher proportion of pay-fixed swaps than receive-fixed swaps, with pay-fixed swaps representing approximately 68% of the outstanding notional amount of our derivative portfolio as of both August 31, 2019 and May 31, 2019. The profile of our interest rate swap portfolio, however, may change as a result of changes in market conditions and actions taken to manage exposure to interest rate risk. The average remaining maturity of our pay-fixed and receive-fixed swaps was 18 years and four years, respectively, as of August 31, 2019. In comparison, the average remaining maturity of our pay-fixed and receive-fixed swaps was 19 years and four years, respectively, as of August 31, 2018.

Derivative Cash Settlements

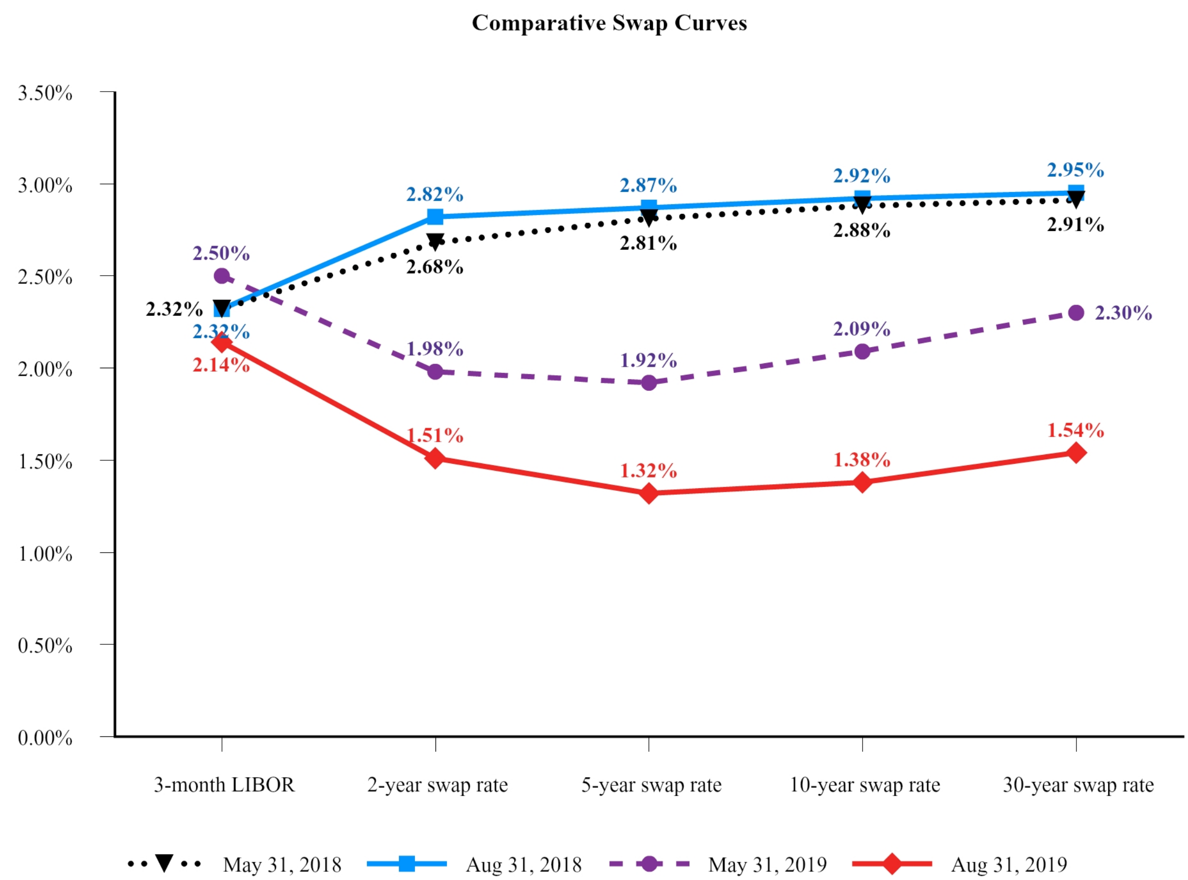
As indicated in Table 5 above, net periodic derivative cash settlement expense totaled $11 million and $13 million for the three months ended August 31, 2019 and 2018, respectively. Table 6 displays, by swap agreement type, the average notional amount outstanding and the weighted-average interest rate paid and received for derivative cash settlements during each respective period.

Table 6: Derivative Cash Settlements Expense—Average Notional Amounts and Interest Rates

	Three Months Ended August 31,					
	2019			2018		
(Dollars in thousands)	**Average Notional Balance**	**Weighted-Average Rate Paid**	**Weighted-Average Rate Received**	**Average Notional Balance**	**Weighted-Average Rate Paid**	**Weighted-Average Rate Received**
Pay-fixed swaps	**$ 7,353,402**	**2.84%**	**2.39%**	$ 7,194,857	2.81%	2.32%
Receive-fixed swaps	**3,399,000**	**3.09**	**2.56**	3,760,141	2.96	2.52
Total	**$10,752,402**	**2.92%**	**2.44%**	$10,954,998	2.86%	2.39%

Comparative Swap Curves

The chart below provides comparative swap curves as of the end of August 31, 2019, May 31, 2019, August 31, 2018 and May 31, 2018.



Benchmark rates obtained from Bloomberg.

See “Note 9—Derivative Instruments and Hedging Activities” for additional information on our derivative instruments.

Non-Interest Expense

Non-interest expense consists of salaries and employee benefit expense, general and administrative expenses, gains and losses on the early extinguishment of debt and other miscellaneous expenses.

Table 7 presents the components of non-interest expense recorded in results of operations for the three months ended August 31, 2019 and 2018.

Table 7: Non-Interest Expense

(Dollars in thousands)	Three Months Ended August 31, 2019	2018
Non-interest expense:		
Salaries and employee benefits	**$ (12,942)**	$ (12,682)
Other general and administrative expenses	**(12,387)**	(10,523)
Losses on early extinguishment of debt	**—**	(7,100)
Other non-interest (expense) income	**7,179**	(394)
Total non-interest expense	**$ (18,150)**	$ (30,699)

Non-interest expense of $18 million for the current quarter decreased by $13 million, or 41%, from the same prior-year quarter. The decrease was largely due to the gain of $8 million recorded in connection with the July 22, 2019 sale of land and the absence of the loss of $7 million on the early redemption of $300 million of 10.375% collateral trust bonds in the prior-year quarter.

Net Income (Loss) Attributable to Noncontrolling Interests

Net income (loss) attributable to noncontrolling interests represents 100% of the results of operations of NCSC and RTFC, as the members of NCSC and RTFC own or control 100% of the interest in their respective companies. The fluctuations in net income (loss) attributable to noncontrolling interests are primarily due to changes in the fair value of NCSC's derivative instruments recognized in NCSC's earnings.

We recorded a net loss attributable to noncontrolling interests of $2 million for the current quarter. In comparison, we recorded net income attributable to noncontrolling interests of less than $1 million for the same prior-year quarter.

CONSOLIDATED BALANCE SHEET ANALYSIS

Total assets of $27,579 million as of August 31, 2019 increased by $454 million, or 2%, from May 31, 2019, primarily due to growth in our loan portfolio. Total liabilities of $26,660 million as of August 31, 2019 increased by $840 million, or 3%, from May 31, 2019, primarily due to debt issuances to fund loan growth and an increase in our derivative liabilities, attributable to a decrease in the fair value of our pay-fixed swaps. Total equity decreased by $385 million to $918 million as of August 31, 2019, attributable to our reported net loss of $324 million during the three months ended August 31, 2019 and the CFC Board of Directors authorization in the current quarter to retire patronage capital of $63 million.

Following is a discussion of changes in the major components of our assets and liabilities during the three months ended August 31, 2019. Period-end balance sheet amounts may vary from average balance sheet amounts due to liquidity and balance sheet management activities that are intended to manage liquidity requirements for the company and our market risk exposure in accordance with our risk appetite.

Loan Portfolio

We offer long-term loans that provide borrowers the option to select fixed- and variable-rate loan advances and line of credit loans. The substantial majority of loans in our portfolio represent fixed-rate advances under secured long-term facilities with terms up to 35 years. Line of credit loans are typically variable-rate revolving facilities and are generally unsecured.

Loans Outstanding

Table 8 summarizes loans to members, by loan type and by member class, as of August 31, 2019 and May 31, 2019. As indicated in Table 8, long-term fixed-rate loans accounted for 90% and 89% of loans to members as of August 31, 2019 and May 31, 2019, respectively.

Table 8: Loans Outstanding by Type and Member Class

	August 31, 2019		May 31, 2019		
(Dollars in thousands)	Amount	% of Total	Amount	% of Total	Change
Loans by type:					
Long-term loans:					
Fixed-rate	**$ 23,677,234**	**90%**	$ 23,094,253	89%	$ 582,981
Variable-rate	**962,541**	**4**	1,066,880	4	(104,339)
Total long-term loans	**24,639,775**	**94**	24,161,133	93	478,642
Lines of credit	**1,648,824**	**6**	1,744,531	7	(95,707)
Total loans outstanding	**26,288,599**	**100**	25,905,664	100	382,935
Deferred loan origination costs	**11,239**	**—**	11,240	—	(1)
Loans to members	**$ 26,299,838**	**100%**	$ 25,916,904	100%	$ 382,934
Loans by member class:					
CFC:					
Distribution	**$ 20,484,460**	**78%**	$ 20,155,266	78%	$ 329,194
Power supply	**4,671,035**	**18**	4,578,841	18	92,194
Statewide and associate	**84,212**	**—**	83,569	—	643
CFC total	**25,239,707**	**96**	24,817,676	96	422,031
NCSC	**697,791**	**3**	742,888	3	(45,097)
RTFC	**351,101**	**1**	345,100	1	6,001
Total loans outstanding	**26,288,599**	**100**	25,905,664	100	382,935
Deferred loan origination costs	**11,239**	**—**	11,240	—	(1)
Loans to members	**$ 26,299,838**	**100%**	$ 25,916,904	100%	$ 382,934

Loans to members totaled $26,300 million as of August 31, 2019, an increase of $383 million, or 1%, from May 31, 2019. The increase was primarily due to an increase in CFC distribution loans, CFC power supply loans and RTFC loans of $329 million, $92 million and $6 million, respectively, which was partially offset by a decrease in NCSC loans of $45 million.

Long-term loan advances totaled $888 million during the three months ended August 31, 2019, with approximately 73% of those advances for capital expenditures by members and 19% for the refinancing of loans made by other lenders. In comparison, long-term loan advances totaled $468 million during the prior year three months ended August 31, 2018, with approximately 71% of those advances for capital expenditures by members and 25% for refinancing of loans made by other lenders.

We provide additional information on our loan product types in "Item 1. Business—Loan Programs" and "Note 4—Loans" in our 2019 Form 10-K. See "Debt—Collateral Pledged" below for information on encumbered and unencumbered loans and "Credit Risk Management" for information on the credit risk profile of our loan portfolio.

Loan Retention Rate

Table 9 presents a summary of the options selected by borrowers for CFC's long-term fixed-rate loans that repriced, in accordance with our standard loan repricing provisions, during the three months ended August 31, 2019 and fiscal year 2019. At the repricing date, the borrower has the option of (i) selecting CFC's current long-term fixed rate for a term of between one year and up to the final maturity of the loan; (ii) selecting CFC's current long-term variable rate; or (iii) repaying the loan in full.

Table 9: Historical Retention Rate and Repricing Selection[1]

(Dollars in thousands)	Three Months Ended August 31, 2019 Amount	% of Total	Fiscal Year Ended May 31, 2019 Amount	% of Total
Loans retained:				
Long-term fixed rate selected	**$ 108,925**	**99%**	$ 568,252	75%
Long-term variable rate selected	**267**	**—**	123,636	16
Total loans retained by CFC	**109,192**	**99**	691,888	91
Loans repaid	**864**	**1**	69,250	9
Total	**$ 110,056**	**100%**	$ 761,138	100%

[1]Does not include NCSC and RTFC loans.

As shown in Table 9, of the loans that repriced during the three months ended August 31, 2019 and fiscal year 2019, the substantial majority of borrowers selected a new long-term fixed or variable rate. The average retention rate, which is calculated based on the election made by the borrower at the repricing date, was 96% for CFC loans that repriced during the three fiscal year period ended May 31, 2019.

Debt

We utilize both short-term borrowings and long-term debt as part of our funding strategy and asset/liability interest rate risk management. We seek to maintain diversified funding sources across products, programs and markets to manage funding concentrations and reduce our liquidity or debt rollover risk. Our funding sources include a variety of secured and unsecured debt securities in a wide range of maturities to our members and affiliates and in the capital markets.

Debt Outstanding

Table 10 displays the composition, by product type, of our outstanding debt as of August 31, 2019 and May 31, 2019. Table 10 also displays the composition of our debt based on several additional selected attributes.

Table 10: Total Debt Outstanding

(Dollars in thousands)	August 31, 2019	May 31, 2019	Change
Debt product type:			
Commercial paper:			
Members, at par	**$ 1,240,830**	$ 1,111,795	$ 129,035
Dealer, net of discounts	**829,763**	944,616	(114,853)
Total commercial paper	**2,070,593**	2,056,411	14,182
Select notes to members	**1,277,927**	1,023,952	253,975
Daily liquidity fund notes to members	**435,070**	298,817	136,253
Medium-term notes:			
Members, at par	**662,263**	625,626	36,637
Dealer, net of discounts	**2,916,200**	2,942,045	(25,845)
Total medium-term notes	**3,578,463**	3,567,671	10,792
Collateral trust bonds	**7,387,636**	7,383,732	3,904
Guaranteed Underwriter Program notes payable	**5,387,155**	5,410,507	(23,352)
Farmer Mac notes payable	**2,962,478**	3,054,914	(92,436)
Other notes payable	**22,559**	22,515	44
Subordinated deferrable debt	**985,981**	986,020	(39)
Members' subordinated certificates:			
Membership subordinated certificates	**630,474**	630,474	—
Loan and guarantee subordinated certificates	**504,841**	505,485	(644)
Member capital securities	**221,170**	221,170	—
Total members' subordinated certificates	**1,356,485**	1,357,129	(644)
Total debt outstanding	**$ 25,464,347**	$ 25,161,668	$ 302,679
Security type:			
Secured debt	**62%**	63%	
Unsecured debt	**38**	37	
Total	**100%**	100%	
Funding source:			
Members	**20%**	18%	
Private placement:			
Guaranteed Underwriter Program notes payable	**21**	21	
Farmer Mac notes payable	**12**	12	
Total private placement	**33**	33	
Capital markets	**47**	49	
Total	**100%**	100%	
Interest rate type:			
Fixed-rate debt	**76%**	77%	
Variable-rate debt	**24**	23	
Total	**100%**	100%	
Interest rate type, including the impact of swaps:			
Fixed-rate debt[1]	**91%**	93%	
Variable-rate debt[2]	**9**	7	
Total	**100%**	100%	
Maturity classification:[3]			
Short-term borrowings	**16%**	14%	
Long-term and subordinated debt[4]	**84**	86	
Total	**100%**	100%	

(1) Includes variable-rate debt that has been swapped to a fixed rate, net of any fixed-rate debt that has been swapped to a variable rate.

(2) Includes fixed-rate debt that has been swapped to a variable rate, net of any variable-rate debt that has been swapped to a fixed rate. Also includes commercial paper notes, which generally have maturities of less than 90 days. The interest rate on commercial paper notes does not change once the note has been issued; however, the interest rate for new commercial paper issuances changes daily.

(3) Borrowings with an original contractual maturity of one year or less are classified as short-term borrowings. Borrowings with an original contractual maturity of greater than one year are classified as long-term debt.

(4) Consists of long-term debt, subordinated deferrable debt and total members' subordinated debt reported on the condensed consolidated balance sheets. Maturity classification is based on the original contractual maturity as of the date of issuance of the debt.

Our outstanding debt volume generally increases and decreases in response to member loan demand. As outstanding loan balances increased during the three months ended August 31, 2019, our debt volume also increased. Total debt outstanding of $25,464 million as of August 31, 2019, increased by $303 million or 1%, from May 31, 2019, due to an increase in borrowings to fund the increase in loans to members. The increase was primarily attributable to net increases in member commercial paper, select notes and daily liquidity fund notes of $519 million, partially offset by a net decrease in commercial paper sold through dealers of $115 million, a net decrease in Farmer Mac notes payable of $92 million and a net decrease in borrowings under the Guaranteed Underwriter Program of $23 million.

On September 13, 2019, we provided notice to investors that we will redeem all $300 million outstanding principal amount of our 2.30% collateral trust bonds due November 15, 2019 on October 15, 2019.

Member Investments

Debt securities issued to our members represent an important, stable source of funding. Table 11 displays outstanding member debt, by debt product type, as of August 31, 2019 and May 31, 2019.

Table 11: Member Investments

	August 31, 2019		May 31, 2019		
(Dollars in thousands)	Amount	% of Total [1]	Amount	% of Total [1]	Change
Commercial paper	**$ 1,240,830**	**60%**	$ 1,111,795	54%	$ 129,035
Select notes	**1,277,927**	**100**	1,023,952	100	253,975
Daily liquidity fund notes	**435,070**	**100**	298,817	100	136,253
Medium-term notes	**662,263**	**19**	625,626	18	36,637
Members' subordinated certificates	**1,356,485**	**100**	1,357,129	100	(644)
Total outstanding member debt	**$ 4,972,575**		$ 4,417,319		$ 555,256
Percentage of total debt outstanding	**20%**		18%		

(1) Represents outstanding debt attributable to members for each debt product type as a percentage of the total outstanding debt for each debt product type.

Member investments totaled $4,973 million and accounted for 20% of total debt outstanding as of August 31, 2019, compared with $4,417 million, or 18%, of total debt outstanding as of May 31, 2019. Over the last three fiscal years, outstanding member investments as of the end of each quarterly reporting period have averaged $4,480 million.

Short-Term Borrowings

Short-term borrowings consist of borrowings with an original contractual maturity of one year or less and do not include the current portion of long-term debt. Short-term borrowings totaled $4,028 million and accounted for 16% of total debt outstanding as of August 31, 2019, compared with $3,608 million, or 14%, of total debt outstanding as of May 31, 2019. See "Liquidity Risk" below and for "Note 6—Short-Term Borrowings" for information on the composition of our short-term borrowings.

Long-Term and Subordinated Debt

Long-term debt, defined as debt with an original contractual maturity term of greater than one year, primarily consists of medium-term notes, collateral trust bonds, notes payable under the Guaranteed Underwriter Program and notes payable under our note purchase agreement with Farmer Mac. Subordinated debt consists of subordinated deferrable debt and members' subordinated certificates. Our subordinated deferrable debt and members' subordinated certificates have original contractual maturity terms of greater than one year.

Long-term and subordinated debt totaled $21,437 million and accounted for 84% of total debt outstanding as of August 31, 2019, compared with $21,554 million, or 86%, of total debt outstanding as of May 31, 2019. We provide additional information on our long-term debt below under "Liquidity Risk" and in "Note 7—Long-Term Debt" and "Note 8—Subordinated Deferrable Debt."

Collateral Pledged

We are required to pledge loans or other collateral in transactions under our collateral trust bond indentures, note purchase agreements with Farmer Mac and bond agreements under the Guaranteed Underwriter Program. We are required to maintain pledged collateral equal to at least 100% of the face amount of outstanding borrowings. However, as discussed below, we typically maintain pledged collateral in excess of the required percentage. Under the provisions of our committed bank revolving line of credit agreements, the excess collateral that we are allowed to pledge cannot exceed 150% of the outstanding borrowings under our collateral trust bond indentures, Farmer Mac note purchase agreements or the Guaranteed Underwriter Program. In certain cases, provided that all conditions of eligibility under the different programs are satisfied, we may withdraw excess pledged collateral or transfer collateral from one borrowing program to another to facilitate a new debt issuance.

Table 12 displays the collateral coverage ratios as of August 31, 2019 and May 31, 2019 for the debt agreements noted above that require us to pledge collateral.

Table 12: Collateral Pledged

	Requirement/Limit		Actual[(1)]	
Debt Agreement	**Debt Indenture Minimum**	**Committed Bank Revolving Line of Credit Agreements Maximum**	**August 31, 2019**	**May 31, 2019**
Collateral trust bonds 1994 indenture	**100%**	**150%**	**116%**	118%
Collateral trust bonds 2007 indenture	**100**	**150**	**114**	117
Guaranteed Underwriter Program notes payable	**100**	**150**	**114**	114
Farmer Mac notes payable	**100**	**150**	**127**	123
Clean Renewable Energy Bonds Series 2009A	**100**	**150**	**106**	112

(1) Calculated based on the amount of collateral pledged divided by the face amount of outstanding secured debt.

Of our total debt outstanding of $25,464 million as of August 31, 2019, $15,746 million, or 62%, was secured by pledged loans totaling $18,635 million. In comparison, of our total debt outstanding of $25,162 million as of May 31, 2019, $15,858 million, or 63%, was secured by pledged loans totaling $18,877 million. Total debt outstanding on our condensed consolidated balance sheet is presented net of unamortized discounts and issuance costs. However, our collateral pledging requirements are based on the face amount of secured outstanding debt, which does not take into consideration the impact of net unamortized discounts and issuance costs.

Table 13 displays the unpaid principal balance of loans pledged for secured debt, the excess collateral pledged and unencumbered loans as of August 31, 2019 and May 31, 2019.

Table 13: Unencumbered Loans

(Dollars in thousands)	August 31, 2019	May 31, 2019
Total loans outstanding[1]	**$ 26,288,599**	$ 25,905,664
Less: Loans required to be pledged for secured debt [2]	**(16,021,569)**	(16,137,357)
Loans pledged in excess of requirement [2][3]	**(2,613,083)**	(2,739,248)
Total pledged loans	**(18,634,652)**	(18,876,605)
Unencumbered loans	**$ 7,653,947**	$ 7,029,059
Unencumbered loans as a percentage of total loans	**29%**	27%

[1] Represents the unpaid principal amount of loans as of the end of each period presented and excludes unamortized deferred loan origination costs of $11 million as of both August 31, 2019 and May 31, 2019.

[2] Reflects unpaid principal balance of pledged loans.

[3] Excludes cash collateral pledged to secure debt. If there is an event of default under most of our indentures, we can only withdraw the excess collateral if we substitute cash or permitted investments of equal value.

As displayed above in Table 13, we had excess loans pledged as collateral totaling $2,613 million and $2,739 million as of August 31, 2019 and May 31, 2019, respectively. We typically pledge loans in excess of the required amount for the following reasons: (i) our distribution and power supply loans are typically amortizing loans that require scheduled principal payments over the life of the loan, whereas the debt securities issued under secured indentures and agreements typically have bullet maturities; (ii) distribution and power supply borrowers have the option to prepay their loans; and (iii) individual loans may become ineligible for various reasons, some of which may be temporary.

We provide additional information on our borrowings, including the maturity profile, below in “Liquidity Risk.” Refer to “Note 4—Loans—Pledging of Loans” for additional information related to pledged collateral. Also refer to “Note 5—Short-Term Borrowings,” “Note 7—Long-Term Debt,” “Note 8—Subordinated Deferrable Debt” and “Note 9—Members’ Subordinated Certificates” in our 2019 Form 10-K for a more detailed description of each of our debt product types.

Equity

Table 14 presents the components of total CFC equity and total equity as of August 31, 2019 and May 31, 2019.

Table 14: Equity

(Dollars in thousands)	August 31, 2019	May 31, 2019	Change
Membership fees and educational fund:			
Membership fees	**$ 970**	$ 969	$ 1
Educational fund	**1,706**	2,013	(307)
Total membership fees and educational fund	**2,676**	2,982	(306)
Patronage capital allocated	**797,756**	860,578	(62,822)
Members' capital reserve	**759,097**	759,097	—
Total allocated equity	**1,559,529**	1,622,657	(63,128)
Unallocated net income (loss):			
Prior year-end cumulative derivative forward value losses[1]	**(348,965)**	(30,831)	(318,134)
Current year derivative forward value losses[1]	**(382,762)**	(318,134)	(64,628)
Current period-end cumulative derivative forward value losses[1]	**(731,727)**	(348,965)	(382,762)
Other unallocated net income	**63,530**	3,190	60,340
Unallocated net loss	**(668,197)**	(345,775)	(322,422)
CFC retained equity	**891,332**	1,276,882	(385,550)
Accumulated other comprehensive income	**(114)**	(147)	33
Total CFC equity	**891,218**	1,276,735	(385,517)
Noncontrolling interests	**27,210**	27,147	63
Total equity	**$ 918,428**	$ 1,303,882	$ (385,454)

[1]Represents derivative forward value gains (losses) for CFC only, as total CFC equity does not include the noncontrolling interests of the variable interest entities NCSC and RTFC, which we are required to consolidate. See "Note 13—Business Segments" for the statements of operations for CFC.

Total equity decreased by $385 million to $918 million as of August 31, 2019, attributable to our reported net loss of $324 million during the three months ended August 31, 2019 and the CFC Board of Directors authorization in the current quarter to retire patronage capital of $63 million.

In July 2019, the CFC Board of Directors authorized the allocation of fiscal year 2019 adjusted net income as follows: $97 million to members in the form of patronage capital; $71 million to the members' capital reserve; and $1 million to the cooperative educational fund. The amount of patronage capital allocated each year by CFC's Board of Directors is based on non-GAAP adjusted net income, which excludes the impact of derivative forward value gains (losses). We provide a reconciliation of our adjusted net income to our reported net income and an explanation of the adjustments below in "Non-GAAP Financial Measures."

In July 2019, the CFC Board of Directors also authorized the retirement of patronage capital totaling $63 million, consisting of $48 million, which represented 50% of the patronage capital allocation for fiscal year 2019, and $15 million, which represented the portion of the allocation from fiscal year 1994 net earnings that has been held for 25 years pursuant to the CFC Board of Directors policy. This amount was returned to members in cash in September 2019. The remaining portion of the amount allocated for fiscal year 2019 will be retained by CFC for 25 years under current guidelines adopted by the CFC Board of Directors in June 2009.

The CFC Board of Directors is required to make annual allocations of adjusted net income, if any. CFC has made annual retirements of allocated net earnings in 39 of the last 40 fiscal years; however, future retirements of allocated amounts are determined based on CFC's financial condition. The CFC Board of Directors has the authority to change the current practice for allocating and retiring net earnings at any time, subject to applicable laws. See "Item 1. Business—Allocation and Retirement of Patronage Capital" of our 2019 Form 10-K for additional information.

OFF-BALANCE SHEET ARRANGEMENTS

In the ordinary course of business, we engage in financial transactions that are not presented on our condensed consolidated balance sheets, or may be recorded on our condensed consolidated balance sheets in amounts that are different from the full contract or notional amount of the transaction. Our off-balance sheet arrangements consist primarily of guarantees of member obligations and unadvanced loan commitments intended to meet the financial needs of our members.

Guarantees

We provide guarantees for certain contractual obligations of our members to assist them in obtaining various forms of financing. We use the same credit policies and monitoring procedures in providing guarantees as we do for loans and commitments. If a member defaults on its obligation, we are obligated to pay required amounts pursuant to our guarantees. Meeting our guarantee obligations satisfies the underlying obligation of our member systems and prevents the exercise of remedies by the guarantee beneficiary based upon a payment default by a member. In general, the member is required to repay any amount advanced by us with accrued interest, pursuant to the documents evidencing the member's reimbursement obligation. Table 15 displays the notional amount of our outstanding guarantee obligations, by guarantee type and by company, as of August 31, 2019 and May 31, 2019.

Table 15: Guarantees Outstanding

(Dollars in thousands)	August 31, 2019	May 31, 2019	Change
Guarantee type:			
Long-term tax-exempt bonds	**$ 311,590**	$ 312,190	$ (600)
Letters of credit	**342,831**	379,001	(36,170)
Other guarantees	**146,906**	146,244	662
Total	**$ 801,327**	$ 837,435	$ (36,108)
Company:			
CFC	**$ 789,988**	$ 827,344	$ (37,356)
NCSC	**9,765**	8,517	1,248
RTFC	**1,574**	1,574	—
Total	**$ 801,327**	$ 837,435	$ (36,108)

Of the total notional amount of our outstanding guarantee obligations of $801 million and $837 million as of August 31, 2019 and May 31, 2019, respectively, 55% as of both periods, were secured by a mortgage lien on substantially all of the assets and future revenue of our member cooperatives for which we provide guarantees.

In addition to providing a guarantee on long-term tax-exempt bonds issued by member cooperatives totaling $312 million as of August 31, 2019, we also were the liquidity provider on $247 million of those tax-exempt bonds. As liquidity provider, we may be required to purchase bonds that are tendered or put by investors. Investors provide notice to the remarketing agent that they will tender or put a certain amount of bonds at the next interest rate reset date. If the remarketing agent is unable to sell such bonds to other investors by the next interest rate reset date, we have unconditionally agreed to purchase such bonds. We were not required to perform as liquidity provider pursuant to these obligations during the three months ended August 31, 2019 or the prior fiscal year.

We had outstanding letters of credit for the benefit of our members totaling $343 million as of August 31, 2019. These letters of credit relate to obligations for which we may be required to advance funds based on various trigger events specified in the letter of credit agreements. If we are required to advance funds, the member is obligated to repay the advance amount and accrued interest to us. In addition to these letters of credit, we had master letter of credit facilities in place as of August 31, 2019, under which we may be required to issue letters of credit to third parties for the benefit of our members up to an additional $57 million as of August 31, 2019. All of our master letter of credit facilities as of August 31, 2019 were subject to material adverse change clauses at the time of issuance. Prior to issuing a letter of credit under these facilities, we confirm that there has been no material adverse change in the business or condition, financial or otherwise, of the borrower since the time the loan was approved and that the borrower is currently in compliance with the letter of credit terms and conditions.

Table 16 presents the maturities for each of the next five fiscal years and thereafter of the notional amount of our outstanding guarantee obligations of $801 million as of August 31, 2019.

Table 16: Maturities of Guarantee Obligations

		Maturities of Guarantee Obligations					
(Dollars in thousands)	**Outstanding Amount**	**2020**	**2021**	**2022**	**2023**	**2024**	**Thereafter**
Guarantees....................	**$ 801,327**	**$ 131,542**	**$ 198,625**	**$ 30,757**	**$ 158,934**	**$ 32,528**	**$ 248,941**

We recorded a guarantee liability of $14 million as of both August 31, 2019 and May 31, 2019, respectively, for our guarantee and liquidity obligations associated with our members' debt. We provide additional information about our guarantee obligations in "Note 11—Guarantees."

Unadvanced Loan Commitments

Unadvanced loan commitments represent approved and executed loan contracts for which funds have not been advanced to borrowers. Our line of credit commitments include both contracts that are subject to material adverse change clauses and contracts that are not subject to material adverse change clauses, while our long-term loan commitments are typically subject to material adverse change clauses.

Table 17 displays the amount of unadvanced loan commitments, which consist of line of credit and long-term loan commitments, as of August 31, 2019 and May 31, 2019.

Table 17: Unadvanced Loan Commitments

	August 31, 2019		May 31, 2019		
(Dollars in thousands)	**Amount**	**% of Total**	**Amount**	**% of Total**	**Change**
Line of credit commitments:					
Conditional[1]	**$ 4,909,566**	**38%**	$ 4,845,306	37%	$ 64,260
Unconditional[2]	**3,003,647**	**23**	2,943,616	22	60,031
Total line of credit unadvanced commitments.........	**7,913,213**	**61**	7,788,922	59	124,291
Total long-term loan unadvanced commitments[1]...	**5,140,530**	**39**	5,448,636	41	(308,106)
Total unadvanced loan commitments.......................	**$13,053,743**	**100%**	$13,237,558	100%	$ (183,815)

___

[1]Represents amount related to facilities that are subject to material adverse change clauses.

[2]Represents amount related to facilities that are not subject to material adverse change clauses.

Table 18 presents the amount of unadvanced loan commitments, by loan type, as of August 31, 2019 and the maturities of the commitment amounts for each of the next five fiscal years and thereafter.

Table 18: Notional Maturities of Unadvanced Loan Commitments

		Notional Maturities of Unadvanced Loan Commitments					
(Dollars in thousands)	**Available Balance**	**2020**	**2021**	**2022**	**2023**	**2024**	**Thereafter**
Line of credit loans......	**$ 7,913,213**	**$ 609,206**	**$4,128,566**	**$ 485,285**	**$1,364,426**	**$1,055,813**	**$ 269,917**
Long-term loans...........	**5,140,530**	**306,460**	**665,361**	**1,295,466**	**1,080,699**	**1,634,791**	**157,753**
Total.............................	**$13,053,743**	**$ 915,666**	**$4,793,927**	**$1,780,751**	**$2,445,125**	**$2,690,604**	**$ 427,670**

Unadvanced line of credit commitments accounted for 61% of total unadvanced loan commitments as of August 31, 2019, while unadvanced long-term loan commitments accounted for 39% of total unadvanced loan commitments. Unadvanced line of credit commitments are typically revolving facilities for periods not to exceed five years and generally serve as supplemental back-up liquidity to our borrowers. Historically, borrowers have not drawn the full commitment amount for line of credit facilities, and we have experienced a very low utilization rate on line of credit loan facilities regardless of whether or not we are obligated to fund the facility where a material adverse change exists. Our unadvanced long-term loan commitments generally have a five-year draw period under which a borrower may advance funds prior to the expiration of the commitment. We expect that the majority of the long-term unadvanced loan commitments of $5,141 million will be advanced prior to the expiration of the commitment.

Because we historically have experienced a very low utilization rate on line of credit loan facilities, which account for the majority of our total unadvanced loan commitments, we believe the unadvanced loan commitment total of $13,054 million as of August 31, 2019 is not necessarily representative of our future funding requirements.

Unadvanced Loan Commitments—Conditional

The majority of our line of credit commitments and all our unadvanced long-term loan commitments include material adverse change clauses. Unadvanced loan commitments subject to material adverse change clauses totaled $10,050 million and $10,294 million as of August 31, 2019 and May 31, 2019, respectively, and accounted for 77% and 78%, respectively, of the combined total of unadvanced line of credit and long-term loan commitments as of both August 31, 2019 and May 31, 2019. Prior to making advances on these facilities, we confirm that there has been no material adverse change in the borrower's business or condition, financial or otherwise, since the time the loan was approved and confirm that the borrower is currently in compliance with loan terms and conditions. In some cases, the borrower's access to the full amount of the facility is further constrained by use of proceeds restrictions, imposition of borrower-specific restrictions, or by additional conditions that must be met prior to advancing funds. Since we generally do not charge a fee for the borrower to have an unadvanced amount on a loan facility that is subject to a material adverse change clause, our borrowers tend to request amounts in excess of their immediate estimated loan requirements.

Unadvanced Loan Commitments—Unconditional

Unadvanced loan commitments not subject to material adverse change clauses at the time of each advance consisted of unadvanced committed lines of credit totaling $3,004 million and $2,944 million as of August 31, 2019 and May 31, 2019, respectively. For contracts not subject to a material adverse change clause, we are generally required to advance amounts on the committed facilities as long as the borrower is in compliance with the terms and conditions of the facility.

Syndicated loan facilities, where the pricing is set at a spread over a market index rate as agreed upon by all of the participating financial institutions based on market conditions at the time of syndication, accounted for 90% of unconditional line of credit commitments as of August 31, 2019. The remaining 10% represented unconditional committed line of credit loans, for which any new advance would be made at rates determined by us.

Table 19 presents the maturities for each of the next five fiscal years and thereafter of the notional amount of unconditional committed lines of credit not subject to a material adverse change clause as of August 31, 2019.

Table 19: Maturities of Notional Amount of Unconditional Committed Lines of Credit

		Notional Maturities of Unconditional Committed Lines of Credit					
(Dollars in thousands)	**Available Balance**	**2020**	**2021**	**2022**	**2023**	**2024**	**Thereafter**
Committed lines of credit ..	**$ 3,003,647**	**$ 260,886**	**$ 478,489**	**$ 171,875**	**$ 1,166,687**	**$ 811,510**	**$ 114,200**

See "MD&A—Off-Balance Sheet Arrangements" in our 2019 Form 10-K for additional information on our off-balance sheet arrangements.

RISK MANAGEMENT

Overview

We face a variety of risks that can significantly affect our financial performance, liquidity, reputation and ability to meet the expectations of our members, investors and other stakeholders. As a financial services company, the major categories of risk exposures inherent in our business activities include credit risk, liquidity risk, market risk and operational risk. These risk categories are summarized below.

- *Credit risk* is the risk that a borrower or other counterparty will be unable to meet its obligations in accordance with agreed-upon terms.
- *Liquidity risk* is the risk that we will be unable to fund our operations and meet our contractual obligations or that we will be unable to fund new loans to borrowers at a reasonable cost and tenor in a timely manner.
- *Market risk* is the risk that changes in market variables, such as movements in interest rates, may adversely affect the match between the timing of the contractual maturities, re-pricing and prepayments of our financial assets and the related financial liabilities funding those assets.
- *Operational risk* is the risk of loss resulting from inadequate or failed internal controls, processes, systems, human error or external events. Operational risk also includes compliance risk, fiduciary risk, reputational risk and litigation risk.

Effective risk management is critical to our overall operations and to achieving our primary objective of providing cost-based financial products to our rural electric members while maintaining the sound financial results required for investment-grade credit ratings on our rated debt instruments. Accordingly, we have a risk-management framework that is intended to govern the principal risks we face in conducting our business and the aggregate amount of risk we are willing to accept, referred to as risk appetite, in the context of CFC's mission and strategic objectives and initiatives. We provide information on our risk management framework in our 2019 Form 10-K under "Item 7. MD&A—Risk Management—Risk Management Framework."

CREDIT RISK

Our loan portfolio, which represents the largest component of assets on our balance sheet, and guarantees account for the substantial majority of our credit risk exposure. We also engage in certain non-lending activities that may give rise to credit and counterparty settlement risk, including the purchase of investment securities and entering into derivative transactions to manage interest rate risk. Our primary credit exposure is to rural electric cooperatives that provide essential electric services to end-users, the majority of which are residential customers. We also have a limited portfolio of loans to not-for-profit and for-profit telecommunication companies. We provide a discussion of our credit risk management processes and activities in our 2019 Form 10-K under "Item 7. MD&A—Credit Risk—Credit Risk Management."

Loan Portfolio Credit Risk

Below we provide information on the credit risk profile of our loan portfolio, including security provisions, loan concentration, credit performance and our allowance for loan losses.

Security Provisions

Except when providing line of credit loans, we generally lend to our members on a senior secured basis. Long-term loans are generally secured on parity with other secured lenders (primarily RUS), if any, by all assets and revenue of the borrower with exceptions typical in utility mortgages. Line of credit loans are generally unsecured. In addition to the collateral pledged to secure our loans, distribution and power supply borrowers also are required to set rates charged to customers to achieve certain specified financial ratios.

Table 20 presents, by loan type and by company, the amount and percentage of secured and unsecured loans in our loan portfolio as of August 31, 2019 and May 31, 2019. Of our total loans outstanding, 93% were secured and 7% were unsecured as of August 31, 2019. In comparison, of our total loans outstanding, 92% were secured and 8% were unsecured as of May 31, 2019.

Table 20: Loan Portfolio Security Profile

	August 31, 2019				
(Dollars in thousands)	**Secured**	**% of Total**	**Unsecured**	**% of Total**	**Total**
Loan type:					
Long-term loans:					
Long-term fixed-rate loans	**$ 23,273,849**	**98%**	**$ 403,385**	**2%**	**$ 23,677,234**
Long-term variable-rate loans	**956,066**	**99**	**6,475**	**1**	**962,541**
Total long-term loans	**24,229,915**	**98**	**409,860**	**2**	**24,639,775**
Line of credit loans	**128,830**	**8**	**1,519,994**	**92**	**1,648,824**
Total loans outstanding[(1)]	**$ 24,358,745**	**93**	**$ 1,929,854**	**7**	**$ 26,288,599**
Company:					
CFC	**$ 23,402,979**	**93%**	**$ 1,836,728**	**7%**	**$ 25,239,707**
NCSC	**621,700**	**89**	**76,091**	**11**	**697,791**
RTFC	**334,066**	**95**	**17,035**	**5**	**351,101**
Total loans outstanding[(1)]	**$ 24,358,745**	**93**	**$ 1,929,854**	**7**	**$ 26,288,599**

	May 31, 2019				
(Dollars in thousands)	**Secured**	**% of Total**	**Unsecured**	**% of Total**	**Total**
Loan type:					
Long-term loans:					
Long-term fixed-rate loans	$ 22,674,330	98%	$ 419,923	2%	$ 23,094,253
Long-term variable-rate loans	1,058,434	99	8,446	1	1,066,880
Total long-term loans	23,732,764	98	428,369	2	24,161,133
Line of credit loans	121,741	7	1,622,790	93	1,744,531
Total loans outstanding[(1)]	$ 23,854,505	92	$ 2,051,159	8	$ 25,905,664
Company:					
CFC	$ 22,861,414	92%	$ 1,956,262	8%	$ 24,817,676
NCSC	664,618	89	78,270	11	742,888
RTFC	328,473	95	16,627	5	345,100
Total loans outstanding[(1)]	$ 23,854,505	92	$ 2,051,159	8	$ 25,905,664

[(1)] Represents the unpaid principal amount of loans as of the end of each period presented and excludes deferred loan origination costs of $11 million as of both August 31, 2019 and May 31, 2019.

As part of our strategy in managing our credit risk exposure, we entered into a long-term standby purchase commitment agreement with Farmer Mac in fiscal year 2016. Under this agreement, we may designate certain loans to be covered under the commitment, as approved by Farmer Mac, and in the event any such loan later goes into payment default for at least 90 days, upon request by us, Farmer Mac must purchase such loan at par value. The outstanding principal balance of loans covered under this agreement totaled $602 million as of August 31, 2019, compared with $619 million as of May 31, 2019. No loans have been put to Farmer Mac for purchase pursuant to this agreement. Our credit exposure is also mitigated by long-term loans guaranteed by RUS. Guaranteed RUS loans totaled $152 million and $154 million as of August 31, 2019 and May 31, 2019, respectively.

Credit Concentration

Concentrations may exist when there are amounts loaned to borrowers engaged in similar activities or in geographic areas that would cause them to be similarly impacted by economic or other conditions or when there are large exposures to single borrowers. As a tax-exempt, member-owned finance cooperative, CFC's principal focus is to provide funding to its rural electric utility cooperative members to assist them in acquiring, constructing and operating electric distribution systems, power supply systems and related facilities. Because we lend primarily to our rural electric utility cooperative members, we have a loan portfolio subject to single-industry and single-obligor concentration risks. Outstanding loans to electric utility organizations represented approximately 99% of our total outstanding loan portfolio as of August 31, 2019, unchanged from May 31, 2019. Although our organizational structure and mission results in single-industry concentration, we serve a geographically diverse group of electric and telecommunications borrowers throughout the United States, with a total of 900 borrowers located in 49 states as of August 31, 2019. Loans to borrowers in Texas accounted for 16% and 15% of total loans outstanding as of August 31, 2019 and May 31, 2019, respectively, representing the largest concentration of outstanding loans to borrowers and the largest number of borrowers in any one state.

Single-Obligor Concentration

Table 21 displays the outstanding loan exposure for the 20 largest borrowers, by company, as of August 31, 2019 and May 31, 2019. The 20 borrowers with the largest exposure consisted of 10 distribution systems, nine power supply systems and one NCSC associate as of both August 31, 2019 and May 31, 2019. The largest total exposure to a single borrower or controlled group represented approximately 2% of total loans outstanding as of both August 31, 2019 and May 31, 2019.

Table 21: Loan Exposure to 20 Largest Borrowers

	August 31, 2019		May 31, 2019		
(Dollars in thousands)	Amount	% of Total	Amount	% of Total	Change
By company:					
CFC	**$ 5,474,333**	**21%**	$ 5,369,879	21%	$ 104,454
NCSC	**245,898**	**1**	245,559	1	339
Total loan exposure to 20 largest borrowers	**5,720,231**	**22**	5,615,438	22	104,793
Less: Loans covered under Farmer Mac standby purchase commitment	**(313,110)**	**(1)**	(360,012)	(1)	46,902
Net loan exposure to 20 largest borrowers	**$ 5,407,121**	**21%**	$ 5,255,426	21%	$ 151,695

Although CFC has been exposed to single-industry and single-obligor concentrations since inception in 1969, we historically have experienced limited defaults and very low credit losses in our electric loan portfolio. The likelihood of default and loss for our electric cooperative borrowers, which account for 99% of our outstanding loans as of August 31, 2019, has been low due to several factors. First, as discussed above, we generally lend to our members on a senior secured basis. Second, electric cooperatives typically are consumer-owned, not-for-profit entities that provide an essential service to end-users, the majority of which are residential customers. Third, electric cooperatives face limited competition, as they tend to operate in exclusive territories not serviced by public investor-owned utilities. Fourth, the majority operate in states where electric cooperatives are not subject to rate regulation. Thus, they are able to make rate adjustments to pass along increased costs to the end customer without first obtaining state regulatory approval, allowing them to cover operating costs and generate sufficient earnings and cash flows to service their debt obligations. Finally, they tend to adhere to a conservative business strategy model that has historically resulted in a relatively stable, resilient operating environment and overall strong financial performance and credit strength for the electric cooperative network.

Credit Quality

Assessing the overall credit quality of our loan portfolio and measuring our credit risk is an ongoing process that involves tracking payment status, the internal risk ratings of our borrowers, troubled debt restructurings, nonperforming and impaired loans, charge-offs and other indicators of credit risk. We monitor and subject each borrower and loan facility in our loan portfolio to an individual risk assessment based on quantitative and qualitative factors. Internal risk ratings and payment status trends are indicators, among others, of the probability of borrower default and level of credit risk in our loan portfolio.

The overall credit quality of our loan portfolio remained high, as evidenced by our strong credit performance metrics, including low levels of criticized exposure. As displayed in Table 20 above, 93% and 92% of our total outstanding loans were secured as of August 31, 2019 and May 31, 2019, respectively. We had no delinquent or nonperforming loans as of August 31, 2019 and May 31, 2019. In addition, we had no loan defaults or charge-offs during the three months ended August 31, 2019.

Borrower Risk Ratings

Our borrower risk ratings are intended to align with banking regulatory agency credit risk rating definitions of pass and criticized classifications, with loans classified as criticized further classified as special mention, substandard or doubtful. Pass ratings reflect relatively low probability of default, while criticized ratings have a higher probability of default. Loans with borrowers classified as criticized totaled $198 million, or 0.75%, of total loans outstanding as of August 31, 2019. Of this amount, $175 million, was classified as substandard. In comparison, loans with borrowers classified as criticized totaled $202 million, or 0.78%, of total loans outstanding as of May 31, 2019. Of this amount, $176 million was classified as substandard. We did not have any loans classified as doubtful as of August 31, 2019 or May 31, 2019. See “Note 4—Loans” for a description of each of the risk rating classifications.

Troubled Debt Restructurings

We actively monitor problem loans and, from time to time, attempt to work with borrowers to manage such exposures through loan workouts or modifications that better align with the borrower’s current ability to pay. A loan restructuring or modification of terms is accounted for as a troubled debt restructuring (“TDR”) if, for economic or legal reasons related to the borrower’s financial difficulties, a concession is granted to the borrower that we would not otherwise consider. TDR loans generally are initially placed on nonaccrual status, although in many cases such loans were already on nonaccrual status prior to modification. Interest accrued but not collected at the date a loan is placed on nonaccrual status is reversed against earnings. These loans may be returned to performing status and the accrual of interest resumed if the borrower performs under the modified terms for an extended period of time, and we expect the borrower to continue to perform in accordance with the modified terms. In certain limited circumstances in which a TDR loan is current at the modification date, the loan may remain on accrual status at the time of modification.

Table 22 presents the carrying value of loans modified as TDRs and the performance status as of August 31, 2019 and May 31, 2019. Our last modification of a loan that met the definition of a TDR occurred in fiscal year 2017. Although TDR loans may be returned to performing status if the borrower performs under the modified terms of the loan for an extended period of time, TDR loans are considered individually impaired.

Table 22: Troubled Debt Restructured Loans

(Dollars in thousands)	August 31, 2019 Carrying Amount	August 31, 2019 % of Total Loans Outstanding	May 31, 2019 Carrying Amount	May 31, 2019 % of Total Loans Outstanding
TDR loans:				
CFC	**$ 5,755**	**0.02%**	$ 6,261	0.03%
RTFC	**5,467**	**0.02**	5,592	0.02
Total TDR loans	**$ 11,222**	**0.04%**	$ 11,853	0.05%
Performance status of TDR loans:				
Performing TDR loans	**$ 11,222**	**0.04%**	$ 11,853	0.05%

As indicated in Table 22 above, we did not have any TDR loans classified as nonperforming as of August 31, 2019 or May 31, 2019.

Nonperforming Loans

In addition to TDR loans that may be classified as nonperforming, we also may have nonperforming loans that have not been modified as a TDR loan. We classify such loans as nonperforming at the earlier of the date when we determine: (i) interest or principal payments on the loan is past due 90 days or more; (ii) as a result of court proceedings, the collection of interest or principal payments based on the original contractual terms is not expected; or (iii) the full and timely collection of interest or principal is otherwise uncertain. Once a loan is classified as nonperforming, we generally place the loan on nonaccrual status. Interest accrued but not collected at the date a loan is placed on nonaccrual status is reversed against earnings. We have not had any loans classified as nonperforming other than TDR loans, since the fiscal year ended May 31, 2014.

Net Charge-Offs

Charge-offs represent the amount of a loan that has been removed from our consolidated balance sheet when the loan is deemed uncollectible. Generally the amount of a charge-off is the recorded investment in excess of the fair value of the expected cash flows from the loan, or, if the loan is collateral dependent, the fair value of the underlying collateral securing the loan. We report charge-offs net of amounts recovered on previously charged off loans. We had no loan defaults or charge-offs during the three months ended August 31, 2019 and 2018.

Historical Loan Losses

In its 50-year history, CFC has experienced only 16 defaults, of which 10 resulted in no loss and six resulted in cumulative historical net charge-offs of $86 million for our electric utility loan portfolio. Of this amount, $67 million was attributable to electric utility power supply cooperatives and $19 million was attributable to electric distribution cooperatives. We discuss the reasons loans to electric utility cooperatives, our principal lending market, typically have a relatively low risk of default above under "Credit Concentration."

In comparison, since RTFC's inception in 1987, we have had 15 defaults and cumulative net charge-offs attributable to telecommunication borrowers totaling $427 million, the most significant of which was a charge-off of $354 million in fiscal year 2011. This charge-off related to outstanding loans to Innovative Communications Corporation ("ICC"), a former RTFC member, and the transfer of ICC's assets in foreclosure to Caribbean Asset Holdings, LLC.

Outstanding loans to electric utility organizations totaled $25,937 million and accounted for 99% of our total outstanding loan portfolio as of August 31, 2019, while outstanding RTFC telecommunications loans totaled $351 million and accounted for 1% of our total outstanding loan portfolio as of August 31, 2019.

We provide additional information on the credit quality of our loan portfolio in "Note 4—Loans."

Allowance for Loan Losses

The allowance for loan losses represents management's estimate of probable losses inherent in our loan portfolio as of each balance sheet date. We determine the allowance based on borrower risk ratings, historical loss experience, specific problem loans, economic conditions and other pertinent factors that, in management's judgment, may affect the risk of loss in our loan portfolio.

Table 23 summarizes changes in the allowance for loan losses for the three months ended August 31, 2019 and 2018, and provides a comparison of the allowance by company as of August 31, 2019 and May 31, 2019.

Table 23: Allowance for Loan Losses

	Three Months Ended August 31,	
(Dollars in thousands)	**2019**	**2018**
Beginning balance	**$ 17,535**	$ 18,801
Provision (benefit) for loan losses	**30**	(109)
Ending balance	**$ 17,565**	$ 18,692
	August 31, 2019	**May 31, 2019**
Allowance for loan losses by company:		
CFC	**$ 12,962**	$ 13,120
NCSC	**2,077**	2,007
RTFC	**2,526**	2,408
Total	**$ 17,565**	$ 17,535
Allowance coverage ratios:		
Total loans outstanding[1]	**$ 26,288,599**	$ 25,905,664
Percentage of total loans outstanding	**0.07%**	0.07%

[1] Represents the unpaid principal amount of loans as of the end of each period presented and excludes unamortized deferred loan origination costs of $11 million as of both August 31, 2019 and May 31, 2019.

Our allowance for loan losses was $18 million as of August 31, 2019, relatively unchanged from May 31, 2019. The allowance coverage ratio was 0.07% as of both August 31, 2019 and May 31, 2019. We had no loans classified as nonperforming as of August 31, 2019 or May 31, 2019. We experienced no charge-offs during the three months ended August 31, 2019 and 2018. Loans designated as individually impaired totaled $11 million and $12 million as of August 31, 2019 and May 31, 2019, respectively, and the specific allowance related to those loans totaled $1 million as of both August 31, 2019 and May 31, 2019.

See "MD&A—Critical Accounting Policies and Estimates—Allowance for Loan Losses" and "Note 1—Summary of Significant Accounting Policies" in our 2019 Form 10-K for additional information on the methodology for determining our allowance for loan losses and the key assumptions. See "Note 4—Loans" of this Report for additional information on the credit quality of our loan portfolio.

Counterparty Credit Risk

We are exposed to counterparty credit risk related to the performance of the parties with which we enter into financial transactions, primarily for derivative instruments, cash and time deposit accounts and our investment security holdings. To mitigate this risk, we only enter into these transactions with financial institutions with investment-grade ratings. Our cash and time deposits with financial institutions generally have an original maturity of less than one year.

We manage our derivative counterparty credit risk by monitoring the overall credit worthiness of each counterparty based on our internal counterparty credit risk scoring model; using counterparty-specific credit risk limits; executing master netting arrangements; and diversifying our derivative transactions among multiple counterparties. We also require that our derivative counterparties be a participant in one of our committed bank revolving line of credit agreements. Our active derivative counterparties had credit ratings ranging from Aa2 to Baa2 by Moody's Investors Service ("Moody's") and from AA- to BBB+ by S&P Global Inc. ("S&P") as of August 31, 2019. Our largest counterparty exposure, based on the outstanding notional amount, represented approximately 23% of the total outstanding notional amount of derivatives as of both August 31, 2019 and May 31, 2019.

Credit Risk-Related Contingent Features

Our derivative contracts typically contain mutual early-termination provisions, generally in the form of a credit rating trigger. Under the mutual credit rating trigger provisions, either counterparty may, but is not obligated to, terminate and settle the agreement if the credit rating of the other counterparty falls below a level specified in the agreement. If a derivative contract is terminated, the amount to be received or paid by us would be equal to the prevailing fair value, as defined in the agreement, as of the termination date.

Our senior unsecured credit ratings from Moody's and S&P were A2 and A, respectively, as of August 31, 2019. Both Moody's and S&P had our ratings on stable outlook as of August 31, 2019. Table 24 displays the notional amounts of our derivative contracts with rating triggers as of August 31, 2019, and the payments that would be required if the contracts were terminated as of that date because of a downgrade of our unsecured credit ratings or the counterparty's unsecured credit ratings below A3/A-, below Baa1/BBB+, to or below Baa2/BBB, below Baa3/BBB-, or to or below Ba2/BB+ by Moody's or S&P, respectively. In calculating the payment amounts that would be required upon termination of the derivative contracts, we assumed that the amounts for each counterparty would be netted in accordance with the provisions of the counterparty's master netting agreements. The net payment amounts are based on the fair value of the underlying derivative instrument, excluding the credit risk valuation adjustment, plus any unpaid accrued interest amounts.

Table 24: Rating Triggers for Derivatives

(Dollars in thousands)	Notional Amount	Payable Due From CFC	Receivable Due to CFC	Net (Payable)/ Receivable
Impact of rating downgrade trigger:				
Falls below A3/A-[(1)]	**$ 50,460**	**$ (10,748)**	**$ —**	**$ (10,748)**
Falls below Baa1/BBB+	**6,989,288**	**(471,249)**	**—**	**(471,249)**
Falls to or below Baa2/BBB [(2)]	**558,159**	**(20,778)**	**—**	**(20,778)**
Falls below Baa3/BBB-	**221,473**	**(14,759)**	**—**	**(14,759)**
Total	**$ 7,819,380**	**$ (517,534)**	**$ —**	**$ (517,534)**

____

(1) Rating trigger for CFC falls below A3/A-, while rating trigger for counterparty falls below Baa1/BBB+ by Moody's or S&P, respectively.
(2) Rating trigger for CFC falls to or below Baa2/BBB, while rating trigger for counterparty falls to or below Ba2/BB+ by Moody's or S&P, respectively.

We have outstanding notional amount of derivatives with one counterparty subject to a ratings trigger and early termination provision in the event of a downgrade of CFC's senior unsecured credit ratings below Baa3, BBB- or BBB- by Moody's, S&P or Fitch Ratings Inc. ("Fitch"), respectively, which is not included in the above table, totaling $165 million as of August 31, 2019. These contracts were in an unrealized loss position of $41 million as of August 31, 2019.

The aggregate fair value amount, including the credit valuation adjustment, of all interest rate swaps with rating triggers that were in a net liability position was $543 million as of August 31, 2019. There were no counterparties that fell below the rating trigger levels in our interest swap contracts as of August 31, 2019. If a counterparty has a credit rating that falls below the rating trigger level specified in the interest swap contract, we have the option to terminate all derivatives with the counterparty. However, we generally do not terminate such agreements prematurely because our interest rate swaps are critical to our matched funding strategy to mitigate interest rate risk.

See "Item 1A. Risk Factors" in our 2019 Form 10-K for additional information about credit risk related to our business.

LIQUIDITY RISK

We define liquidity as the ability to convert assets into cash quickly and efficiently, maintain access to readily available funding and rollover or issue new debt, under both normal operating conditions and periods of CFC-specific and/or market stress, to ensure that we can meet borrower loan requests, pay current and future obligations and fund our operations on a cost-effective basis. Our primary sources of liquidity include cash flows from operations, member loan repayments, committed bank revolving lines of credit, committed loan facilities under the Guaranteed Underwriter Program, revolving note purchase agreements with Farmer Mac and our ability to issue debt in the capital markets, to our members and in private placements. We provide a discussion of our liquidity risk-management framework and activities undertaken to manage liquidity risk in our 2019 Form 10-K under "Item 7. MD&A—Liquidity Risk—Liquidity Risk Management."

Available Liquidity

As part of our strategy in managing liquidity risk and meeting our liquidity objectives, we seek to maintain a substantial level of on-balance sheet and off-balance sheet sources of liquidity that are readily available for access to meet our near-term liquidity needs. Table 25 presents the sources of our available liquidity as of August 31, 2019 and May 31, 2019.

Table 25: Available Liquidity

	August 31, 2019			May 31, 2019		
(Dollars in millions)	Total	Accessed	Available	Total	Accessed	Available
Cash and cash equivalents	**$ 231**	**$ —**	**$ 231**	$ 178	$ —	$ 178
Committed bank revolving line of credit agreements—unsecured[1]	**2,975**	**3**	**2,972**	2,975	3	2,972
Guaranteed Underwriter Program committed facilities—secured[2]	**7,298**	**5,948**	**1,350**	7,298	5,948	1,350
Farmer Mac revolving note purchase agreement, dated March 24, 2011, as amended—secured[3]	**5,200**	**2,962**	**2,238**	5,200	3,055	2,145
Farmer Mac revolving note purchase agreement, dated July 31, 2015, as amended—secured	**300**	**—**	**300**	300	—	300
Total	**$ 16,004**	**$ 8,913**	**$ 7,091**	$ 15,951	$ 9,006	$ 6,945

[1]The committed bank revolving line of credit agreements consist of a three-year and a five-year line of credit agreement. The accessed amount of $3 million as of both August 31, 2019 and May 31, 2019, relates to letters of credit issued pursuant to the five-year line of credit agreement.

[2]The committed facilities under the Guaranteed Underwriter Program are not revolving.

[3]Availability subject to market conditions.

We believe we have sufficient liquidity from the available on- and off-balance sheet liquidity sources presented above in Table 25 and our ability to issue debt to meet demand for member loan advances and satisfy our obligations to repay long-term debt maturing over the next 12 months.

Borrowing Capacity Under Current Facilities

Following is a discussion of our borrowing capacity and key terms and conditions under our revolving line of credit agreements with banks and committed loan facilities under the Guaranteed Underwriter Program and revolving note purchase agreements with Farmer Mac.

Committed Bank Revolving Line of Credit Agreements—Unsecured

Our committed bank revolving lines of credit may be used for general corporate purposes; however, we generally rely on them as a backup source of liquidity for our member and dealer commercial paper. We had $2,975 million of commitments under committed bank revolving line of credit agreements as of August 31, 2019. Under our current committed bank revolving line of credit agreements, we have the ability to request up to $300 million of letters of credit, which would result in a reduction in the remaining available amount under the facilities.

Table 26 presents the total commitment, the net amount available for use and the outstanding letters of credit under our committed bank revolving line of credit agreements as of August 31, 2019. We did not have any outstanding borrowings under our bank revolving line of credit agreements as of August 31, 2019.

Table 26: Committed Bank Revolving Line of Credit Agreements

	August 31, 2019				
(Dollars in millions)	**Total Commitment**	**Letters of Credit Outstanding**	**Net Available for Advance**	**Maturity**	**Annual Facility Fee (1)**
3-year agreement	$ **1,440**	$ **—**	$ **1,440**	November 28, 2021	7.5 bps
5-year agreement	**1,535**	**3**	**1,532**	November 28, 2023	10 bps
Total	$ **2,975**	$ **3**	$ **2,972**		

(1)Facility fee based on CFC's senior unsecured credit ratings in accordance with the established pricing schedules at the inception of the related agreement.

Our committed bank revolving line of credit agreements do not contain a material adverse change clause or rating triggers that would limit the banks' obligations to provide funding under the terms of the agreements; however, we must be in compliance with the covenants to draw on the facilities. We have been and expect to continue to be in compliance with the covenants under our committed bank revolving line of credit agreements. As such, we could draw on these facilities to repay dealer or member commercial paper that cannot be rolled over. See "Financial Ratios and Debt Covenants" below for additional information, including the specific financial ratio requirements under our committed bank revolving line of credit agreements.

Guaranteed Underwriter Program Committed Facilities—Secured

Under the Guaranteed Underwriter Program, we can borrow from the Federal Financing Bank and use the proceeds to make new loans and refinance existing indebtedness. As part of the program, we pay fees, based on outstanding borrowings supporting the USDA Rural Economic Development Loan and Grant program. The borrowings under this program are guaranteed by RUS.

We had up to $1,350 million available for access under the Guaranteed Underwriter Program as of August 31, 2019. Of this amount, $600 million is available for advance through July 15, 2022 and $750 million is available for advance through July 15, 2023. On September 25, 2019, we received a commitment letter for the guarantee by RUS of a $500 million loan facility from the Federal Financing Bank under the Guaranteed Underwriter Program.

We are required to pledge eligible distribution system loans or power supply system loans as collateral in an amount at least equal to the total outstanding borrowings under the Guaranteed Underwriter Program. See "Consolidated Balance Sheet Analysis—Debt—Collateral Pledged" and "Note 4—Loans" for additional information on pledged collateral.

Farmer Mac Revolving Note Purchase Agreements—Secured

As indicated in Table 25, we have two revolving note purchase agreements with Farmer Mac, which together allow us to borrow up to $5,500 million from Farmer Mac. Under our first revolving note purchase agreement with Farmer Mac, dated March 24, 2011, as amended, we can borrow, subject to market conditions, up to $5,200 million at any time through January 11, 2022, and such date shall automatically extend on each anniversary date of the closing for an additional year, unless prior to any such anniversary date, Farmer Mac provides us with a notice that the draw period will not be extended beyond the remaining term. This revolving note purchase agreement allows us to borrow, repay and re-borrow funds at any time through maturity, as market conditions permit, provided that the outstanding principal amount at any time does not exceed the total available under the agreement. Each borrowing under the note purchase agreement is evidenced by a pricing agreement setting forth the interest rate, maturity date and other related terms as we may negotiate with Farmer Mac at the time of each such borrowing. We may select a fixed rate or variable rate at the time of each advance with a maturity as determined in the applicable pricing agreement. We had outstanding secured notes payable totaling $2,962 million and $3,055 million as of August 31, 2019 and May 31, 2019, respectively, under the Farmer Mac revolving note purchase agreement of $5,200 million. The available borrowing amount totaled $2,238 million as of August 31, 2019.

Under our second revolving note purchase agreement with Farmer Mac, dated July 31, 2015, as amended, we can borrow up to $300 million at any time through December 20, 2023 at a fixed spread over LIBOR. This agreement also allows us to borrow, repay and re-borrow funds at any time through maturity, provided that the outstanding principal amount at any time does not exceed the total available under the agreement. Prior to the maturity date, Farmer Mac may terminate the agreement upon 30 days written notice to us on periodic facility renewal dates, the first of which was January 31, 2019. Subsequent facility renewal dates are on each June 20 or December 20 thereafter until the maturity date. We may terminate the agreement upon 30 days written notice at any time. We did not have any outstanding notes payable under this revolving note purchase agreement with Farmer Mac as of August 31, 2019. Under the terms of the first revolving note purchase agreement with Farmer Mac described above, the $5,200 million commitment will increase to $5,500 million in the event the second revolving note purchase agreement is terminated.

Pursuant to both Farmer Mac revolving note purchase agreements, we are required to pledge eligible distribution system or power supply system loans as collateral in an amount at least equal to the total principal amount of notes outstanding. See “Consolidated Balance Sheet Analysis—Debt—Collateral Pledged” and “Note 4—Loans” for additional information on pledged collateral.

Short-Term Borrowings and Long-Term and Subordinated Debt

Additional funding is provided by short-term borrowings and issuances of long-term and subordinated debt. We rely on short-term borrowings as a source to meet our daily, near-term funding needs. Long-term and subordinated debt represents the most significant component of our funding. The issuance of long-term debt allows us to reduce our reliance on short-term borrowings and effectively manage our refinancing and interest rate risk.

Short-Term Borrowings

Our short-term borrowings consist of commercial paper, which we offer to members and dealers, select notes and daily liquidity fund notes offered to members, and bank-bid notes and medium-term notes offered to members and dealers.

Table 27 displays the composition, by funding source, of our short-term borrowings as of August 31, 2019 and May 31, 2019. Member borrowings accounted for 79% of total short-term borrowings as of August 31, 2019, compared with 74% of total short-term borrowings as of May 31, 2019.

Table 27: Short-Term Borrowings—Funding Sources

	August 31, 2019		May 31, 2019	
(Dollars in thousands)	Amount Outstanding	% of Total Short-Term Borrowings	Amount Outstanding	% of Total Short-Term Borrowings
Funding source:				
Members	**$ 3,197,882**	**79%**	$ 2,663,110	74%
Capital markets	**829,763**	**21**	944,616	26
Total	**$ 4,027,645**	**100%**	$ 3,607,726	100%

Table 28 displays the composition, by product type, of our short-term borrowings as of August 31, 2019 and May 31, 2019.

Table 28: Short-Term Borrowings

	August 31, 2019			May 31, 2019	
(Dollars in thousands)	**Amount Outstanding**	**% of Total Debt Outstanding**	**Amount Outstanding**	**% of Total Debt Outstanding**
Short-term borrowings:				
Commercial paper:				
Commercial paper to dealers, net of discounts	**$ 829,763**	**3%**	$ 944,616	4%
Commercial paper to members, at par	**1,240,830**	**5**	1,111,795	4
Total commercial paper	**2,070,593**	**8**	2,056,411	8
Select notes to members	**1,277,927**	**5**	1,023,952	4
Daily liquidity fund notes to members	**435,070**	**2**	298,817	1
Medium-term notes sold to members	**244,055**	**1**	228,546	1
Total short-term borrowings	**$ 4,027,645**	**16%**	$ 3,607,726	14%

Our short-term borrowings totaled $4,028 million and accounted for 16% of total debt outstanding as of August 31, 2019, compared with $3,608 million, or 14% of total debt outstanding as of May 31, 2019. Of the total commercial paper, $830 million, or 3% of total debt outstanding, was issued to dealers as of August 31, 2019, compared with $945 million, or 4% of total debt outstanding, that was issued to dealers as of May 31, 2019. Our intent is to manage our short-term wholesale funding risk by maintaining outstanding dealer commercial paper at an amount below $1,250 million for the foreseeable future.

Long-Term and Subordinated Debt

In addition to access to private debt facilities, we also issue debt in the public capital markets. Pursuant to Rule 405 of the Securities Act, we are classified as a "well-known seasoned issuer." In September 2019, we filed a new shelf registration statement for our collateral trust bonds under which we can issue an unlimited amount of collateral trust bonds until September 2022. See "Item 7. MD&A—Liquidity Risk" in our 2019 Form 10-K for additional information on our shelf registration statements with the SEC.

As discussed in "Consolidated Balance Sheet Analysis—Debt," long-term and subordinated debt totaled $21,437 million and accounted for 84% of total debt outstanding as of August 31, 2019, from $21,554 million, or 86%, of total debt outstanding as of May 31, 2019. Table 29 summarizes long-term and subordinated debt issuances and repayments during the three months ended August 31, 2019.

Table 29: Issuances and Repayments of Long-Term and Subordinated Debt[(1)]

	Three Months Ended August 31, 2019		
(Dollars in thousands)	**Issuances**	**Repayments[(2)]**	**Change**
Long-term and subordinated debt activity:			
Guaranteed Underwriter Program notes payable	**$ —**	**$ 23,352**	**$ (23,352)**
Farmer Mac notes payable	**—**	**92,436**	**(92,436)**
Medium-term notes sold to members	**94,256**	**73,128**	**21,128**
Medium-term notes sold to dealers	**—**	**26,835**	**(26,835)**
Members' subordinated certificates	**1,289**	**1,933**	**(644)**
Total	**$ 95,545**	**$ 217,684**	**$ (122,139)**

(1) Amounts exclude unamortized debt issuance costs and discounts.

(2) Repayments include principal maturities, scheduled amortization payments, repurchases and redemptions.

Table 30 summarizes the scheduled amortization of the principal amount of long-term debt, subordinated deferrable debt and members' subordinated certificates as of August 31, 2019.

Table 30: Principal Maturity of Long-Term and Subordinated Debt

(Dollars in thousands)	Amount Maturing [(1)]	% of Total
Fiscal year ending:		
May 31, 2020	$ 1,439,826	7%
May 31, 2021	1,940,594	9
May 31, 2022	1,958,673	9
May 31, 2023	1,193,854	6
May 31, 2024	1,092,535	5
Thereafter	13,811,167	64
Total	$ 21,436,649	100%

[(1)] Excludes $0.05 million in subscribed and unissued member subordinated certificates for which a payment has been received. Member loan subordinated certificates totaling $253 million amortize annually based on the unpaid principal balance of the related loan.

We provide additional information on our financing activities above under "Consolidated Balance Sheet Analysis—Debt."

Investment Portfolio

In addition to our primary sources of liquidity discussed above, we have an investment portfolio, which totaled $633 million and $653 million as of August 31, 2019 and May 31, 2019, respectively, composed of equity securities and held-to-maturity investment securities. The decrease in our investment portfolio of $20 million during the current quarter was primarily attributable to the redemption by Farmer Mac of its Series B non-cumulative preferred stock on June 12, 2019, at a redemption price of $25.00 per share, plus any declared and unpaid dividends through and including the redemption date. The amortized cost of our investment in the Farmer Mac Series B non-cumulative preferred stock was $25 million as of the redemption date, which equaled the per share redemption price.

Our investment portfolio is unencumbered and structured so that the securities generally have active secondary or resale markets under normal market conditions. The objective of the portfolio is to achieve returns commensurate with the level of risk assumed subject to CFC's investment policy and guidelines and liquidity requirements. While we have structured our investment portfolio to remain adequately liquid to serve as a contingent supplemental source of liquidity for unanticipated liquidity needs, we have the positive intent and ability to hold to maturity investment securities classified as held to maturity. As such, we have classified them as held to maturity on our condensed consolidated balance sheets. Our held-to-maturity investment securities totaled $570 million and $565 million as of August 31, 2019 and May 31, 2019, respectively. The average contractual maturity and weighted average coupon of our held-to-maturity investment securities was three years and 2.94%, respectively, as of August 31, 2019.

Pursuant to our investment policy and guidelines, all fixed-income debt securities, at the time of purchase, must be rated at least investment grade and on stable outlook based on external credit ratings from at least two of the leading global credit rating agencies, when available, or the corresponding equivalent, when not available. Securities rated investment grade, that is those rated Baa3 or higher by Moody's or BBB- or higher by S&P or BBB- or higher by Fitch, are generally considered by the rating agencies to be of lower credit risk than non-investment grade securities. We have the positive intent and ability to hold these securities to maturity.

We provide additional information on our investment securities in "Note 3—Investment Securities."

Projected Near-Term Sources and Uses of Liquidity

As discussed above, our primary sources of liquidity include cash flows from operations, member loan repayments, committed bank revolving lines of credit, committed loan facilities, short-term borrowings and funds from the issuance of long-term and subordinated debt. Our primary uses of liquidity include loan advances to members, principal and interest payments on borrowings, periodic settlement payments related to derivative contracts, and operating expenses.

Table 31 below displays our projected sources and uses of cash from debt and investment activity, by quarter, over the next six quarters through the quarter ending February 28, 2021. Our assumptions also include the following: (i) the estimated issuance of long-term debt, including collateral trust bonds and private placement of term debt, is based on maintaining a matched funding position within our loan portfolio with our bank revolving lines of credit serving as a backup liquidity facility for commercial paper and on maintaining outstanding dealer commercial paper at an amount below $1,250 million; (ii) long-term loan scheduled amortization payments represent the scheduled long-term loan payments for loans outstanding as of August 31, 2019, and our current estimate of long-term loan prepayments, which the amount and timing of are subject to change; (iii) other loan repayments and other loan advances primarily relate to line of credit repayments and advances; (iv) long-term debt maturities reflect scheduled maturities of outstanding term debt for the periods presented; and (v) long-term loan advances reflect our current estimate of member demand for loans, the amount and timing of which are subject to change.

Table 31: Projected Sources and Uses of Liquidity from Debt and Investment Activity(1)

	Projected Sources of Liquidity				Projected Uses of Liquidity				
(Dollars in millions)	Long-Term Debt Issuance	Anticipated Long-Term Loan Repayments(2)	Other Loan Repayments(3)	Total Projected Sources of Liquidity	Long-Term Debt Maturities(4)	Long-Term Loan Advances	Other Loan Advances(5)	Total Projected Uses of Liquidity	Other Sources/ (Uses) of Liquidity(6)
2Q FY 2020	$ 265	$ 341	$ 118	$ 724	$ 773	$ 510	$ 8	$ 1,291	$ 573
3Q FY 2020	690	320	76	1,086	650	508	—	1,158	59
4Q FY 2020	90	312	9	411	235	208	—	443	(20)
1Q FY 2021	620	336	—	956	564	302	—	866	(69)
2Q FY 2021	420	315	—	735	504	322	—	826	70
3Q FY 2021	320	308	—	628	314	320	—	634	(11)
Total	$ 2,405	$ 1,932	$ 203	$ 4,540	$ 3,040	$ 2,170	$ 8	$ 5,218	$ 602

(1) The dates presented represent the end of each quarterly period through the quarter ending February 28, 2021.
(2) Anticipated long-term loan repayments include scheduled long-term loan amortizations, anticipated cash repayments at repricing date and sales.
(3) Other loan repayments include anticipated short-term loan repayments.
(4) Long-term debt maturities also include medium-term notes with an original maturity of one year or less and expected early redemptions of debt.
(5) Other loan advances include anticipated short-term loan advances.
(6) Includes net increase or decrease to dealer commercial paper, member commercial paper and select notes, and purchases and maturity of investments.

As displayed in Table 31, we currently project long-term advances of $1,528 million over the next 12 months, which we anticipate will exceed anticipated loan repayments over the same period of $1,309 million by approximately $219 million. The estimates presented above are developed at a particular point in time based on our expected future business growth and funding. Our actual results and future estimates may vary, perhaps significantly, from the current projections, as a result of changes in market conditions, management actions or other factors.

Credit Ratings

Our funding and liquidity, borrowing capacity, ability to access capital markets and other sources of funds and the cost of these funds are partially dependent on our credit ratings. Rating agencies base their ratings on numerous factors, including liquidity, capital adequacy, industry position, member support, management, asset quality, quality of earnings and the probability of systemic support. Significant changes in these factors could result in different ratings. Table 32 displays our credit ratings as of August 31, 2019. During fiscal year 2019, Moody's and S&P affirmed our ratings and outlook. On September 24, 2019, Fitch also affirmed our ratings and outlook. Our credit ratings as of August 31, 2019 are unchanged from May 31, 2019, and as of the date of the filing of this Report.

Table 32: Credit Ratings

	August 31, 2019		
	Moody's	S&P	Fitch
Long-term issuer credit rating[(1)]	**A2**	**A**	**A**
Senior secured debt[(2)]	**A1**	**A**	**A+**
Senior unsecured debt[(3)]	**A2**	**A**	**A**
Subordinated debt	**A3**	**BBB+**	**BBB+**
Commercial paper	**P-1**	**A-1**	**F1**
Outlook	**Stable**	**Stable**	**Stable**

____

(1) Based on our senior unsecured debt rating.
(2) Applies to our collateral trust bonds.
(3) Applies to our medium-term notes.

In order to access the commercial paper markets at attractive rates, we believe we need to maintain our current commercial paper credit ratings of P-1 by Moody's, A-1 by S&P and F1 by Fitch. In addition, the notes payable to the Federal Financing Bank and guaranteed by RUS under the Guaranteed Underwriter Program contain a provision that if during any portion of the fiscal year, our senior secured credit ratings do not have at least two of the following ratings: (i) A3 or higher from Moody's, (ii) A- or higher from S&P, (iii) A- or higher from Fitch or (iv) an equivalent rating from a successor rating agency to any of the above rating agencies, we may not make cash patronage capital distributions in excess of 5% of total patronage capital. See "Credit Risk—Counterparty Credit Risk—Credit Risk-Related Contingent Features" above for information on credit rating provisions related to our derivative contracts.

Financial Ratios

Our debt-to-equity ratio increased to 29.03 as of August 31, 2019, from 19.80 as of May 31, 2019, due to the combined impact of an increase in debt to fund loan growth, an increase in derivative liabilities and a decrease in equity resulting from our reported net loss of $324 million and the authorization by the CFC Board of Directors in the current quarter to retire patronage capital of $63 million. We returned the patronage capital to members in September 2019.

Our adjusted debt-to-equity ratio increased to 5.84 as of August 31, 2019, from 5.73 as of May 31, 2019, primarily attributable to an increase in debt outstanding to fund loan growth. We provide a reconciliation of our adjusted debt-to-equity ratio to the most comparable GAAP measure and an explanation of the adjustments below in "Non-GAAP Financial Measures."

Debt Covenants

As part of our short-term and long-term borrowing arrangements, we are subject to various financial and operational covenants. If we fail to maintain specified financial ratios, such failure could constitute a default by CFC of certain debt covenants under our committed bank revolving line of credit agreements and senior debt indentures. We were in compliance with all covenants and conditions under our committed bank revolving line of credit agreements and senior debt indentures as of August 31, 2019.

As discussed above in "Summary of Selected Financial Data," the financial covenants set forth in our committed bank revolving line of credit agreements and senior debt indentures are based on adjusted financial measures, including adjusted TIER. We provide a reconciliation of adjusted TIER and other non-GAAP measures disclosed in this Report to the most comparable GAAP measures and an explanation of the adjustments below in "Non-GAAP Financial Measures."

MARKET RISK

Interest rate risk represents our primary source of market risk. Interest rate risk is the risk to current or anticipated earnings or equity arising primarily from movements in interest rates. This risk results from differences between the timing of cash flows on our assets and the liabilities funding those assets. The timing of cash flows of our assets is impacted by re-pricing characteristics, prepayments and contractual maturities. Our interest rate risk exposure is primarily related to the funding of the fixed-rate loan portfolio. We provide a discussion of how we manage interest rate risk in our 2019 Form 10-K under “Item 7. MD&A—Market Risk—Market Risk Management.”

Future of LIBOR

In 2017, the United Kingdom’s Financial Conduct Authority (“FCA”), which regulates the LIBOR index, announced that the FCA intends to stop requesting banks to submit the rates required to calculate LIBOR after 2021. Management has formed a cross-functional LIBOR working group to identify CFC’s exposure, assess the potential risks related to the transition from LIBOR to a new index and develop a strategic transition plan. The LIBOR working group has performed an initial assessment of all of the CFC’s LIBOR dependent contracts and financial instruments and the systems, models and processes that may be impacted. The LIBOR working group will closely monitor and assess developments with respect to the phasing out of LIBOR and provide regular reports to the Chief Financial Officer and the CFC Board of Directors. We discuss the risks related to the uncertainty as to the nature of potential changes or other reforms associated with the transition away from and expected replacement of LIBOR as a benchmark interest rate in in our 2019 Form 10-K under “Item 1A. Risk Factors.”

Matched Funding Objective

Our funding objective is to manage the matched funding of asset and liability repricing terms within a range of adjusted total assets (calculated by excluding derivative assets from total assets) deemed appropriate by the Asset Liability Committee based on the current environment and extended outlook for interest rates. We refer to the difference between fixed-rate loans scheduled for amortization or repricing and the fixed-rate liabilities and equity funding those loans as our interest rate gap. Our primary strategies for managing our interest rate risk include the use of derivatives and limiting the amount of fixed-rate assets that can be funded by variable-rate debt to a specified percentage of adjusted total assets based on market conditions. We provide our members with many options on loans with regard to interest rates, the term for which the selected interest rate is in effect and the ability to convert or prepay the loan. Long-term loans generally have maturities of up to 35 years. Borrowers may select fixed interest rates for periods of one year through the life of the loan. We do not match fund the majority of our fixed-rate loans with a specific debt issuance at the time the loans are advanced. We fund the amount of fixed-rate assets that exceed fixed-rate debt and members’ equity with short-term debt, primarily commercial paper.

Interest Rate Gap Analysis

As part of our asset-liability management, we perform a monthly interest rate gap analysis that provides a comparison between the timing of cash flows, by year, for fixed-rate assets scheduled for amortization and repricing and for fixed-rate liabilities and members’ equity maturing. This gap analysis is a useful tool in measuring, monitoring and mitigating the interest rate risk inherent in the funding of fixed-rate assets with variable-rate debt and also helpful in assessing liquidity risk.

Table 33 displays the scheduled amortization and repricing of fixed-rate assets and outstanding fixed-rate liabilities and equity as of August 31, 2019. We exclude variable-rate loans from our interest rate gap analysis, as we do not consider the interest rate risk on these loans to be significant because they are subject to repricing at least monthly. Loans with variable interest rates accounted for 10% and 11% of our total loan portfolio as of August 31, 2019 and May 31, 2019, respectively. Fixed-rate liabilities include debt issued at a fixed rate, as well as variable-rate debt swapped to a fixed rate using interest rate swaps. Fixed-rate debt swapped to a variable rate using interest rate swaps is excluded from the analysis because it is used to match fund our variable-rate loans. With the exception of members’ subordinated certificates, which are generally issued with extended maturities, and commercial paper, our liabilities have average maturities that closely match the repricing terms (but not the maturities) of our fixed-rate loans.

Table 33: Interest Rate Gap Analysis

(Dollars in millions)	Prior to 5/31/20	Two Years 6/1/20 to 5/31/22	Two Years 6/1/22 to 5/31/24	Five Years 6/1/24 to 5/31/29	10 Years 6/1/29 to 5/31/39	6/1/39 and Thereafter	Total
Asset amortization and repricing	**$1,307**	**$3,365**	**$2,863**	**$ 5,819**	**$7,267**	**$ 3,483**	**$ 24,104**
Liabilities and members' equity:							
Long-term debt [(1)(2)]	**$1,628**	**$3,708**	**$2,448**	**$ 6,183**	**$4,911**	**$ 1,994**	**$ 20,872**
Subordinated deferrable debt and subordinated certificates[(2)(3)]	**10**	**40**	**412**	**611**	**154**	**811**	**2,038**
Members' equity [(4)]	**55**	**21**	**28**	**111**	**308**	**927**	**1,450**
Total liabilities and members' equity	**$1,693**	**$3,769**	**$2,888**	**$ 6,905**	**$5,373**	**$ 3,732**	**$ 24,360**
Gap [(5)]	**$ (386)**	**$ (404)**	**$ (25)**	**$(1,086)**	**$1,894**	**$ (249)**	**$ (256)**
Cumulative gap	**(386)**	**(790)**	**(815)**	**(1,901)**	**(7)**	**(256)**	
Cumulative gap as a % of total assets	**(1.40)%**	**(2.86)%**	**(2.96)%**	**(6.89)%**	**(0.03)%**	**(0.93)%**	
Cumulative gap as a % of adjusted total assets[(6)]	**(1.40)**	**(2.87)**	**(2.96)**	**(6.91)**	**(0.03)**	**(0.93)**	

(1) Includes long-term fixed-rate debt and the net impact of our interest rate swaps.

(2) The maturity presented for debt is based on the call date.

(3) Represents the amount of subordinated deferrable debt and subordinated certificates allocated to fund fixed-rate assets.

(4) Represents the portion of members' equity and loan loss allowance allocated to fund fixed-rate assets. See Table 38: Members' Equity below under "Non-GAAP Financial Measures" for a reconciliation of total CFC equity to members' equity.

(5) Calculated based on the amount of assets scheduled for amortization and repricing less total liabilities and members' equity funding those assets.

(6) Adjusted total assets represents total assets reported in our condensed consolidated balance sheets less derivative assets.

When the amount of the cash flows related to fixed-rate assets scheduled for amortization and repricing exceeds the amount of cash flows related to the fixed-rate debt and equity funding those assets, we refer to the difference, or gap, as "warehousing." When the amount of the cash flows related to fixed-rate assets scheduled for amortization and repricing is less than the amount of the cash flows related to the fixed-rate debt and equity funding those assets, we refer to the gap as "prefunding." The amount of the gap is an indication of our interest rate and liquidity risk exposure. Our goal is to maintain an unmatched position related to the cash flows for fixed-rate financial assets within a targeted range of adjusted total assets.

Because the substantial majority of our financial assets are fixed-rate, amortizing loans and these loans are primarily funded with bullet debt and equity, our interest rate gap analysis typically reflects a warehouse position. When we are in a warehouse position, we utilize some short-term borrowings to fund the scheduled amortization and repricing of our financial assets. However, we limit the extent to which we fund our long-term, fixed-rate loans with short-term, variable-rate debt because it exposes us to higher interest rate and liquidity risk.

We typically are in a warehouse position. However, as indicated above in Table 33, we were in a prefunded position of $256 million as of August 31, 2019, down from a prefunded position of $798 million as of May 31, 2019. In the second half of fiscal year 2019, we had an opportunity to issue longer-term debt at an attractive coupon rate due to favorable market conditions. We took advantage of that opportunity, which resulted in our current prefunded position. We do not expect to maintain this prefunded position for an extended period, as we expect to continue to fund long-term fixed-rate loans in the future.

NON-GAAP FINANCIAL MEASURES

In addition to financial measures determined in accordance with GAAP, management evaluates performance based on certain non-GAAP measures, which we refer to as "adjusted" measures. We provide a discussion of each of these non-GAAP measures in our 2019 Form 10-K under "Item 7. MD&A—Non-GAAP Measures." Below we provide a reconciliation of our adjusted measures to the most comparable GAAP measures in this section. We believe our non-GAAP adjusted metrics, which are not a substitute for GAAP and may not be consistent with similarly titled non-GAAP measures used by other companies, provide meaningful information and are useful to investors because management uses these metrics to compare operating results across financial reporting periods, for internal budgeting and forecasting purposes, for compensation decisions and for short- and long-term strategic planning decisions. In addition, certain of the financial covenants in our committed bank revolving line of credit agreements and debt indentures are based on our adjusted measures.

Statements of Operations Non-GAAP Adjustments

Table 34 provides a reconciliation of adjusted interest expense, adjusted net interest income and adjusted net income to the comparable GAAP measures for three months ended August 31, 2019 and 2018. The adjusted amounts are used in the calculation of our adjusted net interest yield and adjusted TIER.

Table 34: Adjusted Financial Measures—Income Statement

	Three Months Ended August 31,	
(Dollars in thousands)	**2019**	**2018**
Interest expense	**$ (213,271)**	$ (210,231)
Include: Derivative cash settlements expense	**(11,043)**	(12,829)
Adjusted interest expense	**$ (224,314)**	$ (223,060)
Net interest income	**$ 76,744**	$ 68,260
Include: Derivative cash settlements expense	**(11,043)**	(12,829)
Adjusted net interest income	**$ 65,701**	$ 55,431
Net income (loss)	**$ (324,079)**	$ 47,978
Exclude: Derivative forward value gains (losses)	**(384,682)**	20,012
Adjusted net income	**$ 60,603**	$ 27,966

We consider the cost of derivatives to be an inherent cost of funding and hedging our loan portfolio and, therefore, economically similar to the interest expense that we recognize on debt issued for funding. We therefore include derivative cash settlements expense in our adjusted interest expense and exclude the unrealized forward value of derivatives from our adjusted net income.

TIER and Adjusted TIER

Table 35 presents our TIER and adjusted TIER for the three months ended August 31, 2019 and 2018.

Table 35: TIER and Adjusted TIER

	Three Months Ended August 31,	
	2019	**2018**
TIER [1]	**(0.52)**	1.23
Adjusted TIER [2]	**1.27**	1.13

(1) TIER is calculated based on our net income (loss) plus interest expense for the period divided by interest expense for the period.

(2) Adjusted TIER is calculated based on adjusted net income (loss) plus adjusted interest expense for the period divided by adjusted interest expense for the period.

Debt-to-Equity and Adjusted Debt-to-Equity

Table 36 provides a reconciliation between our total liabilities and total equity and the amounts used to calculate our adjusted debt-to-equity ratio as of August 31, 2019 and May 31, 2019. As indicated in Table 36 , subordinated debt is treated in the same manner as equity in calculating our adjusted-debt-to-equity ratio.

Table 36: Adjusted Financial Measures—Balance Sheet

(Dollars in thousands)	August 31, 2019	May 31, 2019
Total liabilities	**$ 26,660,328**	$ 25,820,490
Exclude:		
Derivative liabilities	**820,872**	391,724
Debt used to fund loans guaranteed by RUS	**152,218**	153,991
Subordinated deferrable debt	**985,981**	986,020
Subordinated certificates	**1,356,485**	1,357,129
Adjusted total liabilities	**$ 23,344,772**	$ 22,931,626
Total equity	**$ 918,428**	$ 1,303,882
Exclude:		
Prior fiscal year-end cumulative derivative forward value losses	**(354,704)**	(34,974)
Current year derivative forward value losses	**(384,682)**	(319,730)
Accumulated other comprehensive income attributable to derivatives[1]	**2,459**	2,571
Include:		
Subordinated deferrable debt	**985,981**	986,020
Subordinated certificates	**1,356,485**	1,357,129
Adjusted total equity	**$ 3,997,821**	$ 3,999,164

(1) Represents AOCI related to derivatives. See “Note 10—Equity” for the components of AOCI.

Table 37 displays the calculations of our debt-to-equity and adjusted debt-to-equity ratios as of August 31, 2019 and May 31, 2019.

Table 37: Debt-to-Equity Ratio

	August 31, 2019	May 31, 2019
Debt-to-equity ratio [1]	**29.03**	19.80
Adjusted debt-to-equity ratio [2]	**5.84**	5.73

(1) Calculated based on total liabilities as of the end of the period divided by total equity as of the end of the period.

(2) Calculated based on adjusted total liabilities as of the end of the period divided by adjusted total equity as of the end of the period.

Members’ Equity

Members’ equity represents equity attributable to CFC members. Table 38 provides a reconciliation of members’ equity to total CFC equity as of August 31, 2019 and May 31, 2019.

Table 38: Members' Equity

(Dollars in thousands)	August 31, 2019	May 31, 2019
Members' equity:		
Total CFC equity	**$ 891,218**	$ 1,276,735
Excludes:		
Accumulated other comprehensive loss	**(114)**	(147)
Current period-end cumulative derivative forward value losses	**(731,727)**	(348,965)
Subtotal	**(731,841)**	(349,112)
Members' equity	**$ 1,623,059**	$ 1,625,847

Item 1. Financial Statements

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(UNAUDITED)

	Three Months Ended August 31,	
(Dollars in thousands)	**2019**	**2018**
Interest income	**$ 290,015**	$ 278,491
Interest expense	**(213,271)**	(210,231)
Net interest income	**76,744**	68,260
Benefit (provision) for loan losses	**(30)**	109
Net interest income after benefit (provision) for loan losses	**76,714**	68,369
Non-interest income:		
Fee and other income	**10,941**	3,911
Derivative gains (losses)	**(395,725)**	7,183
Unrealized gains (losses) on equity securities	**1,620**	(726)
Total non-interest income	**(383,164)**	10,368
Non-interest expense:		
Salaries and employee benefits	**(12,942)**	(12,682)
Other general and administrative expenses	**(12,387)**	(10,523)
Losses on early extinguishment of debt	**—**	(7,100)
Other non-interest (expense) income	**7,179**	(394)
Total non-interest expense	**(18,150)**	(30,699)
Income (loss) before income taxes	**(324,600)**	48,038
Income tax benefit (expense)	**521**	(60)
Net income (loss)	**(324,079)**	47,978
Less: Net (income) loss attributable to noncontrolling interests	**1,657**	(13)
Net income (loss) attributable to CFC	**$ (322,422)**	$ 47,965

See accompanying notes to condensed consolidated financial statements.

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(UNAUDITED)

(Dollars in thousands)	Three Months Ended August 31, 2019	2018
Net income (loss)	**$ (324,079)**	$ 47,978
Other comprehensive income (loss):		
Unrealized gains on cash flow hedge	**—**	24
Reclassification of derivative gains to net income	**(112)**	(119)
Defined benefit plan adjustments	**145**	131
Other comprehensive income (loss)	**33**	36
Total comprehensive income (loss)	**(324,046)**	48,014
Less: Total comprehensive (income) loss attributable to noncontrolling interests	**1,657**	(13)
Total comprehensive income (loss) attributable to CFC	**$ (322,389)**	$ 48,001

See accompanying notes to condensed consolidated financial statements.

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS
(UNAUDITED)

(Dollars in thousands)	August 31, 2019	May 31, 2019
Assets:		
Cash and cash equivalents	**$ 231,050**	$ 177,922
Restricted cash	**9,138**	8,282
Total cash, cash equivalents and restricted cash	**240,188**	186,204
Investment securities:		
Equity securities	**63,922**	87,533
Debt securities held-to-maturity, at amortized cost	**569,575**	565,444
Total investment securities	**633,497**	652,977
Loans to members	**26,299,838**	25,916,904
Less: Allowance for loan losses	**(17,565)**	(17,535)
Loans to members, net	**26,282,273**	25,899,369
Accrued interest receivable	**133,119**	133,605
Other receivables	**35,878**	36,712
Fixed assets, net	**121,692**	120,627
Derivative assets	**85,533**	41,179
Other assets	**46,576**	53,699
Total assets	**$ 27,578,756**	$ 27,124,372
Liabilities:		
Accrued interest payable	**$ 209,931**	$ 158,997
Debt outstanding:		
Short-term borrowings	**4,027,645**	3,607,726
Long-term debt	**19,094,236**	19,210,793
Subordinated deferrable debt	**985,981**	986,020
Members' subordinated certificates:		
Membership subordinated certificates	**630,474**	630,474
Loan and guarantee subordinated certificates	**504,841**	505,485
Member capital securities	**221,170**	221,170
Total members' subordinated certificates	**1,356,485**	1,357,129
Total debt outstanding	**25,464,347**	25,161,668
Patronage capital retirement payable	**61,102**	—
Deferred income	**55,614**	57,989
Derivative liabilities	**820,872**	391,724
Other liabilities	**48,462**	50,112
Total liabilities	**26,660,328**	25,820,490
Equity:		
CFC equity:		
Retained equity	**891,332**	1,276,882
Accumulated other comprehensive income	**(114)**	(147)
Total CFC equity	**891,218**	1,276,735
Noncontrolling interests	**27,210**	27,147
Total equity	**918,428**	1,303,882
Total liabilities and equity	**$ 27,578,756**	$ 27,124,372

See accompanying notes to condensed consolidated financial statements.

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
(UNAUDITED)

(Dollars in thousands)	Membership Fees and Educational Fund	Patronage Capital Allocated	Members' Capital Reserve	Unallocated Net Income (Loss)	CFC Retained Equity	Accumulated Other Comprehensive Income (Loss)	Total CFC Equity	Non-controlling Interests	Total Equity
Balance as of May 31, 2019	**$ 2,982**	**$ 860,578**	**$ 759,097**	**$ (345,775)**	**$ 1,276,882**	**$ (147)**	**$1,276,735**	**$ 27,147**	**$ 1,303,882**
Net loss	**—**	**—**	**—**	**(322,422)**	**(322,422)**	**—**	**(322,422)**	**(1,657)**	**(324,079)**
Other comprehensive income	**—**	**—**	**—**	**—**	**—**	**33**	**33**	**—**	**33**
Patronage capital retirement	**—**	**(62,822)**	**—**	**—**	**(62,822)**	**—**	**(62,822)**	**—**	**(62,822)**
Other	**(306)**	**—**	**—**	**—**	**(306)**	**—**	**(306)**	**1,720**	**1,414**
Balance as of August 31, 2019	**$ 2,676**	**$ 797,756**	**$ 759,097**	**$ (668,197)**	**$ 891,332**	**$ (114)**	**$ 891,218**	**$ 27,210**	**$ 918,428**
Balance as of May 31, 2018	$ 2,945	$ 811,493	$ 687,785	$ (36,434)	$ 1,465,789	$ 8,544	$1,474,333	$ 31,520	$ 1,505,853
Cumulative effect from adoption of new accounting standard	—	—	—	8,794	8,794	(8,794)	—	—	—
Balance as of June 1, 2018	2,945	811,493	687,785	(27,640)	1,474,583	(250)	1,474,333	31,520	1,505,853
Net income	—	—	—	47,965	47,965	—	47,965	13	47,978
Other comprehensive income	—	—	—	—	—	36	36	—	36
Patronage capital retirement	—	(47,507)	—	—	(47,507)	—	(47,507)	—	(47,507)
Other	(336)	—	—	—	(336)	—	(336)	552	216
Balance as of August 31, 2018	$ 2,609	$ 763,986	$ 687,785	$ 20,325	$ 1,474,705	$ (214)	$1,474,491	$ 32,085	$ 1,506,576

See accompanying notes to condensed consolidated financial statements.

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED)

(Dollars in thousands)	Three Months Ended August 31, 2019	2018
Cash flows from operating activities:		
Net income (loss)	**$ (324,079)**	$ 47,978
Adjustments to reconcile net income to net cash provided by operating activities:		
Amortization of deferred loan fees	**(2,332)**	(2,609)
Amortization of debt issuance costs and deferred charges	**2,357**	3,003
Amortization of discount on long-term debt	**2,626**	2,802
Amortization of issuance costs for bank revolving lines of credit	**1,268**	1,328
Depreciation and amortization	**2,374**	2,230
Provision (benefit) for loan losses	**30**	(109)
Loss on early extinguishment of debt	**—**	7,100
Gain on sale of land	**(7,713)**	—
Unrealized losses on equity securities	**(1,620)**	726
Derivative forward value (gains) losses	**384,682**	(20,012)
Changes in operating assets and liabilities:		
Accrued interest receivable	**485**	3,099
Accrued interest payable	**50,934**	56,614
Deferred income	**(43)**	398
Other	**(9,160)**	(20,818)
Net cash provided by operating activities	**99,809**	81,730
Cash flows from investing activities:		
Advances on loans, net	**(382,936)**	(3,942)
Investment in fixed assets	**(3,087)**	(4,253)
Proceeds from sale of land	**21,618**	—
Net proceeds from time deposits	**—**	100,000
Proceeds from redemption of equity securities	**25,000**	—
Purchases of held-to-maturity debt securities	**(23,650)**	(40,684)
Proceeds from maturities of held-to-maturity debt securities	**19,533**	7,339
Net cash provided by (used in) investing activities	**(343,522)**	58,460
Cash flows from financing activities:		
Proceeds from short-term borrowings, net	**355,750**	29,246
Proceeds from short-term borrowings with original maturity greater than 90 days	**679,062**	296,242
Repayments of short term-debt with original maturity greater than 90 days	**(614,892)**	(328,262)
Proceeds from issuance of long-term debt, net of discount and issuance costs	**94,256**	349,509
Payments for retirement of long-term debt	**(215,751)**	(395,284)
Payments made for early extinguishment of debt	**—**	(7,100)
Payments for issuance costs for subordinated deferrable debt	**(84)**	—
Proceeds from issuance of members' subordinated certificates	**1,289**	471
Payments for retirement of members' subordinated certificates	**(1,933)**	(2,378)
Payments for retirement of patronage capital	**—**	(46,956)
Net cash provided by (used in) financing activities	**297,697**	(104,512)
Net increase in cash, cash equivalents and restricted cash	**53,984**	35,678
Beginning cash, cash equivalents and restricted cash	**186,204**	238,824
Ending cash, cash equivalents and restricted cash	**$ 240,188**	$ 274,502
Supplemental disclosure of cash flow information:		
Cash paid for interest	**$ 155,330**	$ 148,063

See accompanying notes to condensed consolidated financial statements.

NOTE 1—SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Company

National Rural Utilities Cooperative Finance Corporation ("CFC") is a member-owned cooperative association incorporated under the laws of the District of Columbia in April 1969. CFC's principal purpose is to provide its members with financing to supplement the loan programs of the Rural Utilities Service ("RUS") of the United States Department of Agriculture ("USDA"). CFC makes loans to its rural electric members so they can acquire, construct and operate electric distribution systems, generation and transmission ("power supply") systems and related facilities. CFC also provides its members with credit enhancements in the form of letters of credit and guarantees of debt obligations. As a cooperative, CFC is owned by and exclusively serves its membership, which consists of not-for-profit entities or subsidiaries or affiliates of not-for-profit entities. CFC is exempt from federal income taxes.

Basis of Presentation and Use of Estimates

The accompanying unaudited interim condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP"). The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts and related disclosures during the period. Management's most significant estimates and assumptions involve determining the allowance for loan losses and the fair value of financial assets and liabilities. Actual results could differ from these estimates. We believe these financial statements reflect all adjustments of a normal, recurring nature that are, in the opinion of management, necessary for the fair presentation of the results for the interim period. The results of operations for interim periods are not necessarily indicative of results for the entire fiscal year. Certain reclassifications have been made to prior periods to conform to the current presentation.

The accompanying financial statements should be read in conjunction with the audited consolidated financial statements, and related notes thereto, included in CFC's Annual Report on Form 10-K for the fiscal year ended May 31, 2019 ("2019 Form 10-K"). Refer to "Note 1—Summary of Significant Accounting Policies" in our 2019 Form 10-K for a discussion of our significant accounting policies.

Principles of Consolidation

The accompanying condensed consolidated financial statements include the accounts of CFC, variable interest entities ("VIEs") where CFC is the primary beneficiary and subsidiary entities created and controlled by CFC to hold foreclosed assets. CFC did not have any entities that held foreclosed assets as of August 31, 2019 or May 31, 2019. All intercompany balances and transactions have been eliminated. National Cooperative Services Corporation ("NCSC") and Rural Telephone Finance Cooperative ("RTFC") are VIEs that are required to be consolidated by CFC. NCSC is a taxable member-owned cooperative that may provide financing to members of CFC, government or quasi-government entities which own electric utility systems that meet the Rural Electrification Act definition of "rural," and for-profit and nonprofit entities that are owned, operated or controlled by, or provide significant benefits to certain members of CFC. RTFC is a taxable Subchapter T cooperative association that provides financing for its rural telecommunications members and their affiliates. Unless stated otherwise, references to "we," "our" or "us" relate to CFC and its consolidated entities.

Restricted Cash

Restricted cash, which consists primarily of member funds held in escrow for certain specifically designed cooperative programs, totaled $9 million and $8 million as of August 31, 2019 and May 31, 2019, respectively.

Assets Held for Sale

On March 14, 2018, CFC entered into a purchase and sale agreement ("the agreement"), which was subsequently amended, for the sale of a parcel of land, consisting of approximately 28 acres, located in Loudoun County, Virginia. We designated the property, which had a carrying value of $14 million, as held for sale and reclassified it from fixed assets, net to other assets on our consolidated balance sheet. On July 22, 2019, we closed on the sale of the land and received net proceeds of $22 million, resulting in a gain of $8 million on the sale of this property, which is reported in other non-interest income (expense) on our condensed consolidated statements of operations.

Interest Income

The following table presents interest income, by interest-earning asset category, for the three months ended August 31, 2019 and 2018.

	Three Months Ended August 31,	
(Dollars in thousands)	**2019**	**2018**
Interest income by interest-earning asset type:		
Long-term fixed-rate loans[(1)]	**$ 258,478**	$ 251,801
Long-term variable-rate loans	**9,756**	9,381
Line of credit loans	**16,033**	11,633
TDR loans[(2)]	**206**	218
Other income, net[(3)]	**(284)**	(325)
Total loans	**284,189**	272,708
Cash, time deposits and investment securities	**5,826**	5,783
Total interest income	**$ 290,015**	$ 278,491

[(1)]Includes loan conversion fees, which are generally deferred and recognized as interest income using the effective interest method.
[(2)]Troubled debt restructured ("TDR") loans.
[(3)]Consists of late payment fees, commitment fees and net amortization of deferred loan fees and loan origination costs.

Deferred income of $56 million and $58 million as of August 31, 2019 and May 31, 2019, respectively, consists primarily of deferred loan conversion fees totaling $50 million and $52 million, respectively. Deferred loan conversion fees are recognized in interest income using the effective interest method.

Interest Expense

The following table presents interest expense, by debt product type, for the three months ended August 31, 2019 and 2018.

	Three Months Ended August 31,	
(Dollars in thousands)	**2019**	**2018**
Interest expense by debt product type:[1][2]		
Short-term borrowings	**$ 22,822**	$ 19,419
Medium-term notes	**32,076**	32,410
Collateral trust bonds	**65,381**	77,705
Guaranteed Underwriter Program notes payable	**40,433**	35,334
Farmer Mac notes payable	**25,074**	21,111
Other notes payable	**254**	322
Subordinated deferrable debt	**12,882**	9,417
Subordinated certificates	**14,349**	14,513
Total interest expense	**$ 213,271**	$ 210,231

(1) Includes amortization of debt discounts and debt issuance costs, which are generally deferred and recognized as interest expense using the effective interest method. Issuance costs related to dealer commercial paper, however, are recognized as interest expense immediately as incurred.

(2) Includes fees related to funding arrangements, such as up-front fees paid to banks participating in our committed bank revolving line of credit agreements. Depending on the nature of the fee, amounts may be deferred and recognized as interest expense ratably over the term of the arrangement or recognized immediately as incurred.

Recent Accounting Changes and Other Developments

Accounting Standards Adopted in Fiscal Year 2020

Derivatives and Hedging—Targeted Improvements to Accounting for Hedging Activities

In August 2017, the FASB issued ASU 2017-12, *Derivatives and Hedging—Targeted Improvements to Accounting for Hedging Act*ivities, which expands the types of risk management strategies that qualify for hedge accounting treatment to more closely align the results of hedge accounting with the economics of certain risk management activities and simplifies certain hedge documentation and assessment requirement. It also eliminates the concept of separately recording hedge ineffectiveness and expands disclosure requirements. The guidance is effective for public entities for fiscal years beginning after December 15, 2018, including interim periods within those years. Early adoption is permitted in any interim period or fiscal year before the effective date. We adopted this guidance on June 1, 2019. Hedge accounting is elective, and we currently apply hedge accounting on a limited basis, specifically when we enter into treasury rate lock agreements. The adoption of this guidance did not have an impact on our consolidated financial statements or cash flows. If we continue to elect not to apply hedge accounting to our interest rate swaps, the guidance will not have an impact on our consolidated financial statements or cash flows.

Receivables—Nonrefundable Fees and Other Cost

In March 2017, the FASB issued ASU 2017-08, *Receivables—Nonrefundable Fees and Other* Costs, which shortens the amortization period for the premium on certain callable debt securities to the earliest call date rather the maturity date. The guidance is applicable to any individual debt security, purchased at a premium, with an explicit and noncontingent call feature with a fixed price on a preset date. The guidance does not impact the accounting for purchased callable debt securities held at a discount. The guidance is effective for public entities in fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. We adopted this guidance on June 1, 2019. The adoption of this guidance did not have a material impact on our consolidated financial statements or cash flows.

Leases

In February 2016, the FASB issued ASU 2016-02, Leases, which provides new guidance that is intended to improve financial reporting about leasing transactions. The new guidance requires the recognition of a right-of use asset and lease liability on the consolidated balance sheet by lessees for those leases classified as operating leases under previous guidance. It also requires new disclosures to help investors and other financial statement users better understand the amount, timing, and uncertainty of cash flows arising from leases. The guidance is effective for fiscal years and interim periods within those fiscal years beginning after December 15, 2018. We adopted this guidance on June 1, 2019. The adoption of this guidance did not have a material impact on our consolidated financial statements or cash flows.

Accounting Standards Issued But Not Yet Adopted

Fair Value Measurement—Changes to the Disclosure Requirements for Fair Value Measurement

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement—Changes to the Disclosure Requirements for Fair Value Measurement,* which eliminates, adds and modifies certain disclosure requirements for fair value measurements as part of its disclosure framework project. The guidance is effective for public entities for fiscal years beginning after December 15, 2019, including interim periods within those years. Early adoption is permitted in any interim period or fiscal year before the effective date. The guidance is effective for us beginning June 1, 2020. We do not expect that the adoption of this guidance will have a material impact on our consolidated financial statements or cash flows.

Financial Instruments—Credit Losses: Measurement of Credit Losses on Financial Instruments

In June 2016, the FASB issued ASU 2016-13, Financial Instruments—Credit Losses: Measurement of Credit Losses on Financial Instruments, which replaces the existing incurred credit loss model and establishes a single credit loss framework based on a current expected credit loss model for financial assets carried at amortized cost, including loans and held-to-maturity debt securities. The current expected loss model requires an entity to estimate credit losses expected over the life of the credit exposure upon initial recognition of that exposure when the financial asset is originated or acquired, which will generally result in earlier recognition of credit losses. The guidance also amends the other-than-temporary model for available-for-sale debt securities by requiring the use of an allowance, rather than directly reducing the carrying value of the security. The new guidance also requires expanded credit quality disclosures. The new guidance is effective for fiscal years and interim periods within those fiscal years, beginning after December 15, 2019. This guidance is effective for us on June 1, 2020. While early adoption is permitted, we do not expect to elect that option. We are continuing to evaluate the impact of the guidance on our consolidated financial statements, including assessing and evaluating assumptions and models to estimate losses. Upon adoption of the guidance on June 1, 2020, we will be required to record a cumulative effect adjustment to retained earnings for the impact as of the date of adoption. The impact will depend on our portfolio composition and credit quality at the date of adoption, as well as forecasts at that time.

NOTE 2—VARIABLE INTEREST ENTITIES

NCSC and RTFC meet the definition of a VIE because they do not have sufficient equity investment at risk to finance their activities without financial support. CFC is the primary source of funding for NCSC and the sole source of funding for RTFC. Under the terms of management agreements with each company, CFC manages the business operations of NCSC and RTFC. CFC also unconditionally guarantees full indemnification for any loan losses of NCSC and RTFC pursuant to guarantee agreements with each company. CFC earns management and guarantee fees from its agreements with NCSC and RTFC.

NCSC and RTFC creditors have no recourse against CFC in the event of a default by NCSC and RTFC, unless there is a guarantee agreement under which CFC has guaranteed NCSC or RTFC debt obligations to a third party. The following table provides information on incremental consolidated assets and liabilities of VIEs included in CFC's condensed consolidated financial statements, after intercompany eliminations, as of August 31, 2019 and May 31, 2019.

(Dollars in thousands)	August 31, 2019	May 31, 2019
Total loans outstanding	**$ 1,048,892**	$ 1,087,988
Other assets	**10,074**	10,963
Total assets	**$ 1,058,966**	$ 1,098,951
Long-term debt	**$ 6,000**	$ 6,000
Other liabilities	**36,878**	33,385
Total liabilities	**$ 42,878**	$ 39,385

The following table provides information on CFC's credit commitments to NCSC and RTFC, and its potential exposure to loss as of August 31, 2019 and May 31, 2019.

(Dollars in thousands)	August 31, 2019	May 31, 2019
CFC credit commitments	**$ 5,500,000**	$ 5,500,000
Outstanding commitments:		
Borrowings payable to CFC[(1)]	**1,019,103**	1,059,629
Credit enhancements:		
CFC third-party guarantees	**11,339**	10,091
Other credit enhancements	**16,171**	14,251
Total credit enhancements[(2)]	**27,510**	24,342
Total outstanding commitments	**1,046,613**	1,083,971
CFC available credit commitments	**$ 4,453,387**	$ 4,416,029

(1) Borrowings payable to CFC are eliminated in consolidation.
(2) Excludes interest due on these instruments.

CFC loans to NCSC and RTFC are secured by all assets and revenue of NCSC and RTFC. CFC's maximum potential exposure, including interest due, for the credit enhancements totaled $29 million as of August 31, 2019. The maturities for obligations guaranteed by CFC extend through 2031.

NOTE 3—INVESTMENT SECURITIES

We currently hold investments in equity and debt securities. We record purchases and sales of our investment securities on a trade-date basis. The accounting and measurement framework for investment securities differs depending on the security type and the classification.

Equity Securities

The following table presents the fair value of our equity securities, all of which had readily determinable fair values, as of August 31, 2019 and May 31, 2019.

(Dollars in thousands)	August 31, 2019	May 31, 2019
Equity securities at fair value:		
Farmer Mac—Series A, B and C non-cumulative preferred stock	**$ 58,166**	$ 82,445
Farmer Mac—class A common stock	**5,756**	5,088
Total equity securities at fair value	**$ 63,922**	$ 87,533

We recognized net unrealized gains on our investments in equity securities of $2 million for the three months ended August 31, 2019. We recognized net unrealized losses on our investments in equity securities of $1 million during the three months ended August 31, 2018. These unrealized amounts are reported as a component of non-interest income on our condensed consolidated statements of operations.

On June 12, 2019, Farmer Mac redeemed its Series B non-cumulative preferred stock at a redemption price of $25.00 per share, plus any declared and unpaid dividends through and including the redemption date. The amortized cost of our investment in the Farmer Mac Series B non-cumulative preferred stock was $25 million as of the redemption date, which equaled the per share redemption price.

Debt Securities

We currently classify and account for our investments in debt securities as held to maturity because we have the positive intent and ability to hold these securities to maturity. If we acquire debt securities that we may sell prior to maturity in response to changes in our investment strategy, liquidity needs, credit risk mitigating considerations, market risk profile or for other reasons, we would classify such securities as available for sale. We report debt securities classified as held to maturity on our condensed consolidated balance sheets at amortized cost. Interest income, including amortization of premiums and accretion of discounts, is generally recognized over the contractual life of the securities based on the effective yield method.

Pursuant to our investment policy guidelines, all fixed-income debt securities, at the time of purchase, must be rated at least investment grade and on stable outlook based on external credit ratings from at least two of the leading global credit rating agencies, when available, or the corresponding equivalent, when not available. Securities rated investment grade, that is those rated Baa3 or higher by Moody's Investors Service ("Moody's") or BBB- or higher by S&P or BBB- or higher by Fitch Ratings Inc. ("Fitch"), are generally considered by the rating agencies to be of lower credit risk than non-investment grade securities.

Amortized Cost and Fair Value of Debt Securities

The following tables present the amortized cost and fair value of our debt securities and the corresponding gross unrealized gains and losses, by classification category and major security type, as of August 31, 2019 and May 31, 2019.

	August 31, 2019			
(Dollars in thousands)	**Amortized Cost**	**Gross Unrealized Gains**	**Gross Unrealized Losses**	**Fair Value**
Debt securities held-to-maturity:				
Certificates of deposit	**$ 6,123**	**$ 2**	**$ —**	**$ 6,125**
Commercial paper	**5,950**	**—**	**—**	**5,950**
U.S. agency debt securities	**4,563**	**201**	**—**	**4,764**
Corporate debt securities	**481,914**	**9,426**	**(219)**	**491,121**
Commercial MBS:				
Agency	**7,243**	**473**	**—**	**7,716**
Non-agency	**3,453**	**—**	**(5)**	**3,448**
Total commercial MBS	**10,696**	**473**	**(5)**	**11,164**
U.S. state and municipality debt securities	**9,606**	**520**	**—**	**10,126**
Foreign government debt securities	**1,257**	**58**	**—**	**1,315**
Other ABS[1]	**49,466**	**448**	**(3)**	**49,911**
Total debt securities held-to-maturity	**$ 569,575**	**$ 11,128**	**$ (227)**	**$ 580,476**

	May 31, 2019			
(Dollars in thousands)	**Amortized Cost**	**Gross Unrealized Gains**	**Gross Unrealized Losses**	**Fair Value**
Debt securities held-to-maturity:				
Certificates of deposit	$ 1,000	$ —	$ —	$ 1,000
Commercial paper	12,395	—	—	12,395
U.S. agency debt securities	3,207	108	—	3,315
Corporate debt securities	478,578	4,989	(912)	482,655
Commercial MBS:				
Agency	7,255	291	—	7,546
Non-agency	3,453	—	(7)	3,446
Total commercial MBS	10,708	291	(7)	10,992
U.S. state and municipality debt securities	9,608	352	—	9,960
Foreign government debt securities	1,254	42	—	1,296
Other ABS[1]	48,694	290	(48)	48,936
Total debt securities held-to-maturity	$ 565,444	$ 6,072	$ (967)	$ 570,549

[1] Consists primarily of securities backed by auto lease loans, equipment-backed loans, auto loans and credit card loans.

Debt Securities in Gross Unrealized Loss Position

An unrealized loss exists when the fair value of an individual security is less than its amortized cost basis. The following table presents the fair value and gross unrealized losses for debt securities in a gross loss position, aggregated by security type, and the length of time the securities have been in a continuous unrealized loss position as of August 31, 2019 and May 31, 2019. The securities are segregated between investments that have been in a continuous unrealized loss position for less than 12 months and 12 months or more based on the point in time that the fair value declined below the amortized cost basis.

	August 31, 2019					
	Unrealized Loss Position Less than 12 Months		Unrealized Loss Position 12 Months or Longer		Total	
(Dollars in thousands)	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
Debt securities held-to-maturity:						
Corporate debt securities	**$ 50,895**	**$ (75)**	**$ 45,650**	**$ (144)**	**$ 96,545**	**$ (219)**
Commercial MBS, non-agency	**3,447**	**(5)**	**—**	**—**	**3,447**	**(5)**
Other ABS[1]	**—**	**—**	**7,909**	**(3)**	**7,909**	**(3)**
Total debt securities held-to-maturity	**$ 54,342**	**$ (80)**	**$ 53,559**	**$ (147)**	**$ 107,901**	**$ (227)**

	May 31, 2019					
	Unrealized Loss Position Less than 12 Months		Unrealized Loss Position 12 Months or Longer		Total	
(Dollars in thousands)	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
Debt securities held-to-maturity:						
Commercial paper[2]	$ 2,688	$ —	$ —	$ —	$ 2,688	$ —
Corporate debt securities	45,999	(198)	164,086	(714)	210,085	(912)
Commercial MBS, non-agency	1,996	(4)	1,448	(3)	3,444	(7)
Other ABS[1]	1,982	(4)	13,840	(44)	15,822	(48)
Total debt securities held-to-maturity	$ 52,665	$ (206)	$ 179,374	$ (761)	$ 232,039	$ (967)

[1]Consists primarily of securities backed by auto lease loans, equipment-backed loans, auto loans and credit card loans.
[2]Unrealized losses on the commercial paper investments are less than $1,000.

Other-Than-Temporary Impairment

We conduct periodic reviews of all securities with unrealized losses to evaluate whether the impairment is other than temporary. The number of individual securities in an unrealized loss position was 84 as of August 31, 2019. We have assessed each security with gross unrealized losses included in the above table for credit impairment. As part of that assessment, we concluded that the unrealized losses are driven by changes in market interest rates rather than by adverse changes in the credit quality of these securities. Based on our assessment, we expect to recover the entire amortized cost basis of these securities, as we do not intend to sell any of the securities and have concluded that it is more likely than not that we will not be required to sell prior to recovery of the amortized cost basis. Accordingly, we currently consider the impairment of these securities to be temporary.

Contractual Maturity and Yield

The following table presents, by major security type, the remaining contractual maturity based on amortized cost and fair value of our held-to-maturity investment securities as of August 31, 2019 and May 31, 2019. Because borrowers may have the right to call or prepay certain obligations, the expected maturities of our investments may differ from the scheduled contractual maturities presented below.

	August 31, 2019				
(Dollars in thousands)	Due in 1 Year or Less	Due > 1 Year through 5 Years	Due > 5 Years through 10 Years	Due >10 Years	Total
Amortized cost:					
Certificates of deposit	$ 5,123	$ 1,000	$ —	$ —	$ 6,123
Commercial paper	5,950	—	—	—	5,950
U.S. agency debt securities	—	2,682	1,881	—	4,563
Corporate debt securities	61,766	408,037	12,111	—	481,914
Commercial MBS:					
Agency	—	2,078	5,165	—	7,243
Non-agency	—	—	—	3,453	3,453
Total commercial MBS	—	2,078	5,165	3,453	10,696
U.S. state and municipality debt securities	—	9,606	—	—	9,606
Foreign government debt securities	—	1,257	—	—	1,257
Other ABS(1)	—	49,466	—	—	49,466
Total	$ 72,839	$ 474,126	$ 19,157	$ 3,453	$ 569,575
Fair value:					
Certificates of deposit	$ 5,125	$ 1,000	$ —	$ —	$ 6,125
Commercial paper	5,950	—	—	—	5,950
U.S. agency debt securities	—	2,811	1,953	—	4,764
Corporate debt securities	61,784	416,655	12,682	—	491,121
Commercial MBS:					
Agency	—	2,210	5,506	—	7,716
Non-Agency	—	—	—	3,448	3,448
Total commercial MBS	—	2,210	5,506	3,448	11,164
U.S. state and municipality debt securities	—	10,126	—	—	10,126
Foreign government debt securities	—	1,315	—	—	1,315
Other ABS(1)	—	49,911	—	—	49,911
Total	$ 72,859	$ 484,028	$ 20,141	$ 3,448	$ 580,476
Weighted average coupon(2)	2.32%	3.03%	3.00%	3.02%	2.94%

	May 31, 2019				
(Dollars in thousands)	Due in 1 Year or Less	Due > 1 Year through 5 Years	Due > 5 Years through 10 Years	Due >10 Years	Total
Amortized cost:					
Certificates of deposit	$ —	$ 1,000	$ —	$ —	$ 1,000
Commercial paper	12,395	—	—	—	12,395
U.S. agency debt securities	—	2,678	529	—	3,207
Corporate debt securities	51,923	414,788	11,867	—	478,578
Commercial MBS:					
Agency	—	310	6,945	—	7,255
Non-agency	—	—	—	3,453	3,453
Total Commercial MBS	—	310	6,945	3,453	10,708
U.S. state and municipality debt securities	—	9,608	—	—	9,608
Foreign government debt securities	—	1,254	—	—	1,254
Other ABS[1]	510	45,730	2,454	—	48,694
Total	$ 64,828	$ 475,368	$ 21,795	$ 3,453	$565,444
Fair value:					
Certificates of deposit	$ —	$ 1,000	$ —	$ —	$ 1,000
Commercial paper	12,395	—	—	—	12,395
U.S. agency debt securities	—	2,769	546	—	3,315
Corporate debt securities	51,818	418,606	12,231	—	482,655
Commercial MBS:					
Agency	—	317	7,229	—	7,546
Non-agency	—	—	—	3,446	3,446
Total commercial MBS	—	317	7,229	3,446	10,992
U.S. state and municipality debt securities	—	9,960	—	—	9,960
Foreign government debt securities	—	1,296	—	—	1,296
Other ABS[1]	509	45,916	2,511	—	48,936
Total	$ 64,722	$ 479,864	$ 22,517	$ 3,446	$570,549
Weighted average coupon[2]	2.08%	3.10%	3.07%	3.26%	2.98%

[1]Consists primarily of securities backed by auto lease loans, equipment-backed loans, auto loans and credit card loans.
[2]Calculated based on the weighted average coupon rate, which excludes the impact of amortization of premium and accretion of discount.

The average contractual maturity and weighted average coupon of our held-to-maturity investment securities was three years and 2.94%, respectively, as of August 31, 2019. The average credit rating of these securities, based on the equivalent lowest credit rating by Moody's, S&P and Fitch was A2, A and A, respectively, as of August 31, 2019.

Realized Gains and Losses

We did not sell any of our debt securities during the three months ended August 31, 2019, and therefore have not recorded any realized gains or losses. In connection with Farmer Mac's early redemption of its Series B non-cumulative preferred stock, we recorded a realized loss on equity securities of $0.2 million for the three months ended August 31, 2019.

NOTE 4—LOANS

Loans, which are classified as held for investment, are carried at the outstanding unpaid principal balance net of unamortized loan origination costs. The following table presents the outstanding principal balance of loans to members, including deferred loan origination costs, and unadvanced loan commitments by loan type and member class, as of August 31, 2019 and May 31, 2019.

	August 31, 2019		May 31, 2019	
(Dollars in thousands)	**Loans Outstanding**	**Unadvanced Commitments[1]**	**Loans Outstanding**	**Unadvanced Commitments[1]**
Loan type:				
Long-term loans:				
Fixed rate	**$ 23,677,234**	**$ —**	$ 23,094,253	$ —
Variable rate	**962,541**	**5,140,530**	1,066,880	5,448,636
Total long-term loans	**24,639,775**	**5,140,530**	24,161,133	5,448,636
Lines of credit	**1,648,824**	**7,913,213**	1,744,531	7,788,922
Total loans outstanding	**26,288,599**	**13,053,743**	25,905,664	13,237,558
Deferred loan origination costs	**11,239**	**—**	11,240	—
Loans to members	**$ 26,299,838**	**$ 13,053,743**	$ 25,916,904	$ 13,237,558
Member class:				
CFC:				
Distribution	**$ 20,484,460**	**$ 8,568,888**	$ 20,155,266	$ 8,773,018
Power supply	**4,671,035**	**3,456,266**	4,578,841	3,466,680
Statewide and associate	**84,212**	**168,564**	83,569	165,687
Total CFC	**25,239,707**	**12,193,718**	24,817,676	12,405,385
NCSC	**697,791**	**575,888**	742,888	552,840
RTFC	**351,101**	**284,137**	345,100	279,333
Total loans outstanding	**26,288,599**	**13,053,743**	25,905,664	13,237,558
Deferred loan origination costs	**11,239**	**—**	11,240	—
Loans to members	**$ 26,299,838**	**$ 13,053,743**	$ 25,916,904	$ 13,237,558

[1]The interest rate on unadvanced loan commitments is not set until an advance is made; therefore, all long-term unadvanced loan commitments are reported as variable-rate. However, the borrower may select either a fixed or a variable rate when an advance on a commitment is made.

Unadvanced Loan Commitments

Unadvanced loan commitments represent approved and executed loan contracts for which funds have not been advanced to borrowers. The following table summarizes the available balance under unadvanced loan commitments as of August 31, 2019 and the related maturities by fiscal year and thereafter by loan type:

		Notional Maturities of Unadvanced Loan Commitments					
(Dollars in thousands)	**Available Balance**	**2020**	**2021**	**2022**	**2023**	**2024**	**Thereafter**
Line of credit loans...	**$ 7,913,213**	**$ 609,206**	**$ 4,128,566**	**$ 485,285**	**$1,364,426**	**$ 1,055,813**	**$ 269,917**
Long-term loans	**5,140,530**	**306,460**	**665,361**	**1,295,466**	**1,080,699**	**1,634,791**	**157,753**
Total	**$ 13,053,743**	**$ 915,666**	**$ 4,793,927**	**$ 1,780,751**	**$2,445,125**	**$ 2,690,604**	**$ 427,670**

Unadvanced line of credit commitments accounted for 61% of total unadvanced loan commitments as of August 31, 2019, while unadvanced long-term loan commitments accounted for 39% of total unadvanced loan commitments. Unadvanced line of credit commitments are typically revolving facilities for periods not to exceed five years. Unadvanced line of credit commitments generally serve as supplemental back-up liquidity to our borrowers. Historically, borrowers have not drawn the full commitment amount for line of credit facilities, and we have experienced a very low utilization rate on line of credit loan facilities regardless of whether or not we are obligated to fund the facility where a material adverse change exists.

Our unadvanced long-term loan commitments have a five-year draw period under which a borrower may advance funds prior to the expiration of the commitment. We expect that the majority of the long-term unadvanced loan commitments of $5,141 million will be advanced prior to the expiration of the commitment.

Because we historically have experienced a very low utilization rate on line of credit loan facilities, which account for the majority of our total unadvanced loan commitments, we believe the unadvanced loan commitment total of $13,054 million as of August 31, 2019 is not necessarily representative of our future funding cash requirements.

Unadvanced Loan Commitments—Conditional

The substantial majority of our line of credit commitments and all of our unadvanced long-term loan commitments include material adverse change clauses. Unadvanced loan commitments subject to material adverse change clauses totaled $10,050 million and $10,294 million as of August 31, 2019 and May 31, 2019, respectively. Prior to making an advance on these facilities, we confirm that there has been no material adverse change in the business or condition, financial or otherwise, of the borrower since the time the loan was approved and confirm that the borrower is currently in compliance with loan terms and conditions. In some cases, the borrower's access to the full amount of the facility is further constrained by the designated purpose, imposition of borrower-specific restrictions or by additional conditions that must be met prior to advancing funds.

Unadvanced Loan Commitments—Unconditional

Unadvanced loan commitments not subject to material adverse change clauses at the time of each advance consisted of unadvanced committed lines of credit totaling $3,004 million and $2,944 million as of August 31, 2019 and May 31, 2019, respectively. As such, we are required to advance amounts on these committed facilities as long as the borrower is in compliance with the terms and conditions of the facility.

The following table summarizes the available balance under unconditional committed lines of credit, and the related maturities by fiscal year and thereafter, as of August 31, 2019.

(Dollars in thousands)	Available Balance	Notional Maturities of Unconditional Committed Lines of Credit					
		2020	2021	2022	2023	2024	Thereafter
Committed lines of credit	**$3,003,647**	**$260,886**	**$478,489**	**$171,875**	**$1,166,687**	**$811,510**	**$114,200**

Loan Sales

We transfer, from time to time, loans to third parties under our direct loan sale program. We sold CFC loans with outstanding balances totaling $20 million, at par for cash, during the three months ended August 31, 2019. We did not have any loan sales during the three months ended August 31, 2018. We recorded immaterial losses upon the sale of these loans, attributable to the unamortized deferred loan origination costs associated with the transferred loans.

Pledging of Loans

We are required to pledge eligible mortgage notes in an amount at least equal to the outstanding balance of our secured debt. The following table summarizes our loans outstanding as collateral pledged to secure our collateral trust bonds, Clean Renewable Energy Bonds, notes payable to Farmer Mac and notes payable under USDA's Guaranteed Underwriter Program ("Guaranteed Underwriter Program") and the amount of the corresponding debt outstanding as of August 31, 2019 and May 31, 2019. See "Note 6—Short-Term Borrowings" and "Note 7—Long-Term Debt" for information on our borrowings.

(Dollars in thousands)	August 31, 2019	May 31, 2019
Collateral trust bonds:		
2007 indenture:		
Distribution system mortgage notes	**$ 8,557,299**	$ 8,775,231
RUS-guaranteed loans qualifying as permitted investments	**133,129**	134,678
Total pledged collateral..	**$ 8,690,428**	$ 8,909,909
Collateral trust bonds outstanding	**7,622,711**	7,622,711
1994 indenture:		
Distribution system mortgage notes	**$ 46,522**	$ 47,331
Collateral trust bonds outstanding	**40,000**	40,000
Farmer Mac:		
Distribution and power supply system mortgage notes..........................	**$ 3,760,219**	$ 3,751,798
Notes payable outstanding...	**2,962,478**	3,054,914
Clean Renewable Energy Bonds Series 2009A:		
Distribution and power supply system mortgage notes..........................	**$ 9,799**	$ 10,349
Cash	**802**	415
Total pledged collateral..	**$ 10,601**	$ 10,764
Notes payable outstanding...	**9,225**	9,225
Federal Financing Bank:		
Distribution and power supply system mortgage notes..........................	**$ 6,127,684**	$ 6,157,218
Notes payable outstanding...	**5,387,155**	5,410,507

Credit Concentration

Concentrations may exist when there are amounts loaned to borrowers engaged in similar activities or in geographic areas that would cause them to be similarly impacted by economic or other conditions or when there are large exposures to single borrowers. As a tax-exempt, member-owned finance cooperative, CFC's principal focus is to provide funding to its rural electric utility cooperative members to assist them in acquiring, constructing and operating electric distribution systems, power supply systems and related facilities. We serve electric and telecommunications members throughout the United States, with a total of 900 borrowers located in 49 states as of August 31, 2019. Loans to borrowers in Texas accounted for approximately 16% and 15% of total loans outstanding as of August 31, 2019 and May 31, 2019, respectively, representing the largest concentration of outstanding loans to borrowers and the largest number of borrowers in any one state.

Because we lend primarily to our rural electric utility cooperative members, we have a loan portfolio subject to single-industry and single-obligor concentration risks. Loans outstanding to electric utility organizations represented approximately 99% of total loans outstanding as of August 31, 2019, unchanged from May 31, 2019. The remaining loans outstanding in our portfolio were to RTFC members, affiliates and associates in the telecommunications industry. The outstanding loan exposure for our 20 largest borrowers was 22% as of both August 31, 2019 and May 31, 2019. The 20 largest borrowers consisted of 10 distribution systems, nine power supply systems and one NCSC associate as of both August 31, 2019 and May 31, 2019. The largest total outstanding exposure to a single borrower or controlled group represented approximately 2% of total loans outstanding as of both August 31, 2019 and May 31, 2019.

As part of our strategy in managing our credit exposure, we entered into a long-term standby purchase commitment agreement with Farmer Mac during fiscal year 2016. Under this agreement, we may designate certain long-term loans to be covered under the commitment, subject to approval by Farmer Mac, and in the event any such loan later goes into payment default for at least 90 days, upon request by us, Farmer Mac must purchase such loan at par value. The aggregate unpaid principal balance of designated and Farmer Mac approved loans was $602 million and $619 million as of August 31, 2019 and May 31, 2019, respectively. Under the agreement, we are required to pay Farmer Mac a monthly fee based on the unpaid principal balance of loans covered under the purchase commitment. No loans had been put to Farmer Mac for purchase, pursuant to this agreement, as of August 31, 2019. Also, we had long-term loans totaling $152 million and $154 million as of August 31, 2019 and May 31, 2019, respectively, guaranteed by RUS.

Credit Quality

Assessing the overall credit quality of our loan portfolio and measuring our credit risk is an ongoing process that involves tracking payment status, charge-offs, troubled debt restructurings, nonperforming and impaired loans, the internal risk ratings of our borrowers and other indicators of credit risk. We monitor and subject each borrower and loan facility in our loan portfolio to an individual risk assessment based on quantitative and qualitative factors. Internal risk ratings and payment status trends are indicators, among others, of the probability of borrower default and level of credit risk in our loan portfolio.

Borrower Risk Ratings

As part of our credit risk management process, we monitor and evaluate each borrower and loan in our loan portfolio and assign internal borrower and loan facility risk ratings based on quantitative and qualitative assessments. Our borrower risk ratings are intended to assess probability of default. Each risk rating is reassessed annually following the receipt of the borrower's audited financial statements; however, interim risk-rating downgrades or upgrades may occur as a result of significant developments or trends. Our borrower risk ratings are intended to align with banking regulatory agency credit risk rating definitions of pass and criticized classifications, with criticized divided between special mention, substandard and doubtful. Pass ratings reflect relatively low probability of default, while criticized ratings have a higher probability of default. Following is a description of each rating category.

- *Pass*: Borrowers that are not experiencing difficulty and/or not showing a potential or well-defined credit weakness.
- *Special Mention*: Borrowers that may be characterized by a potential credit weakness or deteriorating financial condition that is not sufficiently serious to warrant a classification of substandard or doubtful.
- *Substandard*: Borrowers that display a well-defined credit weakness that may jeopardize the full collection of principal and interest.
- *Doubtful*: Borrowers that have a well-defined credit weakness or weaknesses that make full collection of principal and interest, on the basis of currently known facts, conditions and collateral values, highly questionable and improbable.

Loans to borrowers in the pass, special mention and substandard categories are generally considered not to be individually impaired and are included in the loan pools for determining the collective reserve component of the allowance for loan losses. Loans to borrowers in the doubtful category are considered to be impaired and are therefore individually assessed for impairment in determining the specific reserve component of the allowance for loan losses.

The following tables present total loans outstanding, by member class and borrower risk rating category, based on the risk ratings used in the estimation of our allowance for loan losses as of August 31, 2019 and May 31, 2019. For purposes of these tables and for determining the allowance for loan losses, loans to borrowers that are supported by a full guarantee of repayment by the parent company are grouped in the same risk rating category of the guarantor parent company, rather than the risk rating category of the subsidiary borrower.

	August 31, 2019				
(Dollars in thousands)	Pass	Special Mention	Substandard	Doubtful	Total
CFC:					
Distribution	**$ 20,354,654**	**$ 8,222**	**$ 121,584**	**$ —**	**$ 20,484,460**
Power supply	**4,623,131**	**—**	**47,904**	**—**	**4,671,035**
Statewide and associate	**69,212**	**15,000**	**—**	**—**	**84,212**
CFC total	**25,046,997**	**23,222**	**169,488**	**—**	**25,239,707**
NCSC	**697,791**	**—**	**—**	**—**	**697,791**
RTFC	**345,634**	**—**	**5,467**	**—**	**351,101**
Total loans outstanding	**$ 26,090,422**	**$ 23,222**	**$ 174,955**	**$ —**	**$ 26,288,599**

	May 31, 2019				
(Dollars in thousands)	Pass	Special Mention	Substandard	Doubtful	Total
CFC:					
Distribution	$ 20,022,193	$ 10,375	$ 122,698	$ —	$ 20,155,266
Power supply	4,530,708	—	48,133	—	4,578,841
Statewide and associate	68,569	15,000	—	—	83,569
CFC total	24,621,470	25,375	170,831	—	24,817,676
NCSC	742,888	—	—	—	742,888
RTFC	339,508	—	5,592	—	345,100
Total loans outstanding	$ 25,703,866	$ 25,375	$ 176,423	$ —	$ 25,905,664

The substantial majority of the loans in the substandard category are attributable to loans to one electric distribution cooperative borrower and its subsidiary totaling $169 million and $171 million as of August 31, 2019 and May 31, 2019, respectively. The electric distribution cooperative owns and operates a distribution and transmission system. Several years ago, it established a subsidiary to deploy retail broadband service in underserved rural communities. Although the borrower has experienced financial difficulties due to recent net losses and liquidity constraints, the borrower and its subsidiary are current with regard to all principal and interest payments and have never been delinquent. The borrower, which operates in a territory that is not rate-regulated, recently increased its electric and broadband rates and has begun taking other actions to improve its financial performance and liquidity. All of the loans outstanding to this borrower were secured under our typical collateral requirements for long-term loan advances as of August 31, 2019. We currently expect to collect all principal and interest amounts due from the borrower and its subsidiary. Accordingly, the loans outstanding to this borrower and its subsidiary were not deemed to be impaired as of August 31, 2019.

Payment Status of Loans

The following tables present the payment status of loans outstanding by member class as of August 31, 2019 and May 31, 2019. As indicated in the table, we did not have any past due loans as of either August 31, 2019 or May 31, 2019.

	August 31, 2019					
(Dollars in thousands)	Current	30-89 Days Past Due	90 Days or More Past Due [(1)]	Total Past Due	Total Loans Outstanding	Nonaccrual Loans
CFC:						
Distribution	**$ 20,484,460**	**$ —**	**$ —**	**$ —**	**$ 20,484,460**	**$ —**
Power supply	**4,671,035**	**—**	**—**	**—**	**4,671,035**	**—**
Statewide and associate	**84,212**	**—**	**—**	**—**	**84,212**	**—**
CFC total	**25,239,707**	**—**	**—**	**—**	**25,239,707**	**—**
NCSC	**697,791**	**—**	**—**	**—**	**697,791**	**—**
RTFC	**351,101**	**—**	**—**	**—**	**351,101**	**—**
Total loans outstanding	**$ 26,288,599**	**$ —**	**$ —**	**$ —**	**$ 26,288,599**	**$ —**
Percentage of total loans	**100.00%**	**—%**	**—%**	**—%**	**100.00%**	**—%**

	May 31, 2019					
(Dollars in thousands)	Current	30-89 Days Past Due	90 Days or More Past Due [(1)]	Total Past Due	Total Loans Outstanding	Nonaccrual Loans
CFC:						
Distribution	$ 20,155,266	$ —	$ —	$ —	$ 20,155,266	$ —
Power supply	4,578,841	—	—	—	4,578,841	—
Statewide and associate	83,569	—	—	—	83,569	—
CFC total	24,817,676	—	—	—	24,817,676	—
NCSC	742,888	—	—	—	742,888	—
RTFC	345,100	—	—	—	345,100	—
Total loans outstanding	$ 25,905,664	$ —	$ —	$ —	$ 25,905,664	$ —
Percentage of total loans	100.00%	—%	—%	—%	100.00%	—%

[(1)] All loans 90 days or more past due are on nonaccrual status.

Troubled Debt Restructurings

We did not have any loans modified as TDRs during the three months ended August 31, 2019. The following table provides a summary of loans modified as TDRs in prior periods, the performance status of these loans and the unadvanced loan commitments related to the TDR loans, by member class, as of August 31, 2019 and May 31, 2019.

	August 31, 2019			May 31, 2019		
(Dollars in thousands)	Loans Outstanding	% of Total Loans	Unadvanced Commitments	Loans Outstanding	% of Total Loans	Unadvanced Commitments
TDR loans:						
Performing TDR loans:						
CFC/Distribution	**$ 5,755**	**0.02%**	**$ —**	$ 6,261	0.03%	$ —
RTFC	**5,467**	**0.02**	**—**	5,592	0.02	—
Total performing TDR loans	**11,222**	**0.04**	**—**	11,853	0.05	—
Total TDR loans	**$ 11,222**	**0.04%**	**$ —**	$ 11,853	0.05%	$ —

We did not have any TDR loans classified as nonperforming as of August 31, 2019 or May 31, 2019. TDR loans classified as performing as of August 31, 2019 and May 31, 2019 were performing in accordance with the terms of their respective restructured loan agreement and on accrual status as of the respective reported dates. One borrower with a TDR loan also had two line of credit facilities as of both August 31, 2019 and May 31, 2019. One line of credit facility for $6 million as of both August 31, 2019 and May 31, 2019, is restricted for fuel purchases only. Outstanding loans under this facility totaled $1 million and $3 million as of August 31, 2019 and May 31, 2019, respectively, and were classified as performing as of each respective date. The other line of credit facility for $2 million as of both August 31, 2019 and May 31, 2019, provides bridge funding for electric work plan expenditures in anticipation of receiving RUS funding. Outstanding loans under this facility totaled $1 million as of both August 31, 2019 and May 31, 2019, respectively, and were classified as performing.

Nonperforming Loans

In addition to TDR loans that may be classified as nonperforming, we also may have nonperforming loans that have not been modified as a TDR. We did not have any loans classified as nonperforming as of either August 31, 2019 or May 31, 2019.

We had no foregone interest income for loans on nonaccrual status during the three months ended August 31, 2019 and 2018.

Impaired Loans

The following table provides information on loans classified as individually impaired as of August 31, 2019 and May 31, 2019.

	August 31, 2019		May 31, 2019	
(Dollars in thousands)	Recorded Investment	Related Allowance	Recorded Investment	Related Allowance
With no specific allowance recorded:				
CFC	**$ 5,755**	**$ —**	$ 6,261	$ —
With a specific allowance recorded:				
RTFC	**5,467**	**989**	5,592	1,021
Total impaired loans	**$ 11,222**	**$ 989**	$ 11,853	$ 1,021

The following table presents, by company, the average recorded investment for individually impaired loans and the interest income recognized on these loans for the three months ended August 31, 2019 and 2018.

	Three Months Ended August 31,			
	2019	2018	2019	2018
(Dollars in thousands)	Average Recorded Investment		Interest Income Recognized	
CFC	**$ 6,239**	$ 6,504	**$ 137**	$ 142
RTFC	**5,547**	6,048	**69**	76
Total impaired loans	**$ 11,786**	$ 12,552	**$ 206**	$ 218

Net Charge-Offs

Charge-offs represent the amount of a loan that has been removed from our consolidated balance sheet when the loan is deemed uncollectible. Generally the amount of a charge-off is the recorded investment in excess of the fair value of the expected cash flows from the loan, or, if the loan is collateral dependent, the fair value of the underlying collateral securing the loan. We report charge-offs net of amounts recovered on previously charged off loans. We had no loan defaults or charge-offs during the three months ended August 31, 2019 and 2018.

NOTE 5—ALLOWANCE FOR LOAN LOSSES

We maintain an allowance for loan losses that represents management's estimate of probable losses inherent in our loan portfolio as of each balance sheet date. Our allowance for loan losses consists of a collective allowance for loans in our portfolio that are not individually impaired and a specific allowance for loans identified as individually impaired. The allowance for loan losses is reported separately on the consolidated balance sheet, and the provision for loan losses is separately reported on our condensed consolidated statements of operations.

The following tables summarize changes, by company, in the allowance for loan losses as of and for the three months ended August 31, 2019 and 2018.

	Three Months Ended August 31, 2019			
(Dollars in thousands)	CFC	NCSC	RTFC	Total
Balance as of May 31, 2019	**$ 13,120**	**$ 2,007**	**$ 2,408**	**$ 17,535**
Provision (benefit) for loan losses	**(158)**	**70**	**118**	**30**
Balance as of August 31, 2019	**$ 12,962**	**$ 2,077**	**$ 2,526**	**$ 17,565**

	Three Months Ended August 31, 2018			
(Dollars in thousands)	CFC	NCSC	RTFC	Total
Balance as of May 31, 2018	$ 12,300	$ 2,082	$ 4,419	$ 18,801
Provision (benefit) for loan losses	208	(70)	(247)	(109)
Balance as of August 31, 2018	$ 12,508	$ 2,012	$ 4,172	$ 18,692

The following tables present, by company, the components of our allowance for loan losses and the recorded investment of the related loans as of August 31, 2019 and May 31, 2019.

	August 31, 2019			
(Dollars in thousands)	**CFC**	**NCSC**	**RTFC**	**Total**
Ending balance of the allowance:				
Collective allowance	**$ 12,962**	**$ 2,077**	**$ 1,537**	**$ 16,576**
Specific allowance	**—**	**—**	**989**	**989**
Total ending balance of the allowance	**$ 12,962**	**$ 2,077**	**$ 2,526**	**$ 17,565**
Recorded investment in loans:				
Collectively evaluated loans	**$ 25,233,952**	**$ 697,791**	**$ 345,634**	**$ 26,277,377**
Individually evaluated loans	**5,755**	**—**	**5,467**	**11,222**
Total recorded investment in loans	**$ 25,239,707**	**$ 697,791**	**$ 351,101**	**$ 26,288,599**
Total recorded investment in loans, net[1]	**$ 25,226,745**	**$ 695,714**	**$ 348,575**	**$ 26,271,034**
Allowance coverage ratio:				
Allowance as a percentage of total recorded investment in loans	**0.05%**	**0.30%**	**0.72%**	**0.07%**

	May 31, 2019			
(Dollars in thousands)	**CFC**	**NCSC**	**RTFC**	**Total**
Ending balance of the allowance:				
Collective allowance	$ 13,120	$ 2,007	$ 1,387	$ 16,514
Specific allowance	—	—	1,021	1,021
Total ending balance of the allowance	$ 13,120	$ 2,007	$ 2,408	$ 17,535
Recorded investment in loans:				
Collectively evaluated loans	$ 24,811,415	$ 742,888	$ 339,508	$ 25,893,811
Individually evaluated loans	6,261	—	5,592	11,853
Total recorded investment in loans	$ 24,817,676	$ 742,888	$ 345,100	$ 25,905,664
Total recorded investment in loans, net[1]	$ 24,804,556	$ 740,881	$ 342,692	$ 25,888,129
Allowance coverage ratio:				
Allowance as a percentage of total recorded investment in loans	0.05%	0.27%	0.70%	0.07%

[1]Excludes unamortized deferred loan origination costs of $11 million as of both August 31, 2019 and May 31, 2019.

As noted above in “Note 4-Loans,” we did not have any loans classified as nonperforming as of either August 31, 2019 or May 31, 2019.

In addition to the allowance for loan losses, we also maintain a reserve for unadvanced loan commitments at a level estimated by management to provide for probable losses under these commitments as of each balance sheet date, which was less than $1 million as of both August 31, 2019 and May 31, 2019.

NOTE 6—SHORT-TERM BORROWINGS

Short-term borrowings consist of borrowings with an original contractual maturity of one year or less and do not include the current portion of long-term debt. Our short-term borrowings totaled $4,028 million and accounted for 16% of total debt outstanding as of August 31, 2019, compared with $3,608 million, or 14%, of total debt outstanding as of May 31, 2019. The following table provides comparative information on our short-term borrowings as of August 31, 2019 and May 31, 2019.

(Dollars in thousands)	August 31, 2019	May 31, 2019
Short-term borrowings:		
Commercial paper:		
Commercial paper sold through dealers, net of discounts	**$ 829,763**	$ 944,616
Commercial paper sold directly to members, at par	**1,240,830**	1,111,795
Total commercial paper	**2,070,593**	2,056,411
Select notes to members	**1,277,927**	1,023,952
Daily liquidity fund notes to members	**435,070**	298,817
Medium-term notes to members	**244,055**	228,546
Total short-term borrowings	**$ 4,027,645**	$ 3,607,726

Committed Bank Revolving Line of Credit Agreements

We had $2,975 million of commitments under committed bank revolving line of credit agreements as of both August 31, 2019 and May 31, 2019, respectively. Under our current committed bank revolving line of credit agreements, we have the ability to request up to $300 million of letters of credit, which would result in a reduction in the remaining available amount under the facilities.

The following table presents the total commitment, the net amount available for use and the outstanding letters of credit under our committed bank revolving line of credit agreements as of August 31, 2019 and May 31, 2019.

	August 31, 2019			May 31, 2019				
(Dollars in millions)	Total Commitment	Letters of Credit Outstanding	Net Available for Use	Total Commitment	Letters of Credit Outstanding	Net Available for Use	Maturity	Annual Facility Fee [1]
3-year agreement	**$ 1,440**	**$ —**	**$ 1,440**	$ 1,440	$ —	$ 1,440	November 28, 2021	7.5 bps
5-year agreement	**1,535**	**3**	**1,532**	1,535	3	1,532	November 28, 2023	10 bps
Total	**$ 2,975**	**$ 3**	**$ 2,972**	$ 2,975	$ 3	$ 2,972		

(1) Facility fee determined by CFC's senior unsecured credit ratings based on the pricing schedules put in place at the inception of the related agreement.

We had no borrowings outstanding under our committed bank revolving line of credit agreements as of August 31, 2019 or May 31, 2019, and we were in compliance with all covenants and conditions under the agreements as of each date.

NOTE 7—LONG-TERM DEBT

The following table displays long-term debt outstanding, by debt type, as of August 31, 2019 and May 31, 2019.

(Dollars in thousands)	August 31, 2019	May 31, 2019
Secured long-term debt:		
Collateral trust bonds	**$ 7,662,711**	$ 7,662,711
Unamortized discount	**(242,123)**	(244,643)
Debt issuance costs	**(32,952)**	(34,336)
Total collateral trust bonds	**7,387,636**	7,383,732
Guaranteed Underwriter Program notes payable	**5,387,155**	5,410,507
Farmer Mac notes payable	**2,962,478**	3,054,914
Other secured notes payable	**9,225**	9,225
Debt issuance costs	**(162)**	(178)
Total other secured notes payable	**9,063**	9,047
Total secured notes payable	**8,358,696**	8,474,468
Total secured long-term debt	**15,746,332**	15,858,200
Unsecured long-term debt:		
Medium-term notes sold through dealers	**2,935,540**	2,962,375
Medium-term notes sold to members	**418,208**	397,080
Subtotal medium-term notes	**3,353,748**	3,359,455
Unamortized discount	**(848)**	(931)
Debt issuance costs	**(18,492)**	(19,399)
Total unsecured medium-term notes	**3,334,408**	3,339,125
Unsecured notes payable	**13,701**	13,701
Unamortized discount	**(164)**	(187)
Debt issuance costs	**(41)**	(46)
Total unsecured notes payable	**13,496**	13,468
Total unsecured long-term debt	**3,347,904**	3,352,593
Total long-term debt	**$ 19,094,236**	$ 19,210,793

Collateral Trust Bonds

Collateral trust bonds represent secured obligations sold to investors in the capital markets. Collateral trust bonds are secured by the pledge of mortgage notes or eligible securities in an amount at least equal to the principal balance of the bonds outstanding.

On September 13, 2019, we provided notice to investors that we will redeem all $300 million outstanding principal amount of our 2.30% collateral trust bonds due November 15, 2019 on October 15, 2019.

Secured Notes Payable

We had outstanding secured notes payable totaling $5,387 million and $5,411 million as of August 31, 2019 and May 31, 2019, respectively, under bond purchase agreements with the Federal Financing Bank and a bond guarantee agreement with

RUS issued under the Guaranteed Underwriter Program, which provides guarantees to the Federal Financing Bank. We pay RUS a fee of 30 basis points per year on the total amount outstanding. We had up to $1,350 million available for access under the Guaranteed Underwriter Program as of August 31, 2019.

The notes outstanding under the Guaranteed Underwriter Program contain a provision that if during any portion of the fiscal year, our senior secured credit ratings do not have at least two of the following ratings: (i) A3 or higher from Moody's, (ii) A- or higher from S&P, (iii) A- or higher from Fitch, or (iv) an equivalent rating from a successor rating agency to any of the above rating agencies, we may not make cash patronage capital distributions in excess of 5% of total patronage capital. We are required to pledge eligible distribution system or power supply system loans as collateral in an amount at least equal to the total principal amount of notes outstanding under the Guaranteed Underwriter Program. See "Note 4—Loans" for additional information on the collateral pledged to secure notes payable under this program.

We have two revolving note purchase agreements with Farmer Mac, which together allow us to borrow up to $5,500 million from Farmer Mac. Under our first revolving note purchase agreement with Farmer Mac, dated March 24, 2011, as amended, we can currently borrow, subject to market conditions, up to $5,200 million at any time through January 11, 2022, and such date shall automatically extend on each anniversary date of the closing for an additional year, unless prior to any such anniversary date, Farmer Mac provides us with a notice that the draw period will not be extended beyond the remaining term. This revolving note purchase agreement allows us to borrow, repay and re-borrow funds at any time through maturity, as market conditions permit, provided that the outstanding principal amount at any time does not exceed the total available under the agreement. Each borrowing under the revolving note purchase agreement is evidenced by a pricing agreement setting forth the interest rate, maturity date and other related terms as we may negotiate with Farmer Mac at the time of each such borrowing. We may select a fixed rate or variable rate at the time of each advance with a maturity as determined in the applicable pricing agreement. Under this note purchase agreement with Farmer Mac, we had outstanding secured notes payable totaling $2,962 million and $3,055 million as of August 31, 2019 and May 31, 2019, respectively.

Under our second revolving note purchase agreement with Farmer Mac, dated July 31, 2015, as amended, we can borrow up to $300 million at any time through December 20, 2023 at a fixed spread over London Interbank Offered Rate ("LIBOR"). This agreement also allows us to borrow, repay and re-borrow funds at any time through maturity, provided that the outstanding principal amount at any time does not exceed the total available under the agreement. Prior to the maturity date, Farmer Mac may terminate the agreement upon 30 days written notice to us on periodic facility renewal dates, the first of which was January 31, 2019. Subsequent facility renewal dates are on each June 20 or December 20 thereafter until the maturity date. We may terminate the agreement upon 30 days written notice at any time. We did not have any outstanding notes payable under this revolving note purchase agreement with Farmer Mac as of August 31, 2019 and May 31, 2019. Under the terms of the first revolving note purchase agreement with Farmer Mac described above, the $5,200 million commitment will increase to $5,500 million in the event the second revolving note purchase agreement is terminated.

We are required to pledge eligible distribution system or power supply system loans as collateral in an amount at least equal to the total principal amount of notes outstanding under each of our Farmer Mac revolving note purchase agreements. See "Note 4—Loans" for additional information on the collateral pledged to secure notes payable under these programs.

We were in compliance with all covenants and conditions under our senior debt indentures as of August 31, 2019 and May 31, 2019.

NOTE 8—SUBORDINATED DEFERRABLE DEBT

The following table presents subordinated deferrable debt outstanding as of August 31, 2019 and May 31, 2019. See "Note 8—Subordinated Deferrable Debt" of our 2019 Form 10-K for additional information on the terms of our subordinated deferrable debt outstanding.

(Dollars in thousands)	August 31, 2019	May 31, 2019
4.75% due 2043 with a call date of April 30, 2023	**$ 400,000**	$ 400,000
5.25% due 2046 with a call date of April 20, 2026	**350,000**	350,000
5.50% due 2064 with a call date of May 15, 2024	**250,000**	250,000
Debt issuance costs	**(14,019)**	(13,980)
Total subordinated deferrable debt	**$ 985,981**	$ 986,020

NOTE 9—DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES

We are an end user of derivative financial instruments and do not engage in derivative trading. We use derivatives, primarily interest rate swaps and Treasury rate locks, to manage interest rate risk. Derivatives may be privately negotiated contracts, which are often referred to as OTC derivatives, or they may be listed and traded on an exchange. We generally engage in OTC derivative transactions.

Accounting for Derivatives

In accordance with the accounting standards for derivatives and hedging activities, we record derivative instruments at fair value as either a derivative asset or derivative liability on our condensed consolidated balance sheets. We report derivative asset and liability amounts on a gross basis based on individual contracts, which does not take into consideration the effects of master netting agreements or collateral netting. Our derivatives transactions are not collateralized and do not include collateralization agreements with counterparties. Derivatives in a gain position are reported as derivative assets on our condensed consolidated balance sheets, while derivatives in a loss position are reported as derivative liabilities. Accrued interest related to derivatives is reported on our condensed consolidated balance sheets as a component of either accrued interest receivable or accrued interest payable.

If we do not elect hedge accounting treatment, changes in the fair value of derivative instruments, which consist of net accrued periodic derivative cash settlements expense and derivative forward value amounts, are recognized in our condensed consolidated statements of operations under derivative gains (losses). If we elect hedge accounting treatment for derivatives, we formally document, designate and assess the effectiveness of the hedge relationship. Changes in the fair value of derivatives designated as qualifying fair value hedges are recognized in the same line item on our condensed consolidated statements of operations as the earnings effect of the related hedged item. Changes in the fair value of derivatives designated as qualifying cash flow hedges are recorded as a component of AOCI. Those amounts are reclassified into earnings in the same period during which the forecasted transaction impacts earnings and presented in the same line item on our condensed consolidated statements of operations as the earnings effect of the related hedged item.

We generally do not designate interest rate swaps, which represented all of our outstanding derivatives as of August 31, 2019, for hedge accounting. Accordingly, changes in the fair value of interest rate swaps are reported in our condensed consolidated statements of operations under derivative gains (losses). Net periodic cash settlements expense related to interest rate swaps are classified as an operating activity in our consolidated statements of cash flows.

Outstanding Notional Amount of Derivatives Not Designated as Accounting Hedges

The notional amount provides an indication of the volume of our derivatives activity, but this amount is not recorded on our condensed consolidated balance sheets. The notional amount is used only as the basis on which interest payments are determined and is not the amount exchanged. The following table shows the outstanding notional amounts and the weighted-average rate paid and received for our interest rate swaps, by type, as of August 31, 2019 and May 31, 2019. The substantial majority of our interest rate swaps use an index based on LIBOR for either the pay or receive leg of the swap agreement.

	August 31, 2019			May 31, 2019		
(Dollars in thousands)	Notional Amount	Weighted-Average Rate Paid	Weighted-Average Rate Received	Notional Amount	Weighted-Average Rate Paid	Weighted-Average Rate Received
Pay-fixed swaps	**$ 7,319,015**	**2.84%**	**2.27%**	$ 7,379,280	2.83%	2.60%
Receive-fixed swaps	**3,399,000**	**2.96**	**2.56**	3,399,000	3.25	2.56
Total interest rate swaps	**10,718,015**	**2.88**	**2.36**	10,778,280	2.97	2.58
Forward pay-fixed swaps	**65,000**			65,000		
Total	**$10,783,015**			$10,843,280		

Impact of Derivatives on Condensed Consolidated Balance Sheets

The following table displays the fair value of the derivative assets and derivative liabilities recorded on our condensed consolidated balance sheets and the related outstanding notional amount of our interest rate swaps by derivatives type, as of August 31, 2019 and May 31, 2019.

	August 31, 2019		May 31, 2019	
(Dollars in thousands)	Fair Value	Notional Balance	Fair Value	Notional Balance
Derivative assets:				
Interest rate swaps	**$ 85,533**	**$ 2,641,803**	$ 41,179	$ 2,332,104
Derivative liabilities:				
Interest rate swaps	**$ 820,872**	**$ 8,141,212**	$ 391,724	$ 8,511,176

All of our master swap agreements include netting provisions that allow for offsetting of all contracts with a given counterparty in the event of default by one of the two parties. However, as indicated above, we report derivative asset and liability amounts on a gross basis by individual contracts. The following table presents the gross fair value of derivative assets and liabilities reported on our condensed consolidated balance sheets as of August 31, 2019 and May 31, 2019, and provides information on the impact of netting provisions and collateral pledged, if any.

	August 31, 2019					
				Gross Amount Not Offset in the Balance Sheet		
(Dollars in thousands)	**Gross Amount of Recognized Assets/ Liabilities**	**Gross Amount Offset in the Balance Sheet**	**Net Amount of Assets/ Liabilities Presented in the Balance Sheet**	**Financial Instruments**	**Cash Collateral Pledged**	**Net Amount**
Derivative assets:						
Interest rate swaps	**$ 85,533**	**$ —**	**$ 85,533**	**$ 85,533**	**$ —**	**$ —**
Derivative liabilities:						
Interest rate swaps	**820,872**	**—**	**820,872**	**85,533**	**—**	**735,339**

	May 31, 2019					
				Gross Amount Not Offset in the Balance Sheet		
(Dollars in thousands)	**Gross Amount of Recognized Assets/ Liabilities**	**Gross Amount Offset in the Balance Sheet**	**Net Amount of Assets/ Liabilities Presented in the Balance Sheet**	**Financial Instruments**	**Cash Collateral Pledged**	**Net Amount**
Derivative assets:						
Interest rate swaps	$ 41,179	$ —	$ 41,179	$ 41,176	$ —	$ 3
Derivative liabilities:						
Interest rate swaps	391,724	—	391,724	41,176	—	350,548

Impact of Derivatives on Condensed Consolidated Statements of Operations

Derivative gains (losses) reported in our condensed consolidated statements of operations consist of derivative cash settlements expense and derivative forward value gains (losses). Derivative cash settlements expense represents net contractual interest expense accruals on interest rate swaps during the period. The derivative forward value gains (losses) represent the change in fair value of our interest rate swaps during the reporting period due to changes in the estimate of future interest rates over the remaining life of our derivative contracts.

The following table presents the components of the derivative gains (losses) reported in our condensed consolidated statements of operations for our interest rate swaps for three months ended August 31, 2019 and 2018.

	Three Months Ended August 31,	
(Dollars in thousands)	**2019**	**2018**
Derivative gains (losses) attributable to:		
Derivative cash settlements expense	**$ (11,043)**	$ (12,829)
Derivative forward value gains (losses)	**(384,682)**	20,012
Derivative gains (losses)	**$ (395,725)**	$ 7,183

Credit Risk-Related Contingent Features

Our derivative contracts typically contain mutual early-termination provisions, generally in the form of a credit rating trigger. Under the mutual credit rating trigger provisions, either counterparty may, but is not obligated to, terminate and settle the agreement if the credit rating of the other counterparty falls below a level specified in the agreement. If a derivative contract is terminated, the amount to be received or paid by us would be equal to the prevailing fair value, as defined in the agreement, as of the termination date.

Our senior unsecured credit ratings from Moody's and S&P were A2 and A, respectively, as of August 31, 2019. Both Moody's and S&P had our ratings on stable outlook as of August 31, 2019. The following table displays the notional amounts of our derivative contracts with rating triggers as of August 31, 2019, and the payments that would be required if the contracts were terminated as of that date because of a downgrade of our unsecured credit ratings or the counterparty's unsecured credit ratings below A3/A-, below Baa1/BBB+, to or below Baa2/BBB, below Baa3/BBB-, or to or below Ba2/BB+ by Moody's or S&P, respectively. In calculating the payment amounts that would be required upon termination of the derivative contracts, we assumed that the amounts for each counterparty would be netted in accordance with the provisions of the master netting agreements for each counterparty. The net payment amounts are based on the fair value of the underlying derivative instrument, excluding the credit risk valuation adjustment, plus any unpaid accrued interest amounts.

(Dollars in thousands)	Notional Amount	Payable Due from CFC	Receivable Due to CFC	Net (Payable)/ Receivable
Impact of rating downgrade trigger:				
Falls below A3/A-[1]	$ 50,460	$ (10,748)	$ —	$ (10,748)
Falls below Baa1/BBB+	6,989,288	(471,249)	—	(471,249)
Falls to or below Baa2/BBB [2]	558,159	(20,778)	—	(20,778)
Falls below Baa3/BBB-	221,473	(14,759)	—	(14,759)
Total	$ 7,819,380	$ (517,534)	$ —	$ (517,534)

[1] Rating trigger for CFC falls below A3/A-, while rating trigger for counterparty falls below Baa1/BBB+ by Moody's or S&P, respectively.
[2] Rating trigger for CFC falls to or below Baa2/BBB, while rating trigger for counterparty falls to or below Ba2/BB+ by Moody's or S&P, respectively.

We have outstanding notional amount of derivatives with one counterparty subject to a ratings trigger and early termination provision in the event of a downgrade of CFC's senior unsecured credit ratings below Baa3, BBB- or BBB- by Moody's, S&P or Fitch, respectively, which is not included in the above table, totaling $165 million as of August 31, 2019. These contracts were in an unrealized loss position of $41 million as of August 31, 2019.

Our largest counterparty exposure, based on the outstanding notional amount, accounted for approximately 23% of the total outstanding notional amount of derivatives as of both August 31, 2019 and May 31, 2019. The aggregate fair value amount, including the credit valuation adjustment, of all interest rate swaps with rating triggers that were in a net liability position was $543 million as of August 31, 2019.

NOTE 10—EQUITY

Total equity decreased by $385 million to $918 million as of August 31, 2019. The decrease was primarily attributable to our reported net loss of $324 million for the three months ended August 31, 2019 and the CFC Board of Directors authorization in the current quarter to retire patronage capital of $63 million.

In July 2019, the CFC Board of Directors authorized the allocation of the fiscal year 2019 net earnings as follows: $97 million to members in the form of patronage, $71 million to the members' capital reserve and $1 million to the cooperative educational fund. The amount of patronage capital allocated each year by CFC's Board of Directors is based on adjusted net income, which excludes the impact of derivative forward value gains (losses). See "MD&A—Non-GAAP Financial Measures" for information on adjusted net income.

In July 2019, the CFC Board of Directors authorized the retirement of allocated net earnings totaling $63 million, consisting of $48 million, which represented 50% of the patronage capital allocation for fiscal year 2019, and $15 million, which represented the portion of the allocation from fiscal year 1994 net earnings that has been held for 25 years pursuant to the CFC Board of Directors policy. This amount was returned to members in cash in September 2019. The remaining portion of the amount allocated for fiscal year 2019 will be retained by CFC for 25 years under current guidelines adopted by the CFC Board of Directors in June 2009.

The CFC Board of Directors is required to make annual allocations of adjusted net income, if any. CFC has made annual retirements of allocated net earnings in 39 of the last 40 fiscal years; however, future retirements of allocated amounts are determined based on CFC's financial condition. The CFC Board of Directors has the authority to change the current practice for allocating and retiring net earnings at any time, subject to applicable laws. See "Item 1. Business—Allocation and Retirement of Patronage Capital" of our 2019 Form 10-K for additional information.

Accumulated Other Comprehensive Income (Loss)

The following tables summarize, by component, the activity in AOCI as of and for the three months ended August 31, 2019 and 2018.

	Three Months Ended August 31, 2019				
(Dollars in thousands)	**Unrealized Gains (Losses) Equity Securities**	**Unrealized Gains Derivatives[1]**	**Unrealized Gains (Losses) Cash Flow Hedges**	**Unrealized Losses Defined Benefit Plan[2]**	**Total**
Beginning balance	**$ —**	**$ 2,571**	**$ —**	**$ (2,718)**	**$ (147)**
(Gains) losses reclassified into earnings	**—**	**(112)**	**—**	**145**	**33**
Ending balance	**$ —**	**$ 2,459**	**$ —**	**$ (2,573)**	**$ (114)**

	Three Months Ended August 31, 2018				
(Dollars in thousands)	**Unrealized Gains (Losses) Equity Securities**	**Unrealized Gains Derivatives[1]**	**Unrealized Gains (Losses) Cash Flow Hedges**	**Unrealized Losses Defined Benefit Plan[2]**	**Total**
Beginning balance	$ 8,794	$ 3,039	$ (1,059)	$ (2,230)	$ 8,544
Cumulative effect of changes from adoption of new accounting standards	(8,794)	—	—	—	(8,794)
Unrealized gains	—	—	24	—	24
(Gains) losses reclassified into earnings	—	(119)	—	131	12
Other comprehensive income (loss)	—	(119)	24	131	36
Ending balance	$ —	$ 2,920	$ (1,035)	$ (2,099)	$ (214)

____

[1] Amounts are reclassified into income in the derivative forward value gains (losses) component of the derivative gains (losses) line item of our condensed consolidated statements of operations.

[2] Amounts are reclassified into income in the other general and administrative expenses line item of our condensed consolidated statements of operations.

We expect to reclassify less than $1 million of amounts in AOCI related to unrealized derivative gains into earnings over the next 12 months.

NOTE 11—GUARANTEES

The following table summarizes total guarantees, by type of guarantee and by member class, as of August 31, 2019 and May 31, 2019.

(Dollars in thousands)	August 31, 2019	May 31, 2019
Total by type:		
Long-term tax-exempt bonds[1]	**$ 311,590**	$ 312,190
Letters of credit[2]	**342,831**	379,001
Other guarantees	**146,906**	146,244
Total	**$ 801,327**	$ 837,435
Total by member class:		
CFC:		
Distribution	**$ 242,630**	$ 235,919
Power supply	**542,060**	586,717
Statewide and associate	**5,298**	4,708
CFC total	**789,988**	827,344
NCSC	**9,765**	8,517
RTFC	**1,574**	1,574
Total	**$ 801,327**	$ 837,435

(1)Represents the outstanding principal amount of long-term fixed-rate and variable-rate guaranteed bonds.
(2)Reflects our maximum potential exposure for letters of credit.

Long-term tax-exempt bonds of $312 million as of both August 31, 2019 and May 31, 2019 included $247 million of adjustable or variable-rate bonds that may be converted to a fixed rate as specified in the applicable indenture for each bond offering. We are unable to determine the maximum amount of interest that we may be required to pay related to the remaining adjustable and variable-rate bonds. Many of these bonds have a call provision that allows us to call the bond in the event of a default, which would limit our exposure to future interest payments on these bonds. Our maximum potential exposure generally is secured by mortgage liens on the members' assets and future revenue. If a member's debt is accelerated because of a determination that the interest thereon is not tax-exempt, the member's obligation to reimburse us for any guarantee payments will be treated as a long-term loan. The remaining long-term tax-exempt bonds of $65 million as of August 31, 2019 are fixed-rate. The maximum potential exposure for these bonds, including the outstanding principal of $65 million and related interest through maturity, totaled $90 million as of August 31, 2019. The maturities for long-term tax-exempt bonds and the related guarantees extend through calendar year 2042.

Of the outstanding letters of credit of $343 million and $379 million as of August 31, 2019 and May 31, 2019, respectively, $104 million and $126 million, respectively, were secured. We did not have any letters of credit outstanding that provided for standby liquidity for adjustable and floating-rate tax-exempt bonds issued for the benefit of our members as of August 31, 2019. The maturities for the outstanding letters of credit as of August 31, 2019 extend through calendar year 2039.

In addition to the letters of credit listed in the table above, under master letter of credit facilities in place as of August 31, 2019, we may be required to issue up to an additional $57 million in letters of credit to third parties for the benefit of our members. All of our master letter of credit facilities were subject to material adverse change clauses at the time of issuance as of August 31, 2019. Prior to issuing a letter of credit, we would confirm that there has been no material adverse change in the business or condition, financial or otherwise, of the borrower since the time the loan was approved and confirm that the borrower is currently in compliance with the letter of credit terms and conditions.

The maximum potential exposure for other guarantees was $147 million as of both August 31, 2019 and May 31, 2019 of which $25 million was secured as of both August 31, 2019 and May 31, 2019. The maturities for these other guarantees listed in the table above extend through calendar year 2025. Guarantees under which our right of recovery from our members was not secured totaled $360 million and $374 million and represented 45% of total guarantees as of both August 31, 2019 and May 31, 2019.

In addition to the guarantees described above, we were also the liquidity provider for $247 million of variable-rate tax-exempt bonds as of August 31, 2019, issued for our member cooperatives. While the bonds are in variable-rate mode, in return for a fee, we have unconditionally agreed to purchase bonds tendered or put for redemption if the remarketing agents are unable to sell such bonds to other investors. We were not required to perform as liquidity provider pursuant to these obligations during the three months ended August 31, 2019 or the prior fiscal year.

Guarantee Liability

As of both August 31, 2019 and May 31, 2019, we recorded a guarantee liability of $14 million which represents the contingent and noncontingent exposures related to guarantees and liquidity obligations. The contingent guarantee liability was $1 million as of both August 31, 2019 and May 31, 2019, based on management’s estimate of exposure to losses within the guarantee portfolio. The remaining balance of the total guarantee liability of $13 million as of both August 31, 2019 and May 31, 2019, respectively, relates to our noncontingent obligation to stand ready to perform over the term of our guarantees and liquidity obligations that we have entered into or modified since January 1, 2003.

NOTE 12—FAIR VALUE MEASUREMENT

We use fair value measurements for the initial recording of certain assets and liabilities and periodic remeasurement of certain assets and liabilities on a recurring or nonrecurring basis. The accounting guidance for fair value measurements and disclosures establishes a three-level fair value hierarchy that prioritizes the inputs into the valuation techniques used to measure fair value. The levels of the fair value hierarchy, in priority order, include Level 1, Level 2 and Level 3. For additional information regarding the fair value hierarchy and a description of the methodologies we use to measure fair value, see “Note 14—Fair Value Measurement” to the Consolidated Financial Statements in our 2019 Form 10-K.

The following tables present the carrying value and fair value for all of our financial instruments, including those carried at amortized cost, as of August 31, 2019 and May 31, 2019. The tables also display the classification within the fair value hierarchy of the valuation technique used in estimating fair value.

	August 31, 2019		Fair Value Measurement Level		
(Dollars in thousands)	**Carrying Value**	**Fair Value**	**Level 1**	**Level 2**	**Level 3**
Assets:					
Cash and cash equivalents	**$ 231,050**	**$ 231,050**	**$ 231,050**	**$ —**	**$ —**
Restricted cash	**9,138**	**9,138**	**9,138**	**—**	**—**
Equity securities	**63,922**	**63,922**	**63,922**	**—**	**—**
Debt securities held-to-maturity	**569,575**	**580,476**	**—**	**580,476**	**—**
Deferred compensation investments	**5,923**	**5,923**	**5,923**	**—**	**—**
Loans to members, net	**26,282,273**	**28,353,451**	**—**	**—**	**28,353,451**
Accrued interest receivable	**133,119**	**133,119**	**—**	**133,119**	**—**
Debt service reserve funds	**17,151**	**17,151**	**17,151**	**—**	**—**
Derivative assets	**85,533**	**85,533**	**—**	**85,533**	**—**
Liabilities:					
Short-term borrowings	**$ 4,027,645**	**$ 4,028,391**	**$ —**	**$ 4,028,391**	**$ —**
Long-term debt	**19,094,236**	**20,650,260**	**—**	**11,840,788**	**8,809,472**
Accrued interest payable	**209,931**	**209,931**	**—**	**209,931**	**—**
Guarantee liability	**13,514**	**13,406**	**—**	**—**	**13,406**
Derivative liabilities	**820,872**	**820,872**	**—**	**820,872**	**—**
Subordinated deferrable debt	**985,981**	**1,055,555**	**—**	**1,055,555**	**—**
Members' subordinated certificates	**1,356,485**	**1,356,485**	**—**	**—**	**1,356,485**

	May 31, 2019		Fair Value Measurement Level		
(Dollars in thousands)	**Carrying Value**	**Fair Value**	**Level 1**	**Level 2**	**Level 3**
Assets:					
Cash and cash equivalents	$ 177,922	$ 177,922	$ 177,922	$ —	$ —
Restricted cash	8,282	8,282	8,282	—	—
Equity securities	87,533	87,533	87,533	—	—
Debt securities held-to-maturity	565,444	570,549	—	570,549	—
Deferred compensation investments	4,984	4,984	4,984	—	—
Loans to members, net	25,899,369	25,743,503	—	—	25,743,503
Accrued interest receivable	133,605	133,605	—	133,605	—
Debt service reserve funds	17,151	17,151	17,151	—	—
Derivative assets	41,179	41,179	—	41,179	—
Liabilities:					
Short-term borrowings	$ 3,607,726	$ 3,608,259	$ —	$ 3,608,259	$ —
Long-term debt	19,210,793	20,147,183	—	11,482,715	8,664,468
Accrued interest payable	158,997	158,997	—	158,997	—
Guarantee liability	13,666	13,307	—	—	13,307
Derivative liabilities	391,724	391,724	—	391,724	—
Subordinated deferrable debt	986,020	1,004,707	—	1,004,707	—
Members' subordinated certificates	1,357,129	1,357,129	—	—	1,357,129

Transfers Between Levels

We monitor the availability of observable market data to assess the appropriate classification of financial instruments within the fair value hierarchy and transfer between Level 1, Level 2, and Level 3 accordingly. Observable market data includes but is not limited to quoted prices and market transactions. Changes in economic conditions or market liquidity generally will drive changes in availability of observable market data. Changes in availability of observable market data, which also may result in changes in the valuation technique used, are generally the cause of transfers between levels. We did not have any transfers between levels for financial instruments measured at fair value on a recurring basis for the three months ended August 31, 2019 and 2018.

Recurring Fair Value Measurements

The following table presents the carrying value and fair value of financial instruments reported in our condensed consolidated financial statements at fair value on a recurring basis as of August 31, 2019 and May 31, 2019, and the classification of the valuation technique within the fair value hierarchy.

	August 31, 2019			May 31, 2019		
(Dollars in thousands)	**Level 1**	**Level 2**	**Total**	**Level 1**	**Level 2**	**Total**
Equity securities	**$ 63,922**	**$ —**	**$ 63,922**	$ 87,533	$ —	$ 87,533
Deferred compensation investments	**5,923**	**—**	**5,923**	4,984	—	4,984
Derivative assets	**—**	**85,533**	**85,533**	—	41,179	41,179
Derivative liabilities	**—**	**820,872**	**820,872**	—	391,724	391,724

Nonrecurring Fair Value

We may be required, from time to time, to measure certain assets at fair value on a nonrecurring basis on our condensed consolidated balance sheets. These assets are not measured at fair value on an ongoing basis but are subject to fair value adjustments in certain circumstances, such as in the application of lower of cost or fair value accounting or when we evaluate for impairment. Assets measured at fair value on a nonrecurring basis and still held during the three months ended August 31, 2019 and 2018 consisted of certain impaired loans. Fair value measurement adjustments for individually impaired loans are recorded in the provision for loan losses on our condensed consolidated statements of operations. The fair value of these assets is determined based on the use of significant unobservable inputs, which are considered Level 3 in the fair value hierarchy. We did not have any nonrecurring fair value measurement adjustments recorded in earnings attributable to these assets during the three months ended August 31, 2019 and 2018.

Significant Unobservable Level 3 Inputs

Impaired Loans

The fair value of impaired loans is typically measured based on the present value of expected future cash flows. Our estimate of expected future cash flows incorporates, among other items, assumptions regarding default rates, loss severities, the amounts and timing of prepayments, as well as the characteristics of the loan. If we expect repayment to be provided solely by the continued operation or sale of the underlying collateral, the fair value of the collateral less estimated costs to sell is used as the basis for measuring fair value. We employ various approaches and techniques to determine the fair value of collateral-dependent loans, including developing market multiples and obtaining valuations from third-party specialists. The significant unobservable inputs used in measuring the fair value of collateral-dependent loans include estimated cash flows before interest, taxes, depreciation and amortization and market multiples for comparable companies. Our Credit Risk Management group reviews the unobservable inputs to assess the reasonableness of the assumptions used and the accuracy of the work performed. We did not have any impaired collateral-dependent loans as of August 31, 2019 or May 31, 2019.

NOTE 13—BUSINESS SEGMENTS

The following tables display segment results for the three months ended August 31, 2019 and 2018, and assets attributable to each segment as of August 31, 2019 and August 31, 2018.

	Three Months Ended August 31, 2019			
(Dollars in thousands)	CFC	Other	Elimination	Consolidated Total
Statement of operations:				
Interest income	$ 287,964	$ 12,347	$ (10,296)	$ 290,015
Interest expense	(213,135)	(10,432)	10,296	(213,271)
Net interest income	74,829	1,915	—	76,744
Provision for loan losses	(30)	—	—	(30)
Net interest income after provision for loan losses	74,799	1,915	—	76,714
Non-interest income:				
Fee and other income	12,282	7,821	(9,162)	10,941
Derivative losses:				
Derivative cash settlements expense	(10,801)	(242)	—	(11,043)
Derivative forward value losses	(382,762)	(1,920)	—	(384,682)
Derivative losses	(393,563)	(2,162)	—	(395,725)
Unrealized gains on equity securities	1,620	—	—	1,620
Total non-interest income	(379,661)	5,659	(9,162)	(383,164)
Non-interest expense:				
General and administrative expenses	(24,739)	(2,235)	1,645	(25,329)
Other non-interest (expense) income	7,179	(7,517)	7,517	7,179
Total non-interest expense	(17,560)	(9,752)	9,162	(18,150)
Loss before income taxes	(322,422)	(2,178)	—	(324,600)
Income tax benefit	—	521	—	521
Net loss	$ (322,422)	$ (1,657)	$ —	$ (324,079)

	August 31, 2019			
	CFC	Other	Elimination	Consolidated Total
Assets:				
Total loans outstanding	$ 26,258,810	$ 1,048,892	$ (1,019,103)	$ 26,288,599
Deferred loan origination costs	11,239	—	—	11,239
Loans to members	26,270,049	1,048,892	(1,019,103)	26,299,838
Less: Allowance for loan losses	(17,565)	—	—	(17,565)
Loans to members, net	26,252,484	1,048,892	(1,019,103)	26,282,273
Other assets	1,286,409	105,290	(95,216)	1,296,483
Total assets	$ 27,538,893	$ 1,154,182	$ (1,114,319)	$ 27,578,756

	Three Months Ended August 31, 2018			
(Dollars in thousands)	CFC	Other	Elimination	Consolidated Total
Statement of operations:				
Interest income	$ 276,243	$ 12,984	$ (10,736)	$ 278,491
Interest expense	(210,050)	(10,917)	10,736	(210,231)
Net interest income	66,193	2,067	—	68,260
Benefit for loan losses	109	—	—	109
Net interest income after benefit for loan losses	66,302	2,067	—	68,369
Non-interest income:				
Fee and other income	5,199	564	(1,852)	3,911
Derivative gains (losses):				
Derivative cash settlements expense	(12,562)	(267)	—	(12,829)
Derivative forward value gains	19,671	341	—	20,012
Derivative gains	7,109	74	—	7,183
Unrealized losses on equity securities	(726)	—	—	(726)
Total non-interest income	11,582	638	(1,852)	10,368
Non-interest expense:				
General and administrative expenses	(22,425)	(2,374)	1,594	(23,205)
Losses on early extinguishment of debt	(7,100)	—	—	(7,100)
Other non-interest expense	(394)	(258)	258	(394)
Total non-interest expense	(29,919)	(2,632)	1,852	(30,699)
Income before income taxes	47,965	73	—	48,038
Income tax expense	—	(60)	—	(60)
Net income	$ 47,965	$ 13	$ —	$ 47,978

	August 31, 2018			
	CFC	Other	Elimination	Consolidated Total
Assets:				
Total loans outstanding	$ 25,138,742	$ 1,139,507	$ (1,106,813)	$ 25,171,436
Deferred loan origination costs	11,218	—	—	11,218
Loans to members	25,149,960	1,139,507	(1,106,813)	25,182,654
Less: Allowance for loan losses	(18,692)	—	—	(18,692)
Loans to members, net	25,131,268	1,139,507	(1,106,813)	25,163,962
Other assets	1,501,315	106,902	(95,972)	1,512,245
Total assets	$ 26,632,583	$ 1,246,409	$ (1,202,785)	$ 26,676,207

Item 3. Quantitative and Qualitative Disclosures About Market Risk

For quantitative and qualitative disclosures about market risk, see “Part I—Item 2. MD&A—Market Risk” and “Note 9—Derivative Instruments and Hedging Activities.”

Item 4. Controls and Procedures

As of the end of the period covered by this report, senior management, including the Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934. Based on this evaluation process, the Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures are effective. There were no changes in our internal control over financial reporting that occurred during the three months ended August 31, 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings

From time to time, CFC is subject to certain legal proceedings and claims in the ordinary course of business, including litigation with borrowers related to enforcement or collection actions. Management presently believes that the ultimate outcome of these proceedings, individually and in the aggregate, will not materially harm our financial position, liquidity or results of operations. CFC establishes reserves for specific legal matters when it determines that the likelihood of an unfavorable outcome is probable and the loss is reasonably estimable. Accordingly, no reserve has been recorded with respect to any legal proceedings at this time.

Item 1A. Risk Factors

Refer to “Part I— Item 1A. Risk Factors” in our 2019 Form 10-K for information regarding factors that could affect our results of operations, financial condition and liquidity. We are not aware of any material changes in the risk factors set forth under “Part I— Item 1A. Risk Factors” in our 2019 Form 10-K.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Not applicable.

Item 3. Defaults Upon Senior Securities

Not applicable.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

The following exhibits are incorporated by reference or filed as part of this Report.

EXHIBIT INDEX

Exhibit No.		Description
31.1*	—	Certification of the Chief Executive Officer required by Section 302 of the Sarbanes-Oxley Act of 2002
31.2*	—	Certification of the Chief Financial Officer required by Section 302 of the Sarbanes-Oxley Act of 2002
32.1†	—	Certification of the Chief Executive Officer required by Section 906 of the Sarbanes-Oxley Act of 2002
32.2†	—	Certification of the Chief Financial Officer required by Section 906 of the Sarbanes-Oxley Act of 2002
101.INS*	—	XBRL Instance Document
101.SCH*	—	XBRL Taxonomy Extension Schema Document
101.CAL*	—	XBRL Taxonomy Calculation Linkbase Document
101.LAB*	—	XBRL Taxonomy Label Linkbase Document
101.PRE*	—	XBRL Taxonomy Presentation Linkbase Document
101.DEF*	—	XBRL Taxonomy Definition Linkbase Document

*Indicates a document being filed with this Report.

†Indicates a document that is furnished with this Report, which shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liability of that Section.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

NATIONAL RURAL UTILITIES
COOPERATIVE FINANCE CORPORATION

Date: October 10, 2019

By: /s/ J. ANDREW DON

J. Andrew Don
Senior Vice President and Chief Financial Officer

By: /s/ ROBERT E. GEIER

Robert E. Geier
Controller and Principal Accounting Officer

Exhibit 31.1

National Rural Utilities Cooperative Finance Corporation
Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
(18 U.S.C. Section 1350)

I, Sheldon C. Petersen, certify that:

1. I have reviewed this report on Form 10-Q of National Rural Utilities Cooperative Finance Corporation;

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 the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and we 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 registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) evaluated the effectiveness of the registrant'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 registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the Audit Committee of the registrant's board of directors:

   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 registrant'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 registrant's internal control over financial reporting.

Date: October 10, 2019

By: /s/ SHELDON C. PETERSEN

Sheldon C. Petersen
Chief Executive Officer

A signed original of this written statement required by Section 302 has been provided to National Rural Utilities Cooperative Finance Corporation and will be retained by National Rural Utilities Cooperative Finance Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 31.2

National Rural Utilities Cooperative Finance Corporation
Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
(18 U.S.C. Section 1350)

I, J. Andrew Don, certify that:

1. I have reviewed this report on Form 10-Q of National Rural Utilities Cooperative Finance Corporation;

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 the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and we 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 registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) evaluated the effectiveness of the registrant'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 registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the Audit Committee of the registrant's board of directors:

   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 registrant'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 registrant's internal control over financial reporting.

Date: October 10, 2019

By: /s/ J. ANDREW DON
J. Andrew Don
Chief Financial Officer

A signed original of this written statement required by Section 302 has been provided to National Rural Utilities Cooperative Finance Corporation and will be retained by National Rural Utilities Cooperative Finance Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.1

National Rural Utilities Cooperative Finance Corporation
Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(18 U.S.C. Section 1350)

Pursuant to the requirements of Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Sections 1350(a) and (b)), I, the Chief Executive Officer of National Rural Utilities Cooperative Finance Corporation ("CFC"), hereby certify to the best of my knowledge as follows:

1. CFC's Quarterly Report on Form 10-Q for the quarterly period ended August 31, 2019 filed with the Securities and Exchange Commission (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of CFC.

Date: October 10, 2019

By: /s/ SHELDON C. PETERSEN
Sheldon C. Petersen
Chief Executive Officer

A signed original of this written statement required by Section 906 has been provided to National Rural Utilities Cooperative Finance Corporation and will be retained by National Rural Utilities Cooperative Finance Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.2

National Rural Utilities Cooperative Finance Corporation
Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(18 U.S.C. Section 1350)

Pursuant to the requirements of Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Sections 1350(a) and (b)), I, the Chief Financial Officer of National Rural Utilities Cooperative Finance Corporation (“CFC”), hereby certify to the best of my knowledge as follows:

1. CFC’s Quarterly Report on Form 10-Q for the quarterly period ended August 31, 2019 filed with the Securities and Exchange Commission (the “Report”) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of CFC.

Date: October 10, 2019

By: /s/ J. ANDREW DON
J. Andrew Don
Chief Financial Officer

A signed original of this written statement required by Section 906 has been provided to National Rural Utilities Cooperative Finance Corporation and will be retained by National Rural Utilities Cooperative Finance Corporation and furnished to the Securities and Exchange Commission or its staff upon request.