
**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 November 30, 2016

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

(State or other jurisdiction of incorporation or organization)

52-0891669

(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**

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes No

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

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company

(Do not check if a smaller reporting company)

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

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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 contains certain statements that are considered “forward-looking statements” within the Securities Act of 1933, as amended, and the 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, 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” of our Annual Report on Form 10-K for the fiscal year ended May 31, 2016 (“2016 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, generation, transmission 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. As a member-owned cooperative, CFC’s objective is not to maximize profit, but rather to offer its members cost-based financial products and services consistent with sound financial management. CFC funds its activities primarily through a combination of public and private issuances of debt securities, member investments and retained equity. As a tax-exempt, member-owned cooperative, we cannot issue equity securities.

Our financial statements include the consolidated accounts of CFC, Rural Telephone Finance Cooperative (“RTFC”), National Cooperative Services Corporation (“NCSC”) and subsidiaries created and controlled by CFC to hold foreclosed assets resulting from borrower defaults on loans or bankruptcy proceedings. RTFC is a taxable Subchapter T cooperative association that was established to provide private financing for the rural telecommunications industry. NCSC is a taxable 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 the for-profit and nonprofit entities that are owned, operated or controlled by, or provide significant benefits to certain members of CFC. See “Item 1. Business—Overview” of our 2016 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.

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 results of operations, financial condition and liquidity by discussing the drivers of changes from period to period and the key measures used by management to evaluate performance, such as leverage ratios, growth and credit quality metrics. MD&A 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 2016 Form 10-K and additional information contained in our 2016 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 selected financial data for the three and six months ended November 30, 2016 and 2015, and as of November 30, 2016 and May 31, 2016. In addition to financial measures determined in accordance with GAAP, management also evaluates performance based on certain non-GAAP measures, which we refer to as “adjusted” measures. Our primary non-GAAP metrics include adjusted net income, adjusted net interest income and net interest yield, adjusted times interest earned ratio (“adjusted TIER”), adjusted debt-to-equity ratio and adjusted leverage ratio. The most comparable GAAP measures are net income, net interest income, TIER, debt-to-equity ratio and leverage 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; (ii) adjusting net income, senior debt and total equity to exclude the non-cash impact of the accounting for derivative financial instruments; (iii) adjusting senior debt 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. 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 evaluates performance based on these metrics, and the financial covenants in our committed bank revolving line of credit agreements and debt indentures are based on adjusted TIER and the adjusted debt-to-equity ratio. 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

(Dollars in thousands)	Three Months Ended November 30,			Six Months Ended November 30,		
	2016	2015	Change	2016	2015	Change
Statement of operations						
Interest income	\$ 257,156	\$ 256,325	—%	\$ 513,991	\$ 502,441	2%
Interest expense	(183,654)	(167,124)	10	(364,734)	(332,824)	10
Net interest income	73,502	89,201	(18)	149,257	169,617	(12)
Provision for loan losses	(738)	(1,240)	(40)	(2,666)	(5,802)	(54)
Fee and other income	5,097	7,031	(28)	9,627	11,732	(18)
Derivative gains (losses) ⁽¹⁾	340,660	(101,184)	(437)	152,367	(113,201)	(235)
Results of operations of foreclosed assets	(549)	2,054	(127)	(1,661)	133	(1,349)
Operating expenses ⁽²⁾	(20,632)	(20,231)	2	(41,491)	(43,066)	(4)
Other non-interest expense	(517)	(9)	5,644	(960)	(366)	162
Income (loss) before income taxes	396,823	(24,378)	(1,728)	264,473	19,047	1,289
Income tax expense	(1,519)	(110)	1,281	(1,430)	(440)	225
Net income (loss)	\$ 395,304	\$ (24,488)	(1,714)%	\$ 263,043	\$ 18,607	1,314%
Adjusted operational financial measures						
Adjusted interest expense ⁽³⁾	\$ (205,241)	\$ (189,697)	8%	\$ (409,711)	\$ (375,553)	9%
Adjusted net interest income ⁽³⁾	51,915	66,628	(22)	104,280	126,888	(18)
Adjusted net income ⁽³⁾	33,057	54,123	(39)	65,699	89,079	(26)
Ratios						
Fixed-charge coverage ratio/TIER ⁽⁴⁾	3.15	0.85	230 bps	1.72	1.06	66 bps
Adjusted TIER ⁽³⁾	1.16	1.29	(13)	1.16	1.24	(8)
Balance sheet						
Cash, investments and time deposits				\$ 916,264	\$ 632,480	45%
Loans to members ⁽⁵⁾				23,850,712	23,162,696	3
Allowance for loan losses				(33,911)	(33,258)	2
Loans to members, net				23,816,801	23,129,438	3
Total assets				25,147,721	24,270,200	4
Short-term borrowings				3,663,960	2,938,848	25
Long-term debt				17,617,227	17,473,603	1
Subordinated deferrable debt				742,208	742,212	—
Members' subordinated certificates				1,442,453	1,443,810	—
Total debt outstanding				23,465,848	22,598,473	4
Total liabilities				24,101,644	23,452,822	3
Total equity				1,046,077	817,378	28
Guarantees ⁽⁶⁾				888,337	909,208	(2)
Ratios						
Leverage ratio ⁽⁷⁾				23.89	29.81	(592) bps
Adjusted leverage ratio ⁽³⁾				6.27	6.08	19
Debt-to-equity ratio ⁽⁸⁾				23.04	28.69	(565)
Adjusted debt-to-equity ratio ⁽³⁾				6.02	5.82	20

— Change is less than one percent or not meaningful.

- (1) Consists of derivative cash settlements and derivative forward value amounts. Derivative cash settlement amounts represent net periodic contractual interest accruals related to derivatives not designated for hedge accounting. Derivative forward value amounts represent changes in fair value during the period, excluding net periodic contractual accruals, related to derivatives not designated for hedge accounting and expense amounts reclassified into income related to the cumulative transition loss 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.
- (2) Consists of the salaries and employee benefits and the other general and administrative expenses components of non-interest expense, each of which are presented separately on our consolidated statements of operations.
- (3) 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.
- (4) 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.
- (5) Loans to members consists of the outstanding principal balance of member loans plus unamortized deferred loan origination costs, which totaled \$11 million and \$10 million as of both November 30, 2016 and May 31, 2016, respectively.
- (6) 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 as the guarantee liability is determined based on anticipated losses. See “Note 11—Guarantees” for additional information.
- (7) Calculated based on total liabilities and guarantees at period end divided by total equity at period end.
- (8) 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 net income; therefore, the rates we charge our member-borrowers reflect our adjusted interest expense 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 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, our other financial assets and liabilities are carried at amortized cost. Changes in interest rates and spreads 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. As a result, the mark-to-market changes in our derivatives are recorded in earnings. Based on the composition of our derivatives, we generally record derivative losses in earnings 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 actual derivative cash settlement amounts. As such, management uses our adjusted non-GAAP results, which include realized net periodic derivative settlements but exclude the impact of unrealized derivative forward fair value gains and losses, to evaluate our operating performance. Because derivative forward fair value gains and losses do not impact our cash flows, liquidity or ability to service our debt costs, our financial debt covenants are also based on our non-GAAP adjusted results.

Financial Performance

Reported Results

We reported net income of \$395 million and a TIER of 3.15 for the quarter ended November 30, 2016 (“current quarter”), compared with a net loss of \$24 million and a TIER of 0.85 for the same prior-year quarter. We reported net income of \$263 million and a TIER of 1.72 for the six months ended November 30, 2016, compared with net income of \$19 million and TIER of 1.06 for the same prior-year period. Our debt-to-equity ratio decreased to 23.04-to-1 as of November 30, 2016, from 28.69-to-1 as of May 31, 2016, largely attributable to an increase in equity resulting from our reported net income of \$263 million for the six months ended November 30, 2016, which was partially offset by the patronage capital retirement of \$42 million.

The variance of \$419 million between our reported net income of \$395 million in the current quarter and net loss of \$24 million in the same prior-year quarter was primarily driven by mark-to-market changes in the fair value of our derivatives. We recognized derivative gains of \$341 million in the current quarter, largely due to an increase in longer-term interest rates during the quarter. In contrast, we recognized derivative losses of \$101 million in the same prior year quarter due to a decline in medium-term and longer-term interest rates. The favorable impact of the derivative gains was partially offset by a reduction in net interest income of \$16 million due to the combined impact of a decline in the average yield on interest-earning assets and an increase in our average cost of funds.

The variance of \$244 million between our reported net income of \$263 million for the six months ended November 30, 2016 and net income of \$19 million for the same prior-year period was also primarily driven by mark-to-market changes in the fair value of our derivatives. We recognized derivative gains of \$152 million for the six months ended November 30, 2016 as a result of the increase in longer-term interest rates, compared with derivative losses of \$113 million during the same prior-year period. The variance between periods also reflected a reduction in net interest income of \$20 million due to the decrease in average yield on interest-earning assets and increase in average cost of funds.

Adjusted Non-GAAP Results

Our adjusted net income totaled \$33 million and our adjusted TIER was 1.16 for the current quarter, compared with adjusted net income of \$54 million and adjusted TIER of 1.29 for the same prior-year quarter. Our adjusted net income totaled \$66 million and our adjusted TIER was 1.16 for the six months ended November 30, 2016, compared with adjusted net income of \$89 million and adjusted TIER of 1.24 for the same prior-year period. Our adjusted debt-to-equity ratio increased to 6.02-to-1 as of November 30, 2016, from 5.82-to-1 as of May 31, 2016, largely due to an increase in debt outstanding to fund growth in our loan portfolio.

The decreases in adjusted net income in the current quarter and six months ended November 30, 2016 from the same prior-year periods were primarily driven by a significant decrease in adjusted net interest income resulting from a reduction in the adjusted net interest yield due to the decline in the average yield on interest-earning assets coupled with an increase in our adjusted average cost of funds.

Lending Activity

Total loans outstanding, which consists of the unpaid principal balance and excludes deferred loan origination costs, was \$23,840 million as of November 30, 2016, an increase of \$688 million, or 3%, from May 31, 2016. The increase was primarily due to increases in CFC distribution and power supply loans of \$653 million and \$17 million, respectively, which were largely attributable to members refinancing with us loans made by other lenders and member advances for capital investments.

CFC had long-term fixed-rate loans totaling \$476 million that repriced during the six months ended November 30, 2016. Of this total, \$399 million repriced to a new long-term fixed rate, \$71 million repriced to a long-term variable rate and \$6 million were repaid in full.

Financing Activity

Our outstanding debt volume generally increases and decreases in response to member loan demand. As outstanding loan balances increased during the six months ended November 30, 2016, our debt volume also increased. Total debt outstanding was \$23,466 million as of November 30, 2016, an increase of \$867 million, or 4%, from May 31, 2016. The increase was primarily attributable to an increase in commercial paper outstanding of \$554 million, an increase in daily liquidity fund notes to members of \$149 million and an increase in dealer medium-term notes of \$117 million.

In September 2016, NCSC assigned a total of \$50 million of its commitment to another financial institution under our committed bank revolving line of credit agreements, which consisted of \$25 million under the three-year agreement and \$25 million under the five-year agreement. On November 18, 2016, we amended and restated the three-year and five-year committed bank revolving line of credit agreements to extend the maturity dates to November 19, 2019 and November 19, 2021, respectively, and to terminate certain third-party bank commitments totaling \$165 million under the three-year agreement and \$45 million under the five-year agreement. This reduction was partially offset by an increase in commitment

amounts from certain existing banks of \$8 million under each of the three-year and five-year agreements. We also terminated NCSC's remaining commitment of \$60 million. As a result, the total commitment amount from third-parties under the three-year facility and the five-year facility is \$1,533 million and \$1,632 million, respectively, resulting in a combined total commitment amount under the two facilities of \$3,165 million.

We provide additional information on our financing activities under “Consolidated Balance Sheets Analysis—Debt” and “Liquidity Risk.”

Sale of CAH

On July 1, 2016, the sale of Caribbean Asset Holdings, LLC (“CAH”) to ATN VI Holdings, LLC (“Buyer”) was completed. As a result, we did not carry any foreclosed assets on our consolidated balance sheet as of November 30, 2016. Our net proceeds at closing totaled \$109 million, which represents the purchase price of \$144 million less agreed-upon purchase price adjustments as of the closing date. Upon closing, \$16 million of the sale proceeds was deposited into escrow to fund potential indemnification claims for a period of 15 months following the closing. In connection with the sale, RTFC provided a loan in the amount of \$60 million to Buyer to finance a portion of the transaction. ATN International, Inc., the parent corporation of Buyer, has provided a guarantee on an unsecured basis of Buyer's obligations to RTFC pursuant to the financing.

The net proceeds at closing were subject to post-closing adjustments. The Buyer provided a statement of post-closing adjustments and we agreed upon a net amount due to us for post-closing adjustments of approximately \$1 million, which we received during the current quarter. See “Consolidated Results of Operations—Non-Interest Income—Results of Operations of Foreclosed Assets” below in this Report and “Note 5—Foreclosed Assets” in our 2016 Form 10-K for additional information on the sale of CAH.

Outlook for the Next 12 Months

We currently expect the amount of new long-term loan advances to exceed scheduled loan repayments over the next 12 months. We expect relatively flat net interest income and adjusted net interest income over the next 12 months, reflecting an increase in average total loans which we anticipate will be offset by a decrease in the net interest yield and adjusted net interest yield.

Long-term debt scheduled to mature over the next 12 months totaled \$2,192 million as of November 30, 2016. As part of our strategy in managing and reducing refinancing risk associated with the near-term maturity of long-term debt totaling \$1,440 million in the fourth quarter of fiscal year 2017, we issued \$300 million aggregate principal amount of dealer medium-term notes on November 1, 2016. We invested those funds in time deposits, pending our repayment of such long-term debt. We believe we have sufficient liquidity from the combination of existing cash and time deposits, member loan repayments, committed bank revolving lines of credit 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. We also may consider the early redemption of certain maturing debt to reduce large debt maturity amounts when it is economically feasible. As of November 30, 2016, we had access to liquidity reserves totaling \$7,010 million, which consisted of (i) \$830 million in cash and cash equivalents and time deposits, (ii) up to \$500 million available under committed loan facilities from the Federal Financing Bank under the Guaranteed Underwriter Program, (iii) up to \$3,164 million available under committed bank revolving line of credit agreements, (iv) up to \$300 million available under a committed revolving note purchase agreement with Farmer Mac and (v) up to \$2,216 million available under a revolving note purchase agreement with Farmer Mac, subject to market conditions.

On December 1, 2016, we closed on a \$375 million committed loan facility (“Series L”) from the Federal Financing Bank guaranteed by RUS pursuant to the Guaranteed Underwriter Program. Under the Series L facility, we are able to borrow any time before October 15, 2019, with each advance subject to quarterly amortization and a final maturity not longer than 20 years from the advance date. As a result of this new commitment, the total for committed facilities under the Guaranteed Underwriter Program increased to \$5,798 million and the amount available for access increased to \$875 million from \$500 million.

We believe we can continue to roll over the member outstanding short-term debt of \$2,669 million as of November 30, 2016, based on our expectation that our members will continue to reinvest their excess cash in our commercial paper, daily liquidity fund, select notes and medium-term notes. We expect to continue to roll over our outstanding dealer commercial paper of \$995 million as of November 30, 2016. We intend 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. 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 our roll-over risk as we can draw on these facilities to repay dealer or member commercial paper that cannot be rolled over.

While we are not subject to bank regulatory capital rules, we generally aim to maintain our adjusted debt-to-equity ratio at or below 6.00-to-1. Our adjusted debt-to-equity ratio was 6.02 as of November 30, 2016, slightly above our targeted threshold. We expect to maintain our adjusted debt-to-equity ratio at approximately 6.00 over the next 12 months.

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 2016 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. There were no material changes in the assumptions used in our critical accounting policies and estimates during the current quarter. Management has discussed significant judgments and assumptions in applying our critical accounting policies with the Audit Committee of our board of directors. We provide information on the methodologies and key assumptions used in our critical accounting policies and estimates under "MD&A—Critical Accounting Policies and Estimates" in our 2016 Form 10-K. See "Item 1A. Risk Factors" in our 2016 Form 10-K for a discussion of the risks associated with management's judgments and estimates in applying our accounting policies and methods.

ACCOUNTING CHANGES AND DEVELOPMENTS

See "Note 1—Summary of Significant Accounting Policies" for information on accounting standards adopted during the six months ended November 30, 2016, as well as recently issued accounting standards not yet required to be adopted and the expected impact 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 results of operations, financial condition or liquidity, we discuss the impact in the applicable section(s) of 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 November 30, 2016 and 2015 and the six months ended November 30, 2016 and 2015. Following this section, we provide a comparative analysis of our condensed consolidated balance sheets as of November 30, 2016 and May 31, 2016. 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 and applicable fees earned on our interest-earning assets, which include 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 funding large aggregated amounts of loans.

Table 2 presents our average balance sheets for the three and six months ended November 30, 2016 and 2015, 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 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

(Dollars in thousands)	Three Months Ended November 30,					
	2016			2015		
	Average Balance	Interest Income/Expense	Average Yield/Cost	Average Balance	Interest Income/Expense	Average Yield/Cost
Assets:						
Long-term fixed-rate loans ⁽¹⁾	\$ 21,772,579	\$ 243,817	4.49%	\$ 20,516,596	\$ 243,601	4.78%
Long-term variable-rate loans	751,460	4,987	2.66	691,793	4,822	2.80
Line of credit loans	1,046,826	5,553	2.13	1,057,682	6,386	2.43
TDR loans ⁽²⁾	13,505	231	6.86	10,333	130	5.06
Nonperforming loans	—	—	—	2,787	29	4.18
Other income, net ⁽³⁾	—	(281)	—	—	(600)	—
Total loans	23,584,370	254,307	4.32	22,279,191	254,368	4.53
Cash, investments and time deposits	761,354	2,849	1.50	631,995	1,957	1.25
Total interest-earning assets	\$ 24,345,724	\$ 257,156	4.24%	\$ 22,911,186	\$ 256,325	4.50%
Other assets, less allowance for loan losses	624,014			878,481		
Total assets	<u>\$ 24,969,738</u>			<u>\$ 23,789,667</u>		
Liabilities:						
Short-term debt	\$ 3,037,831	\$ 5,409	0.71%	\$ 3,150,623	\$ 3,382	0.43%
Medium-term notes	3,399,885	24,705	2.91	3,369,780	20,819	2.48
Collateral trust bonds	7,256,608	84,951	4.70	6,660,248	81,769	4.94
Long-term notes payable	7,191,997	44,261	2.47	6,740,850	41,269	2.46
Subordinated deferrable debt	742,187	9,411	5.09	391,381	4,788	4.92
Subordinated certificates	1,442,871	14,917	4.15	1,469,916	15,097	4.13
Total interest-bearing liabilities	\$ 23,071,379	\$ 183,654	3.19%	\$ 21,782,798	\$ 167,124	3.09%
Other liabilities	1,101,635			1,083,069		
Total liabilities	24,173,014			22,865,867		
Total equity	796,724			923,800		
Total liabilities and equity	<u>\$ 24,969,738</u>			<u>\$ 23,789,667</u>		
Net interest spread ⁽⁴⁾			1.05%			1.41%
Impact of non-interest bearing funding ⁽⁵⁾			0.16			0.15
Net interest income/net interest yield ⁽⁶⁾		<u>\$ 73,502</u>	<u>1.21%</u>		<u>\$ 89,201</u>	<u>1.56%</u>
Adjusted net interest income/adjusted net interest yield:						
Interest income		<u>\$ 257,156</u>	<u>4.24%</u>		<u>\$ 256,325</u>	<u>4.50%</u>
Interest expense		<u>183,654</u>	<u>3.19</u>		<u>167,124</u>	<u>3.09</u>
Add: Net accrued periodic derivative cash settlements ⁽⁷⁾		<u>21,587</u>	<u>0.81</u>		<u>22,573</u>	<u>0.92</u>
Adjusted interest expense/adjusted average cost ⁽⁸⁾		<u>\$ 205,241</u>	<u>3.57%</u>		<u>\$ 189,697</u>	<u>3.50%</u>
Adjusted net interest spread ⁽⁴⁾			<u>0.67%</u>			<u>1.00%</u>
Impact of non-interest bearing funding			<u>0.19</u>			<u>0.17</u>
Adjusted net interest income/adjusted net interest yield ⁽⁹⁾		<u>\$ 51,915</u>	<u>0.86%</u>		<u>\$ 66,628</u>	<u>1.17%</u>

Six Months Ended November 30,

(Dollars in thousands)	2016			2015		
	Average Balance	Interest Income/Expense	Average Yield/Cost	Average Balance	Interest Income/Expense	Average Yield/Cost
Assets:						
Long-term fixed-rate loans ⁽¹⁾	\$ 21,698,651	\$ 487,945	4.49%	\$ 20,213,693	\$ 475,803	4.71%
Long-term variable-rate loans	740,594	9,514	2.56	688,829	9,842	2.86
Line of credit loans	1,045,303	11,519	2.20	1,048,807	12,584	2.40
TDR loans ⁽²⁾	15,374	449	5.83	10,873	130	2.39
Nonperforming loans	—	—	—	1,386	29	4.18
Other income, net ⁽³⁾	—	(565)	—	—	(529)	—
Total loans	23,499,922	508,862	4.32	21,963,588	497,859	4.53
Cash, investments and time deposits	687,575	5,129	1.49	677,440	4,582	1.35
Total interest-earning assets	\$ 24,187,497	\$ 513,991	4.24%	\$ 22,641,028	\$ 502,441	4.44%
Other assets, less allowance for loan losses	643,236			875,749		
Total assets	<u>\$ 24,830,733</u>			<u>\$ 23,516,777</u>		
Liabilities:						
Short-term debt	\$ 2,980,748	\$ 10,291	0.69%	\$ 2,973,934	\$ 5,924	0.40%
Medium-term notes	3,341,054	48,290	2.88	3,365,431	40,972	2.43
Collateral trust bonds	7,255,508	170,000	4.67	6,721,564	164,600	4.90
Long-term notes payable	7,152,306	87,390	2.44	6,645,058	81,354	2.45
Subordinated deferrable debt	742,171	18,837	5.06	395,714	9,571	4.84
Subordinated certificates	1,442,753	29,926	4.14	1,483,887	30,403	4.10
Total interest-bearing liabilities	\$ 22,914,540	\$ 364,734	3.17%	\$ 21,585,588	\$ 332,824	3.08%
Other liabilities	1,127,727			1,011,694		
Total liabilities	24,042,267			22,597,282		
Total equity	788,466			919,495		
Total liabilities and equity	<u>\$ 24,830,733</u>			<u>\$ 23,516,777</u>		
Net interest spread ⁽⁴⁾			1.07%			1.36%
Impact of non-interest bearing funding ⁽⁵⁾			0.16			0.14
Net interest income/net interest yield ⁽⁶⁾		<u>\$ 149,257</u>	<u>1.23%</u>		<u>\$ 169,617</u>	<u>1.50%</u>
Adjusted net interest income/adjusted net interest yield:						
Interest income	\$ 513,991		4.24%	\$ 502,441		4.44%
Interest expense		364,734	3.17		332,824	3.08
Add: Net accrued periodic derivative cash settlements ⁽⁷⁾		44,977	0.85		42,729	0.87
Adjusted interest expense/adjusted average cost ⁽⁸⁾		<u>\$ 409,711</u>	<u>3.57%</u>		<u>\$ 375,553</u>	<u>3.48%</u>
Adjusted net interest spread ⁽⁴⁾			0.67%			0.96%
Impact of non-interest bearing funding			0.19			0.16
Adjusted net interest income/adjusted net interest yield ⁽⁹⁾		<u>\$ 104,280</u>	<u>0.86%</u>		<u>\$ 126,888</u>	<u>1.12%</u>

(1) Interest income includes loan conversion fees, which are generally deferred and recognized in 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 interest-earning assets and the average cost of interest-bearing funding. Adjusted net interest spread represents the difference between the average yield on interest-earning assets and the adjusted average cost of interest-bearing funding.

- (5) Includes other liabilities and equity.
- (6) Net interest yield is calculated based on annualized net interest income for the period divided by average interest-earning assets for the period.
- (7) Represents the impact of net accrued periodic derivative cash settlements during the period, which is added to interest expense to derive non-GAAP adjusted interest expense. The average (benefit)/cost associated with derivatives is calculated based on the annualized net accrued periodic derivative cash settlements during the period divided by the average outstanding notional amount of derivatives during the period. The average outstanding notional amount of derivatives was \$10,651 million and \$9,922 million for the three months ended November 30, 2016 and 2015, respectively. The average outstanding notional amount of derivatives was \$10,494 million and \$9,855 million for the six months ended November 30, 2016 and 2015, respectively.
- (8) Adjusted interest expense represents interest expense plus net accrued derivative cash settlements during the period. Net accrued derivative cash settlements are reported on our 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 average interest-bearing funding during the period.
- (9) Adjusted net interest yield is calculated based on annualized adjusted net interest income for the period divided by average interest-earning assets for the period.

Table 3 displays the change in our 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.

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

(Dollars in thousands)	Three Months Ended November 30, 2016 versus 2015			Six Months Ended November 30, 2016 versus 2015		
	Total Variance	Variance due to: ⁽¹⁾		Total Variance	Variance due to: ⁽¹⁾	
		Volume	Rate		Volume	Rate
Interest income:						
Long-term fixed-rate loans	\$ 216	\$ 15,621	\$ (15,405)	\$ 12,142	\$ 36,353	\$ (24,211)
Long-term variable-rate loans	165	430	(265)	(328)	769	(1,097)
Line of credit loans	(833)	(48)	(785)	(1,065)	(8)	(1,057)
Restructured loans	101	40	61	319	54	265
Nonperforming loans	(29)	(29)	—	(29)	(29)	—
Other income, net	319	—	319	(36)	—	(36)
Total loans.....	(61)	16,014	(16,075)	11,003	37,139	(26,136)
Cash, investments and time deposits	892	407	485	547	81	466
Interest income.....	<u>831</u>	<u>16,421</u>	<u>(15,590)</u>	<u>11,550</u>	<u>37,220</u>	<u>(25,670)</u>
Interest expense:						
Short-term debt.....	2,027	(112)	2,139	4,367	30	4,337
Medium-term notes	3,886	244	3,642	7,318	(185)	7,503
Collateral trust bonds.....	3,182	7,566	(4,384)	5,400	13,562	(8,162)
Long-term notes payable	2,992	2,883	109	6,036	6,450	(414)
Subordinated deferrable debt.....	4,623	4,317	307	9,266	8,429	837
Subordinated certificates	(180)	(237)	57	(477)	(762)	285
Interest expense	<u>16,530</u>	<u>14,661</u>	<u>1,870</u>	<u>31,910</u>	<u>27,524</u>	<u>4,386</u>
Net interest income	<u>\$ (15,699)</u>	<u>\$ 1,760</u>	<u>\$ (17,460)</u>	<u>\$ (20,360)</u>	<u>\$ 9,696</u>	<u>\$ (30,056)</u>
Adjusted net interest income:						
Interest income	\$ 831	\$ 16,421	\$ (15,590)	\$ 11,550	\$ 37,220	\$ (25,670)
Interest expense	16,530	14,661	1,870	31,910	27,524	4,386
Net accrued periodic derivative cash settlements ⁽²⁾	(986)	1,726	(2,712)	2,248	2,896	(648)
Adjusted interest expense ⁽³⁾	<u>15,544</u>	<u>16,387</u>	<u>(842)</u>	<u>34,158</u>	<u>30,420</u>	<u>3,738</u>
Adjusted net interest income	<u>\$ (14,713)</u>	<u>\$ 34</u>	<u>\$ (14,748)</u>	<u>\$ (22,608)</u>	<u>\$ 6,800</u>	<u>\$ (29,408)</u>

⁽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.

Net interest income of \$74 million for the current quarter decreased by \$16 million, or 18%, from the same prior-year quarter, driven by a decrease in net interest yield of 22% (35 basis points) to 1.21%, which was partially offset by an increase in average interest-earning assets of 6%.

Net interest income of \$149 million for the six months ended November 30, 2016 decreased by \$20 million, or 12%, from the same prior-year period, driven by a decrease in net interest yield of 18% (27 basis points) to 1.23%, which was partially offset by an increase in average interest-earning assets of 7%.

- *Average Interest-Earning Assets*: The increase in average interest-earning assets for the current quarter and six months ended November 30, 2016 was primarily attributable to growth in average total loans of \$1,305 million, or 6% and \$1,536 million, or 7%, respectively, over the same prior-year periods, as members refinanced with us loans made by other lenders and obtained advances to fund capital investments.
- *Net Interest Yield*: The decrease in the net interest yield for the current quarter and six months ended November 30, 2016 reflects the combined impact of a decline in the average yield on interest-earning assets and an increase in our average cost of funds. The decrease in the average yield on interest-earning assets to 4.24% for both the current quarter and six months ended November 30, 2016 reflects the impact of the repricing of long-term fixed rate loans to lower rates, coupled with lower rates on newly originated long-term fixed-rate loans due to the overall low interest rate environment. Our average cost of funds increased by 10 basis points and 9 basis points, respectively, during the current quarter and six months ended November 30, 2016 to 3.19% and 3.17%, respectively. This increase was largely attributable to a shift in our funding mix resulting from the replacement of a portion of our variable-rate debt with higher cost, longer-term debt to fund the growth in our loan portfolio and manage our funding risk.

Adjusted net interest income of \$52 million for the current quarter decreased by \$15 million, or 22%, from the same prior-year quarter, driven by a decrease in the adjusted net interest yield of 26% (31 basis points) to 0.86%, which was partially offset by the increase in average interest-earning assets of 6%.

Adjusted net interest income of \$104 million for the six months ended November 30, 2016 decreased by \$23 million, or 18%, from the same prior-year period, driven by a decrease in the adjusted net interest yield of 23% (26 basis points) to 0.86%, which was partially offset by an increase in average interest-earning assets of 7%. The decrease in the adjusted net interest yield reflected the combined impact the decline in the average yield on interest-earning assets and the increase in our average cost of funds.

Our adjusted net interest income and adjusted net interest yield include the impact of net accrued periodic derivative cash settlements during the period. We recorded net periodic derivative cash settlement expense of \$22 million and \$23 million three months ended November 30, 2016 and 2015, respectively, and \$45 million and \$43 million for the six months ended November 30, 2016 and 2015, respectively. See “Non-GAAP Financial Measures” for additional information on our adjusted 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.

We recorded a provision for loan losses of \$1 million for the three months ended November 30, 2016 and 2015. We recorded a provision for loan losses of \$3 million and \$6 million for the six months ended November 30, 2016 and 2015, respectively.

The decrease in the provision for the six months ended November 30, 2016 was attributable to an overall reduction in the credit risk exposure of our loan portfolio, due in part to the Farmer Mac long-term standby purchase commitment agreement we entered into during fiscal year 2016 as well as an improvement in the historical default rates used in calculating the allowance. The outstanding principal balance of loans covered under the Farmer Mac long-term standby purchase agreement totaled \$861 million as of November 30, 2016, compared with \$926 million as of May 31, 2016, and \$515 million as of November 30, 2015. No loans had been put to Farmer Mac for purchase, pursuant to this agreement, as of November 30, 2016.

We provide additional information on our allowance for loan losses under “Credit Risk—Allowance for Loan Losses” and “Note 4—Loans and Commitments” of this Report. For information on our allowance methodology, see “MD&A—Critical Accounting Policies and Estimates” and “Note 1—Summary of Significant Accounting Policies” in our 2016 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 results of operations of foreclosed assets.

We recorded non-interest income gains of \$345 million and \$160 million for the three and six months ended November 30, 2016, respectively. In comparison, we recorded non-interest income losses of \$92 million and \$101 million for the three and six months ended November 30, 2015, respectively. The significant variance in non-interest income for the three and six months ended November 30, 2016 from the same prior year periods were primarily attributable to changes in net derivative gains (losses) recognized in our consolidated statements of operations.

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. 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 yield curve and the composition of our derivative portfolio. We generally do not designate our interest rate swaps, which currently account for all of our derivatives, for hedge accounting. Accordingly, changes in the fair value of interest rate swaps are reported in our consolidated statements of operations under derivative gains (losses). We did not have any derivatives designated as accounting hedges as of November 30, 2016 or May 31, 2016.

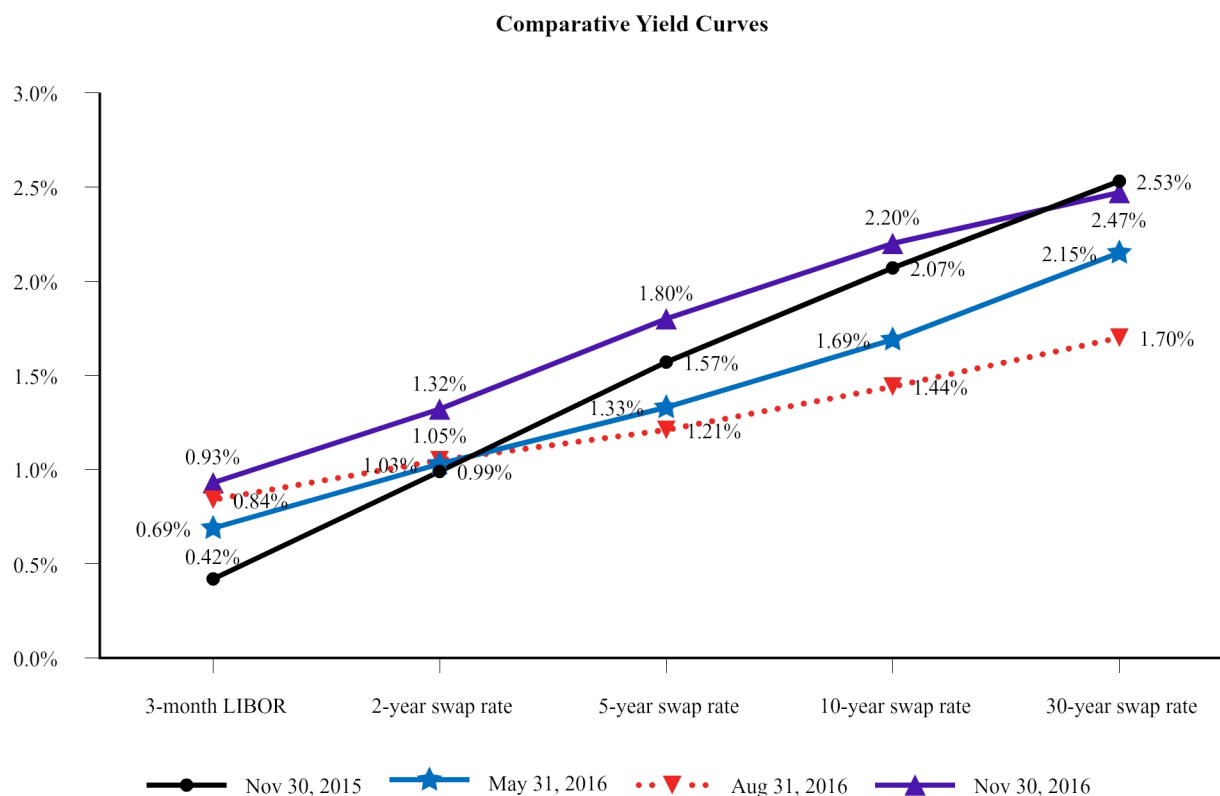
We currently use two types of interest rate swap agreements: (i) we pay a fixed rate and receive a variable rate (“pay-fixed swaps”) and (ii) we pay a variable rate and receive a fixed rate (“receive-fixed swaps”). The benchmark rate for the substantial majority of the floating rate payments under our swap agreements is the London Interbank Offered Rate (“LIBOR”). Table 4 displays the average notional amount outstanding, by swap agreement type, and the weighted-average interest rate paid and received for derivative cash settlements during the three and six months ended November 30, 2016 and 2015. As indicated in Table 4, our derivative portfolio currently consists of a higher proportion of pay-fixed swaps than receive-fixed swaps. The profile of our derivative portfolio may change as a result of changes in market conditions and actions taken to manage our interest rate risk.

Table 4: Derivative Average Notional Amounts and Average Interest Rates

(Dollars in thousands)	Three Months Ended November 30,					
	2016			2015		
	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.....	\$ 6,786,130	2.91%	0.82%	\$ 6,188,639	3.07%	0.33%
Receive-fixed swaps.....	3,864,934	1.24	2.78	3,733,066	0.80	3.02
Total	<u>\$10,651,064</u>	2.31%	1.53%	<u>\$ 9,921,705</u>	2.21%	1.35%
(Dollars in thousands)	Six Months Ended November 30,					
	2016			2015		
	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.....	\$ 6,812,841	2.91%	0.75%	\$ 6,063,335	3.10%	0.31%
Receive-fixed swaps.....	3,680,967	1.14	2.80	3,791,350	0.80	3.05
Total	<u>\$10,493,808</u>	2.29%	1.47%	<u>\$ 9,854,685</u>	2.21%	1.37%

The average remaining maturity of our pay-fixed and receive-fixed swaps was 18 years and three years, respectively, as of November 30, 2016. In comparison, the average remaining maturity of our pay-fixed and receive-fixed swaps was 17 years and three years, respectively, as of November 30, 2015.

Pay-fixed swaps generally decrease in value as interest rates decline and increase in value as interest rates rise. In contrast, receive-fixed swaps generally increase in value as interest rates decline and decrease in value as interest rates rise. Because our pay-fixed and receive-fixed swaps are referenced to different maturity terms along the swap yield curve, different changes in the swap yield curve—parallel, flattening or steepening—will result in differences in the fair value of our derivatives. The chart below provides comparative yield curves as of the end of each reporting period in the current fiscal year and as of May 31, 2016 and November 30, 2015.



Benchmark rates obtained from Bloomberg.

Table 5 presents the components of net derivative gains (losses) recorded in our condensed consolidated results of operations for the three and six months ended November 30, 2016 and 2015. Derivative cash settlements represent the net interest amount accrued during a period for interest-rate swap payments. The derivative forward value represents 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)

(Dollars in thousands)	Three Months Ended November 30,		Six Months Ended November 30,	
	2016	2015	2016	2015
Derivative gains (losses) attributable to:				
Derivative cash settlements.....	\$ (21,587)	\$ (22,573)	\$ (44,977)	\$ (42,729)
Derivative forward value gains (losses).....	362,247	(78,611)	197,344	(70,472)
Derivative gains (losses).....	<u>\$ 340,660</u>	<u>\$ (101,184)</u>	<u>\$ 152,367</u>	<u>\$ (113,201)</u>

The derivative gains of \$341 million and \$152 million recorded for the three and six months ended November 30, 2016, respectively, were primarily attributable to net increase in the fair value of our pay-fixed swaps due to an increase in medium-term and longer-term interest rates and a steepening of the yield curve during the current quarter.

The derivative losses of \$101 million and \$113 million recorded for the three and six months ended November 30, 2015, respectively, were primarily attributable to a net decrease in the fair value of our pay-fixed swaps due to a flattening of the swap yield curve resulting from a gradual decline in interest rates across the medium and longer end of the yield curve.

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

Results of Operations of Foreclosed Assets

Results of operations of foreclosed assets consist of the operating results of entities controlled by CFC that hold foreclosed assets, impairment charges related to those entities and gains or losses related to the disposition of the entities.

As discussed above in “Executive Summary,” on July 1, 2016, the sale of CAH was completed. As a result, we did not carry any foreclosed assets on our consolidated balance sheet as of November 30, 2016. Our net proceeds at closing totaled \$109 million, which represents the purchase price of \$144 million less agreed-upon purchase price adjustments as of the closing date.

We recorded expense of less than \$1 million for the current quarter and expense of \$2 million for the six months ended November 30, 2016 related to CAH. These amounts include the combined impact of adjustments recorded at the closing date of the sale of CAH, post-closing purchase price adjustments and certain legal costs incurred pertaining to CAH.

We recorded gains related to CAH of \$2 million and less than \$1 million for the three and six months ended November 30, 2015, respectively. The gains recorded during the three and six months ended November 30, 2015 were attributable to valuation adjustments.

See “Note 5—Foreclosed Assets” in our 2016 Form 10-K for additional information on the sale of CAH.

Non-Interest Expense

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

We recorded non-interest expense of \$21 million and \$20 million for the three months ended November 30, 2016 and 2015, respectively, and \$42 million and \$43 million for the six months ended November 30, 2016 and 2015, respectively. The increase in non-interest expense of \$1 million for the three months ended November 30, 2016 was primarily attributable to an increase in salaries and employee benefits expenses during the current quarter. The decrease in non-interest expense of \$1 million for the six months ended November 30, 2016 was primarily attributable to a reduction in other general and administrative expenses during the period.

Net Income (Loss) Attributable to Noncontrolling Interests

Net income (loss) attributable to noncontrolling interests represents 100% of the results of operations of RTFC and NCSC, as the members of RTFC and NCSC 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 fluctuations in the fair value of NCSC’s derivative instruments.

We recorded a net income attributable to noncontrolling interests of \$3 million and \$2 million during the three and six months ended November 30, 2016, respectively. In comparison, we recorded net losses attributable to noncontrolling interests of less than \$1 million for the three and six months ended November 30, 2015. The variance in the results of operations of noncontrolling interests was due to fluctuations in the fair value of NCSC’s derivative instruments.

CONSOLIDATED BALANCE SHEET ANALYSIS

Total assets of \$25,148 million as of November 30, 2016 increased by \$878 million, or 4%, from May 31, 2016, primarily due to growth in our loan portfolio. Total liabilities of \$24,102 million as of November 30, 2016 increased by \$649 million, or 3%, from May 31, 2016, primarily due to debt issuances to fund our loan portfolio growth. Total equity increased by \$229 million to \$1,046 million as of November 30, 2016. The increase in total equity for the six months ended November 30, 2016 was primarily attributable to our reported net income of \$263 million, which was partially offset by patronage capital retirement of \$42 million.

Following is a discussion of changes in the major components of our assets and liabilities during the six months ended November 30, 2016. 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 customers and our market risk exposure in accordance with our risk appetite.

Loan Portfolio

We offer long-term fixed- and variable-rate loans and line of credit variable-rate loans. Under our long-term facilities, borrowers have the option of choosing a fixed or variable interest rate for periods of one to 35 years.

Loans Outstanding

Loans outstanding consist of advances from either new approved loans or from the unadvanced portion of loans previously approved. Table 6 summarizes total loans outstanding, by type and by member class, as of November 30, 2016 and May 31, 2016.

Table 6: Loans Outstanding by Type and Member Class

(Dollars in thousands)	November 30, 2016		May 31, 2016		Increase/ (Decrease)
	Amount	% of Total	Amount	% of Total	
Loans by type: ⁽¹⁾					
Long-term loans:					
Long-term fixed-rate loans	\$ 21,897,080	92%	\$ 21,390,576	93%	\$ 506,504
Long-term variable-rate loans	784,665	3	757,500	3	27,165
Total long-term loans ⁽²⁾	22,681,745	95	22,148,076	96	533,669
Line of credit loans	1,158,436	5	1,004,441	4	153,995
Total loans outstanding ⁽³⁾	<u>\$ 23,840,181</u>	<u>100%</u>	<u>\$ 23,152,517</u>	<u>100%</u>	<u>\$ 687,664</u>
Loans by member class: ⁽¹⁾					
CFC:					
Distribution	\$ 18,327,120	77%	\$ 17,674,335	76%	\$ 652,785
Power supply	4,418,475	18	4,401,185	20	17,290
Statewide and associate	57,041	—	54,353	—	2,688
CFC total ⁽²⁾	22,802,636	95	22,129,873	96	672,763
RTFC	371,866	2	341,842	1	30,024
NCSC	665,679	3	680,802	3	(15,123)
Total loans outstanding ⁽³⁾	<u>\$ 23,840,181</u>	<u>100%</u>	<u>\$ 23,152,517</u>	<u>100%</u>	<u>\$ 687,664</u>

⁽¹⁾ Includes TDR loans.

⁽²⁾ Includes long-term loans guaranteed by RUS totaling \$171 million and \$174 million as of November 30, 2016 and May 31, 2016, respectively, and long-term loans covered under the Farmer Mac standby purchase commitment agreement totaling \$861 million and \$926 million as of November 30, 2016 and May 31, 2016, respectively.

(3) Total loans outstanding represents the outstanding unpaid principal balance of loans. Unamortized deferred loan origination costs, which totaled \$11 million and \$10 million as of November 30, 2016 and May 31, 2016, respectively, are excluded from total loans outstanding. These costs, however, are included in loans to members reported on the condensed consolidated balance sheets.

Total loans outstanding of \$23,840 million as of November 30, 2016 increased by \$688 million, or 3%, from May 31, 2016. The increase was primarily due to increases in CFC distribution and power supply loans of \$653 million and \$17 million, respectively, which were largely attributable to members refinancing with us loans made by other lenders and member advances for capital investments.

We provide additional information on our loan product types in “Item 1. Business—Loan Programs” and “Note 4—Loans and Commitments” in our 2016 Form 10-K. See “Debt—Secured Borrowings” 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 7 presents a comparison between the historical retention rate of long-term fixed-rate loans that repriced during the six months ended November 30, 2016 and loans that repriced during fiscal year 2016, and provides information on the percentage of borrowers that selected either another fixed-rate term or a variable rate. The retention rate is calculated based on the election made by the borrower at the repricing date. As indicated in Table 7, the average retention rate of repriced loans has been 99% over the presented periods.

Table 7: Historical Retention Rate and Repricing Selection

(Dollars in thousands)	Six Months Ended November 30, 2016		Year Ended May 31, 2016	
	Amount	% of Total	Amount	% of Total
Loans retained:				
Long-term fixed rate selected.....	\$ 398,711	84%	\$ 1,001,118	93%
Long-term variable rate selected.....	71,370	15	54,796	5
Loans repriced and sold by CFC.....	—	—	4,459	—
Total loans retained.....	<u>470,081</u>	<u>99</u>	<u>1,060,373</u>	<u>98</u>
Total loans repaid.....	5,933	1	17,956	2
Total.....	<u>\$ 476,014</u>	<u>100%</u>	<u>\$ 1,078,329</u>	<u>100%</u>

Debt

We utilize both short-term and long-term borrowings as part of our funding strategy and asset/liability management. We seek to maintain diversified funding sources across products, programs and markets to manage funding concentrations and reduce our liquidity or debt roll-over 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 8 displays the composition, by product type, of our outstanding debt as of November 30, 2016 and May 31, 2016. Table 8 also displays the composition of our debt based on several additional selected attributes.

Table 8: Total Debt Outstanding

(Dollars in thousands)	November 30, 2016	May 31, 2016	Increase/ (Decrease)
Debt product type:			
Commercial paper:			
Members, at par	\$ 1,066,929	\$ 848,007	\$ 218,922
Dealer, net of discounts	994,786	659,935	334,851
Total commercial paper	<u>2,061,715</u>	<u>1,507,942</u>	<u>553,773</u>
Select notes to members	732,047	701,849	30,198
Daily liquidity fund notes to members	675,192	525,959	149,233
Collateral trust bonds	7,255,815	7,253,096	2,719
Guaranteed Underwriter Program notes payable	4,857,772	4,777,111	80,661
Farmer Mac notes payable	2,283,929	2,303,123	(19,194)
Medium-term notes:			
Members, at par	608,134	654,058	(45,924)
Dealer, net of discounts	2,765,517	2,648,369	117,148
Total medium-term notes	<u>3,373,651</u>	<u>3,302,427</u>	<u>71,224</u>
Other notes payable	41,066	40,944	122
Subordinated deferrable debt	742,208	742,212	(4)
Members' subordinated certificates:			
Membership subordinated certificates	630,233	630,063	170
Loan and guarantee subordinated certificates	591,173	593,701	(2,528)
Member capital securities	221,047	220,046	1,001
Total members' subordinated certificates	<u>1,442,453</u>	<u>1,443,810</u>	<u>(1,357)</u>
Total debt outstanding	<u>\$ 23,465,848</u>	<u>\$ 22,598,473</u>	<u>\$ 867,375</u>
Security type:			
Unsecured debt	39%	37%	
Secured debt	61	63	
Total	<u>100%</u>	<u>100%</u>	
Funding source:			
Members	19%	18%	
Private placement:			
Guaranteed Underwriter Program notes payable	21	21	
Farmer Mac notes payable	10	10	
Other	—	1	
Total private placement	<u>31</u>	<u>32</u>	
Capital markets	50	50	
Total	<u>100%</u>	<u>100%</u>	
Interest rate type including impact of swaps:			
Fixed-rate debt ⁽¹⁾	84%	88%	
Variable-rate debt ⁽²⁾	16	12	
Total	<u>100%</u>	<u>100%</u>	
Interest rate type:			
Fixed-rate debt	73%	74%	
Variable-rate debt	27	26	
Total	<u>100%</u>	<u>100%</u>	
Original contractual maturity:			
Short-term borrowings	16%	13%	
Long-term and subordinated debt ⁽³⁾	84	87	
Total	<u>100%</u>	<u>100%</u>	

- (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 rates on new commercial paper notes change daily.
- (3) Consists of long-term debt, subordinated deferrable debt and total members' subordinated debt reported on the condensed consolidated balance sheets.

Our outstanding debt volume generally increases and decreases in response to member loan demand. As outstanding loan balances increased during the six months ended November 30, 2016, our debt volume also increased. Total debt outstanding was \$23,466 million as of November 30, 2016, an increase of \$867 million, or 4%, from May 31, 2016. The increase was primarily attributable to an increase in commercial paper outstanding of \$554 million, an increase in daily liquidity fund notes to members of \$149 million and an increase in dealer medium-term notes of \$117 million. Significant financing-related developments during the six months ended November 30, 2016 are summarized below.

- On August 30, 2016, we received an advance of \$100 million, with a 20-year final maturity, under the Guaranteed Underwriter Program of the USDA.
- On September 28, 2016, we received a commitment from RUS to guarantee a loan of \$375 million from the Federal Financing Bank under the Guaranteed Underwriter Program of the USDA. The draw period for advances under this loan facility is three years, followed by a 20-year repayment period.
- On November 1, 2016, we issued \$300 million aggregate principal amount of 1.50% dealer medium-term notes due 2019, as part of our strategy in managing and reducing the refinancing risk associated with the near-term maturity of long-term debt in the fourth quarter of fiscal year 2017.
- On November 18, 2016, we amended and restated the three-year and five-year committed bank revolving line of credit agreements to extend the maturity dates to November 19, 2019 and November 19, 2021, respectively, and to terminate certain third-party bank commitments. See "Note 6—Short-Term Borrowings" for additional information.

Member Investments

Debt securities issued to our members represent an important, stable source of funding. Table 9 displays outstanding member debt, by debt product type, as of November 30, 2016 and May 31, 2016.

Table 9: Member Investments

(Dollars in thousands)	November 30, 2016		May 31, 2016		Increase/ (Decrease)
	Amount	% of Total ⁽¹⁾	Amount	% of Total ⁽¹⁾	
Commercial paper	\$ 1,066,929	52%	\$ 848,007	56%	\$ 218,922
Select notes	732,047	100	701,849	100	30,198
Daily liquidity fund notes	675,192	100	525,959	100	149,233
Medium-term notes	608,134	18	654,058	20	(45,924)
Members' subordinated certificates.....	1,442,453	100	1,443,810	100	(1,357)
Total	\$ 4,524,755		\$ 4,173,683		\$ 351,072
Percentage of total debt outstanding....	19%		18%		

(1) Represents the percentage of each line item outstanding to our members.

Member investments accounted for 19% and 18% of total debt outstanding as of November 30, 2016 and May 31, 2016, respectively. Over the last three years, outstanding member investments have averaged \$4,185 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 \$3,664 million and accounted for 16% of total debt outstanding as of November 30, 2016, compared with \$2,939 million, or 13%, of total debt outstanding as of May 31, 2016. See Table 22 under “Liquidity Risk” for 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 \$19,802 million and accounted for 84% of total debt outstanding as of November 30, 2016, compared with \$19,659 million, or 87%, of total debt outstanding as of May 31, 2016. As discussed above, the increase in total debt outstanding, including long-term and subordinated debt, was primarily due to the issuance of debt to fund loan portfolio growth.

Collateral Pledged

We are required to pledge loans or other collateral in borrowing transactions under our collateral trust bond indentures, note purchase agreements with Farmer Mac and bond agreements under the Guaranteed Underwriter Program of the USDA. We are required to maintain pledged collateral equal to at least 100% of the outstanding amount of borrowings. However, we typically maintain pledged collateral in excess of the required percentage to ensure that required collateral levels are maintained and to facilitate the timely execution of debt issuances by reducing or eliminating the lead time to pledge additional collateral. 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 or the Guaranteed Underwriter Program of the USDA. 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.

Of our total debt outstanding of \$23,466 million as of November 30, 2016, \$14,412 million, or 61%, was secured by pledged loans. In comparison, of our total debt outstanding of \$22,598 million as of May 31, 2016, \$14,348 million, or 63%, was secured by pledged loans. Table 10 displays the unpaid principal balance of loans pledged for secured debt, the excess collateral pledged and unencumbered loans as of November 30, 2016 and May 31, 2016.

Table 10: Unencumbered Loans

(Dollars in thousands)	November 30, 2016	May 31, 2016
Total loans outstanding ⁽¹⁾	\$ 23,840,181	\$ 23,152,517
Less: Total secured debt ⁽²⁾	(14,699,561)	(14,643,108)
Excess collateral pledged ⁽³⁾	(1,729,861)	(1,673,404)
Unencumbered loans	\$ 7,410,759	\$ 6,836,005
Unencumbered loans as a percentage of total loans	31%	30%

⁽¹⁾ Excludes unamortized deferred loan origination costs of \$11 million and \$10 million as of November 30, 2016 and May 31, 2016, respectively.

⁽²⁾ Represents debt face value, excluding unamortized debt discounts and debt issuance costs.

⁽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.

Table 11 displays the collateral coverage ratios as of November 30, 2016 and May 31, 2016 for the debt agreements noted above that require us to pledge collateral.

Table 11: Collateral Pledged

Debt Agreement	Requirement/Limit		Actual	
	Debt Indenture Minimum	Committed Bank Revolving Line of Credit Agreements	November 30, 2016	May 31, 2016
Collateral trust bonds 1994 indenture	100%	150%	118%	121%
Collateral trust bonds 2007 indenture	100	150	108	110
Guaranteed Underwriter Program notes payable ⁽¹⁾ .	100	150	114	110
Farmer Mac notes payable	100	150	115	117
Clean Renewable Energy Bonds Series 2009A	100	150	108	115

⁽¹⁾ Represents notes payable under the Guaranteed Underwriter Program of the USDA, which supports the Rural Economic Development Loan and Grant program. The Federal Financing Bank provides the financing for these notes, and RUS provides a guarantee of repayment. We are required to pledge collateral in an amount at least equal to the outstanding principal amount of the notes payable.

We provide additional information on our borrowings, including the maturity profile, below in “Liquidity Risk.” We provide a more detailed description of each of our debt product types in “Note 6—Short-Term Borrowings,” “Note 7—Long-Term Debt,” “Note 8—Subordinated Deferrable Debt” and “Note 9—Members’ Subordinated Certificates” in our 2016 Form 10-K. Refer to “Note 4—Loans and Commitments—Pledging of Loans” for additional information related to pledged collateral.

Equity

The increase in total equity of \$229 million to \$1,046 million as of November 30, 2016, was attributable to our reported net income of \$263 million for the six months ended November 30, 2016, partially offset by the patronage capital retirement of \$42 million.

In July 2016, the CFC Board of Directors authorized the allocation of fiscal year 2016 adjusted net income as follows: \$1 million to the Cooperative Educational Fund, \$86 million to the members’ capital reserve and \$84 million to members in the form of patronage capital. The amount of patronage capital allocated each year by CFC’s Board of Directors is based on adjusted non-GAAP net income, which excludes the impact of derivative forward value gains (losses). See “Non-GAAP Financial Measures” for information on adjusted net income.

In July 2016, the CFC Board of Directors also authorized the retirement of patronage capital totaling \$42 million, which represented 50% of the fiscal year 2016 allocation. This amount was returned to members in cash in September 2016. The remaining portion of the allocated amount will be retained by CFC for 25 years under guidelines adopted by the CFC Board of Directors in June 2009.

The CFC Board of Directors is required to make annual allocations of net earnings, if any. CFC has made annual retirements of allocated net earnings in 36 of the last 37 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 2016 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 12 displays our guarantees outstanding, by guarantee type and by company, as of November 30, 2016 and May 31, 2016.

Table 12: Guarantees Outstanding

(Dollars in thousands)	November 30, 2016	May 31, 2016	Increase/ (Decrease)
Guarantee type:			
Long-term tax-exempt bonds	\$ 469,525	\$ 475,965	\$ (6,440)
Letters of credit	305,325	319,596	(14,271)
Other guarantees	113,487	113,647	(160)
Total	\$ 888,337	\$ 909,208	\$ (20,871)
Company:			
CFC	\$ 867,444	\$ 892,289	\$ (24,845)
RTFC	1,574	1,574	—
NCSC	19,319	15,345	3,974
Total	\$ 888,337	\$ 909,208	\$ (20,871)

We recorded a guarantee liability of \$16 million and \$17 million as of November 30, 2016 and May 31, 2016, respectively, related to the contingent and noncontingent exposures for guarantee and liquidity obligations associated with our members' debt. Of our total guarantee amounts, 67% and 66% as of November 30, 2016 and May 31, 2016, respectively, were secured by a mortgage lien on substantially all of the system's assets and future revenue of the borrowers.

We had outstanding letters of credit for the benefit of our members totaling \$305 million as of November 30, 2016. Of this amount, \$229 million was related to obligations for which we may be required to advance funds based on various trigger events specified in the letters of credit agreements. If we are required to advance funds, the member is obligated to repay the advance amount, and accrued interest, to us. The remaining \$76 million of letters of credit are intended to provide liquidity for pollution control bonds.

In addition to the letters of credit presented in Table 12, we had master letter of credit facilities in place as of November 30, 2016, under which we may be required to issue up to an additional \$84 million in letters of credit to third parties for the benefit of our members. All of our master letter of credit facilities as of November 30, 2016 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.

In addition to the guarantees described in Table 12, we were the liquidity provider for long-term variable-rate, tax-exempt bonds issued for our member cooperatives totaling \$476 million as of November 30, 2016. As liquidity provider on these

tax-exempt bonds, 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. Our obligation as liquidity provider is in the form of a letter of credit on \$76 million of the tax-exempt bonds, which is discussed above and included in Table 12 as a component of the letters of credit amount of \$305 million as of November 30, 2016. We were not required to perform as liquidity provider pursuant to these obligations during the six months ended November 30, 2016. For the other \$400 million of these long-term variable-rate, tax-exempt bonds, we also provide a guarantee of payment of principal and interest, which is included in Table 12, as a component of long-term tax-exempt bonds of \$470 million as of November 30, 2016.

Table 13 presents the maturities for each of the next five fiscal years and thereafter of the notional amount of our outstanding guarantee obligations as of November 30, 2016.

Table 13: Maturities of Guarantee Obligations

(Dollars in thousands)	Outstanding Balance	Maturities of Guaranteed Obligations					
		2017	2018	2019	2020	2021	Thereafter
Guarantees.....	\$ 888,337	\$ 55,690	\$305,575	\$ 14,560	\$ 61,122	\$112,603	\$ 338,787

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. The table below displays the amount of unadvanced loan commitments, which consist of line of credit and long-term loan commitments, as of November 30, 2016 and May 31, 2016. 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.

Table 14: Unadvanced Loan Commitments

(Dollars in thousands)	November 30, 2016		May 31, 2016		Increase/ (Decrease)
	Amount	% of Total	Amount	% of Total	
Line of credit commitments:					
Conditional ⁽¹⁾	\$ 5,610,946	44%	\$ 6,248,546	47%	\$ (637,600)
Unconditional ⁽²⁾	2,615,081	20	2,447,902	19	167,179
Total line of credit unadvanced commitments.....	8,226,027	64	8,696,448	66	(470,421)
Total long-term loan unadvanced commitments ⁽¹⁾ ...	4,518,148	36	4,508,562	34	9,586
Total unadvanced loan commitments.....	\$ 12,744,175	100%	\$13,205,010	100%	\$ (460,835)

⁽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.

Unadvanced line of credit commitments are typically revolving facilities for periods not to exceed five years. 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 a material adverse change clause exists at the time of advance. We believe this borrowing pattern is likely to continue because electric cooperatives generate a significant amount of cash from the collection of revenue from their customers and therefore generally do not need to draw down on line of credit commitments to supplement operating cash flow. In addition, the majority of the unadvanced line of credit commitments serve as supplemental back-up liquidity to our borrowers. See “MD&A—Off-Balance Sheet Arrangements” in our 2016 Form 10-K for additional information.

Table 15 presents the amount of unadvanced loan commitments, by loan type, as of November 30, 2016 and the maturities of the commitment amounts for each of the next five fiscal years and thereafter.

Table 15: Notional Maturities of Unadvanced Loan Commitments

(Dollars in thousands)	Available Balance	Notional Maturities of Unadvanced Loan Commitments					
		2017	2018	2019	2020	2021	Thereafter
Line of credit.....	\$ 8,226,027	\$ 189,664	\$ 4,957,467	\$ 934,415	\$ 936,001	\$ 663,497	\$ 544,983
Long-term loans.....	4,518,148	610,595	638,950	960,761	743,070	813,318	751,454
Total.....	<u>\$12,744,175</u>	<u>\$ 800,259</u>	<u>\$ 5,596,417</u>	<u>\$ 1,895,176</u>	<u>\$ 1,679,071</u>	<u>\$ 1,476,815</u>	<u>\$ 1,296,437</u>

Based on our historical experience, we expect that the majority of the unadvanced loan commitments will expire without being fully drawn upon. Accordingly, the total unadvanced loan commitment amount of \$12,744 million as of November 30, 2016 is not necessarily representative of future cash funding 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 \$10,129 million and \$10,757 million as of November 30, 2016 and May 31, 2016, respectively, and accounted for 79% and 81% of the combined total of unadvanced line of credit and long-term loan commitments as of November 30, 2016 and May 31, 2016, respectively. 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 \$2,615 million and \$2,448 million as of November 30, 2016 and May 31, 2016, 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. We record a liability for credit losses on our consolidated balance sheets for unadvanced loan commitments related to facilities that are not subject to a material adverse change clause because we do not consider these commitments to be conditional.

Loan syndications, where the pricing is set at a spread over a market index as agreed upon by all of the participating banks based on market conditions at the time of syndication, accounted for 80% of unconditional line of credit commitments as of November 30, 2016. New advances accounted for the remaining 20% of the unconditional committed line of credit loans as of November 30, 2016. Any new advance would be made at rates determined by us based on our cost, and we have the option to pass on to the borrower any cost increase related to the advance.

Table 16 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 November 30, 2016.

Table 16: Maturities of Notional Amount of Unconditional Committed Lines of Credit

(Dollars in thousands)	Available Balance	Notional Maturities of Unconditional Committed Lines of Credit					
		2017	2018	2019	2020	2021	Thereafter
Committed lines of credit...	\$ 2,615,081	\$ —	\$ 448,508	\$ 613,025	\$ 688,067	\$ 418,871	\$ 446,610

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 in 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 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 2016 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 our interest rate risk.

Loan and Guarantee Portfolio Credit Risk

Below we provide information on the credit risk profile of our loan portfolio and guarantees, 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, borrowers also are required to set rates charged to customers to achieve certain financial ratios. Of our total loans outstanding, 92% were secured and 8% were unsecured as of both November 30, 2016 and May 31, 2016. Table 17 presents, by loan type and by company, the amount and percentage of secured and unsecured loans in our loan portfolio.

Table 18 displays the outstanding exposure of the 20 largest borrowers, by exposure type and by company, as of November 30, 2016 and May 31, 2016. The 20 largest borrowers consisted of 10 distribution systems and 10 power supply systems as of November 30, 2016. The 20 largest borrowers consisted of 11 distribution systems and nine power supply systems as of May 31, 2016. The largest total outstanding exposure to a single borrower or controlled group represented approximately 2% of total loans and guarantees outstanding as of both November 30, 2016 and May 31, 2016.

Table 18: Credit Exposure to 20 Largest Borrowers

(Dollars in thousands)	November 30, 2016		May 31, 2016		Change
	Amount	% of Total	Amount	% of Total	
By exposure type:					
Loans	\$ 5,710,940	24%	\$ 5,638,217	23%	\$ 72,723
Guarantees	356,701	1	365,457	2	(8,756)
Total exposure to 20 largest borrowers	6,067,641	25%	6,003,674	25%	63,967
Less: Loans covered under Farmer Mac standby purchase commitment	(385,956)	(2)	(402,244)	(2)	16,288
Net exposure to 20 largest borrowers	<u>5,681,685</u>	<u>23%</u>	<u>5,601,430</u>	<u>23%</u>	<u>80,255</u>
By company:					
CFC	\$ 6,055,641	25%	\$ 5,991,674	25%	\$ 63,967
NCSC	12,000	—	12,000	—	—
Total exposure to 20 largest borrowers	6,067,641	25%	6,003,674	25%	63,967
Less: Loans covered under Farmer Mac standby purchase commitment	(385,956)	(2)	(402,244)	(2)	16,288
Net exposure to 20 largest borrowers	<u>5,681,685</u>	<u>23%</u>	<u>5,601,430</u>	<u>23%</u>	<u>80,255</u>

Credit Performance

As part of our credit risk management process, we monitor and evaluate each borrower and loan in our loan portfolio and assign numeric internal risk ratings based on quantitative and qualitative assessments. Our ratings are intended to align with the federal banking regulatory credit risk rating definitions of pass and criticized categories, with criticized divided between special mention, substandard and doubtful. Internal risk ratings and payment status trends are indicators, among others, of the level of credit risk in our loan portfolio. As displayed in “Note 4—Loans and Commitments,” 0.2% of the loans in our portfolio were classified as criticized as of both November 30, 2016 and May 31, 2016. Below we provide information on certain additional credit quality indicators, including modified loans that are considered troubled debt restructurings (“TDRs”) and nonperforming loans.

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 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.

We did not have any loans modified as TDRs during the six months ended November 30, 2016. Table 19 presents the carrying value of loans modified as TDRs in prior periods as of November 30, 2016 and May 31, 2016. These loans were considered individually impaired as of the end of each period presented.

Table 19: TDR Loans

(Dollars in thousands)	November 30, 2016		May 31, 2016	
	Amount	% of Total Loans	Amount	% of Total Loans
TDR loans:				
CFC.....	\$ 6,581	0.03%	\$ 6,716	0.03%
RTFC.....	6,842	0.03	10,598	0.04
Total TDR loans.....	<u>\$ 13,423</u>	<u>0.06%</u>	<u>\$ 17,314</u>	<u>0.07%</u>
Performance status of TDR loans:				
Performing TDR loans.....	\$ 13,423	0.06%	\$ 13,808	0.06%
Nonperforming TDR loans.....	—	—	3,506	0.01
Total TDR loans.....	<u>\$ 13,423</u>	<u>0.06%</u>	<u>\$ 17,314</u>	<u>0.07%</u>

As indicated in Table 19, all of our TDR loans were classified as performing as of November 30, 2016. TDR loans classified as performing as of November 30, 2016 and May 31, 2016 were on accrual status as of that date.

Nonperforming Loans

In addition to nonperforming TDR loans, we may also have nonperforming loans that have not been modified and classified 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 did not have any nonperforming loans, excluding TDR loans, as of November 30, 2016 and May 31, 2016. As displayed in Table 19 above, we had TDR loans classified as nonperforming totaling \$4 million as of May 31, 2016.

We provide additional information on the credit quality of our loan portfolio in “Note 4—Loans and Commitments.”

Allowance for Loan Losses

The allowance for loan losses is determined based upon evaluation of the loan portfolio, past loss experience, specific problem loans, economic conditions and other pertinent factors that, in management’s judgment, could affect the risk of loss in the loan portfolio. We review and adjust the allowance quarterly to cover estimated probable losses in the portfolio. All loans are written off in the period that it becomes evident that collectability is highly unlikely; however, our efforts to recover all charged-off amounts may continue. Management believes the allowance for loan losses is appropriate to cover estimated probable portfolio losses.

Table 20 summarizes activity in the allowance for loan losses for the three and six months ended November 30, 2016 and a comparison of the allowance by company as of November 30, 2016 and May 31, 2016.

Table 20: Allowance for Loan Losses

(Dollars in thousands)	Three Months Ended November 30, 2016	Six Months Ended November 30, 2016
Beginning balance	\$ 33,120	\$ 33,258
Provision for loan losses	738	2,666
Net (charge-offs) recoveries	53	(2,013)
Ending balance	<u>\$ 33,911</u>	<u>\$ 33,911</u>

(Dollars in thousands)	November 30, 2016	May 31, 2016
Allowance for loan losses by company:		
CFC.....	\$ 25,857	\$ 24,559
RTFC	4,390	5,565
NCSC.....	3,664	3,134
Total	<u>\$ 33,911</u>	<u>\$ 33,258</u>

Allowance coverage ratios:		
Percentage of total loans outstanding	0.14%	0.14%
Percentage of total performing TDR loans outstanding	252.63	240.86
Percentage of total nonperforming TDR loans outstanding	—	948.60
Percentage of loans on nonaccrual status	—	948.60

The allowance for loan losses increased by \$1 million during the six months ended November 30, 2016 to \$34 million, while the allowance coverage ratio remained at 0.14% as of November 30, 2016, unchanged from May 31, 2016. The increase in the allowance for loan losses was attributable to an increase in the collective allowance for loans not individually evaluated for impairment due to the increase in our loan portfolio, partially offset by a decline in the specific reserve for loans individually evaluated for impairment. Loans designated as individually impaired loans totaled \$13 million and \$17 million as of November 30, 2016 and May 31, 2016, respectively, and the specific allowance related to these loans totaled \$1 million and \$3 million, respectively.

We discuss our methodology for determining the allowance for loan losses above in “MD&A—Critical Accounting Policies and Estimates” and in “Note 1—Summary of Significant Accounting Policies” in our 2016 Form 10-K. Also see “Results of Operations—Provision for Loan Losses” and “Note 4—Loans and Commitments” for additional information on our allowance for loan losses.

Counterparty Credit Risk

We are exposed to counterparty risk related to the performance of the parties with which we entered into financial transactions, primarily for derivative instruments and cash and time deposits that we have with various financial institutions. 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 requiring that derivative counterparties participate in one of our committed bank revolving line of credit agreements, monitoring the overall credit worthiness of each counterparty, using counterparty specific credit risk limits, executing master netting arrangements and diversifying our derivative transactions among multiple counterparties. Our derivative counterparties had credit ratings ranging from Aa3 to Baa2 by Moody’s Investors Service (“Moody’s”) and from AA- to BBB+ by Standard & Poor’s Ratings Services (“S&P”) as of November 30, 2016. Our largest counterparty exposure, based on the outstanding notional amount, represented approximately 24% and 25% of the total outstanding notional amount of derivatives as of November 30, 2016 and May 31, 2016, respectively.

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 to 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 mark-to-market 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 November 30, 2016. Both Moody's and S&P had our ratings on stable outlook as of November 30, 2016. Table 21 displays the notional amounts of our derivative contracts with rating triggers as of November 30, 2016, 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 21: 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⁾	\$ 61,260	\$ (15,113)	\$ —	\$ (15,113)
Falls below Baa1/BBB+ ⁽²⁾	7,258,627	(197,465)	1,817	(195,648)
Falls to or below Baa2/BBB ⁽³⁾⁽⁴⁾	232,998	—	2,071	2,071
Falls below Baa3/BBB-	376,226	(24,502)	—	(24,502)
Total	<u>\$ 7,929,111</u>	<u>\$ (237,080)</u>	<u>\$ 3,888</u>	<u>\$ (233,192)</u>

⁽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⁾ Excludes \$56 million notional amount of a forward-starting swap with an effective start date of July 31, 2018, which was outstanding as of November 30, 2016.

⁽³⁾ Excludes \$56 million notional amount of a forward-starting swap with an effective start date of July 31, 2018, which was outstanding as of November 30, 2016.

⁽⁴⁾ 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.

The aggregate amount, excluding and including the credit risk valuation adjustment, of all derivatives with rating triggers that were in a net liability position was \$237 million and \$236 million, respectively, as of November 30, 2016. There were no counterparties that fell below the rating trigger levels in our interest swap contracts as of November 30, 2016. 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 early because our interest rate swaps are critical to our matched funding strategy.

See "Item 1A. Risk Factors" in our 2016 Form 10-K for additional information about credit risk related to our business.

LIQUIDITY RISK

Our liquidity risk management framework is designed to meet our liquidity objectives of providing a reliable source of funding to members, meet maturing debt and other obligations, issue new debt and fund our operations on a cost-effective basis under normal operating conditions as well as under CFC-specific and/or market stress conditions.

Short-Term Borrowings

We rely primarily on cash flows from our operations along with short-term borrowings, which we refer to as our short-term funding portfolio, as sources of funding to meet our near-term, day-to-day liquidity needs. Our short-term funding portfolio consists of commercial paper, which we offer to members and dealers, select notes and daily liquidity fund notes to members, bank-bid notes and medium-term notes to members and dealers. Table 22 displays the composition of our short-term borrowings as of November 30, 2016 and May 31, 2016.

Table 22: Short-Term Borrowings

(Dollars in thousands)	November 30, 2016		May 31, 2016	
	Amount Outstanding	% of Total Debt Outstanding	Amount Outstanding	% of Total Debt Outstanding
Short-term borrowings:				
Commercial paper:				
Commercial paper sold through dealers, net of discounts ...	\$ 994,786	4%	\$ 659,935	3%
Commercial paper sold directly to members, at par	1,066,929	5	848,007	4
Total commercial paper	2,061,715	9	1,507,942	7
Select notes	732,047	3	701,849	3
Daily liquidity fund notes	675,192	3	525,959	2
Medium-term notes sold to members	195,006	1	203,098	1
Total short-term borrowings	<u>\$ 3,663,960</u>	<u>16%</u>	<u>\$ 2,938,848</u>	<u>13%</u>

Our short-term borrowings totaled \$3,664 million and accounted for 16% of total debt outstanding as of November 30, 2016, compared with \$2,939 million, or 13%, of total debt outstanding as of May 31, 2016. Of the total outstanding commercial paper, \$995 million and \$660 million was issued to dealers as of November 30, 2016 and May 31, 2016, respectively. During fiscal year 2015, we began reducing the level of dealer commercial paper to an amount below \$1,250 million to manage our short-term wholesale funding risk. We expect to continue to maintain our outstanding dealer commercial paper at a level below this amount for the foreseeable future.

Liquidity Reserve

As part of our strategy in meeting our liquidity objectives, we seek to maintain a liquidity reserve in the form of both on-balance sheet and off-balance sheet funding sources that are readily accessible for immediate liquidity needs. Table 23 below presents the components of our liquidity reserve and a comparison of the amounts available as of November 30, 2016 and May 31, 2016.

Table 23: Liquidity Reserve

(Dollars in millions)	November 30, 2016			May 31, 2016		
	Total	Accessed	Available	Total	Accessed	Available
Cash and cash equivalents and time deposits	\$ 830	\$ —	\$ 830	\$ 545	\$ —	\$ 545
Committed bank revolving line of credit agreements—unsecured ⁽¹⁾	3,165	1	3,164	3,310	1	3,309
Guaranteed Underwriter Program committed facilities—secured ⁽²⁾	5,423	4,923	500	5,423	4,823	600
Farmer Mac revolving note purchase agreement, dated March 24, 2011—secured ⁽³⁾	4,500	2,284	2,216	4,500	2,303	2,197
Farmer Mac revolving note purchase agreement, dated July 31, 2015—secured	300	—	300	300	—	300
Total	\$ 14,218	\$ 7,208	\$ 7,010	\$ 14,078	\$ 7,127	\$ 6,951

⁽¹⁾The accessed amount of \$1 million relates to a letter of credit issued pursuant to the line of credit agreement.

⁽²⁾The committed facilities under the Guaranteed Underwriting program are nonrevolving.

⁽³⁾Availability subject to market conditions.

Cash and cash equivalents and time deposits are a source of liquidity available to support our operations. As displayed in Table 23, cash and cash equivalents and time deposits increased by \$285 million during the first six months of fiscal year 2017 to \$830 million as of November 30, 2016, primarily due to an additional investment in time deposits of \$300 million. As part of our strategy in managing and reducing refinancing risk associated with the near-term maturity of long-term debt totaling \$1,440 million in the fourth quarter of fiscal year 2017, we issued \$300 million aggregate principal amount of 1.50% dealer medium-term notes on November 1, 2016. We invested those funds in time deposits, pending our repayment of such long-term debt.

Borrowing Capacity

In addition to cash and time deposits, our liquidity reserve includes access to funds under committed revolving line of credit agreements with banks, committed loan facilities under the Guaranteed Underwriter Program of the USDA and our revolving note purchase agreements with Farmer Mac. Following is a discussion of our borrowing capacity and key terms and conditions under each of these facilities.

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 to our short-term funding portfolio. Our short-term funding portfolio consists of member and dealer commercial paper, select notes to members and daily liquidity fund investments by members.

In September 2016, NCSC assigned a total of \$50 million of its commitment to another financial institution under our committed bank revolving line of credit agreements, which consisted of \$25 million under the three-year agreement and \$25 million under the five-year agreement. On November 18, 2016, we amended and restated the three-year and five-year committed bank revolving line of credit agreements to extend the maturity dates to November 19, 2019 and November 19, 2021, respectively, and to terminate certain third-party bank commitments totaling \$165 million under the three-year agreement and \$45 million under the five-year agreement. This reduction was partially offset by an increase in commitment amounts from certain existing banks of \$8 million under each of the three-year and five-year agreements. We also terminated NCSC's remaining commitment of \$60 million. As a result, the total commitment amount from third-parties under the three-year facility and the five-year facility is \$1,533 million and \$1,632 million, respectively, resulting in a combined total commitment amount under the two facilities of \$3,165 million. 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 24 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 November 30, 2016. We did not have any outstanding borrowings under our committed bank revolving line of credit agreements as of November 30, 2016.

Table 24: Committed Bank Revolving Line of Credit Agreements

(Dollars in millions)	November 30, 2016			Maturity	Annual Facility Fee ⁽¹⁾
	Total Commitment	Letters of Credit Outstanding	Net Available for Advance		
3-year agreement	\$ 1,533	\$ —	\$ 1,533	November 19, 2019	7.5 bps
5-year agreement	1,632	1	1,631	November 19, 2021	10 bps
Total.....	<u>\$ 3,165</u>	<u>\$ 1</u>	<u>\$ 3,164</u>		

⁽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.

The 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 “Debt Covenants and Financial Ratios” 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 of the USDA, we can borrow from the Federal Financing Bank and use the proceeds to make loans to electric cooperatives or to refinance existing indebtedness. As part of the program, we pay fees, based on outstanding borrowings, that support the USDA Rural Economic Development Loan and Grant program. The borrowings under this program are guaranteed by RUS.

We borrowed \$100 million with a 20 year final maturity under the Guaranteed Underwriter Program of the USDA during the six months ended November 30, 2016. As part of this program, we had committed loan facilities from the Federal Financing Bank of up to \$500 million available as of November 30, 2016. Of this amount, \$250 million is available for advance through October 15, 2017, and \$250 million is available for advance through January 15, 2019.

On December 1, 2016, we closed on a \$375 million Series L committed loan facility from the Federal Financing Bank guaranteed by RUS pursuant to the Guaranteed Underwriter Program. Under the Series L facility, we are able to borrow any time before October 15, 2019, with each advance subject to quarterly amortization and a final maturity not longer than 20 years from the advance date. As a result of this new commitment, the total for committed facilities under the Guaranteed Underwriter Program increased to \$5,798 million and the amount available for access increased to \$875 million from \$500 million.

We are required to pledge eligible distribution system 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 and Commitments” for additional information on pledged collateral.

Farmer Mac Revolving Note Purchase Agreements—Secured

As indicated in Table 23, we have two revolving note purchase agreements with Farmer Mac, which together allow us to borrow up to \$4,800 million from Farmer Mac. Under the terms of the first revolving note purchase agreement with Farmer Mac dated March 24, 2011, as amended, we can borrow up to \$4,500 million at any time through January 11, 2020, 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 secured note 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. The available borrowing amount totaled \$2,216 million as of November 30, 2016.

Under the terms of the second revolving note purchase agreement with Farmer Mac dated July 31, 2015, we can borrow up to \$300 million at any time through July 31, 2018. 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. We did not borrow any amounts under this note purchase agreement during the six months ended November 30, 2016; thus, the available borrowing amount was \$300 million as of November 30, 2016.

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 and Commitments” for additional information on pledged collateral.

Long-Term and Subordinated Debt

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 manage our refinancing and interest rate risk, due in part to the multi-year contractual maturity structure of long-term debt. In addition to private debt issuances, we also issue debt in the public capital markets. Under the SEC rules, we are classified as a “well-known seasoned issuer.” In September 2016, we filed a new shelf registration statement for our collateral trust bonds under which we can register an unlimited amount of collateral trust bonds until September 2019. See “MD&A—Liquidity Risk” of our 2016 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 \$19,802 million and accounted for 84% of total debt outstanding as of November 30, 2016, compared with \$19,659 million, or 87%, of total debt outstanding as of May 31, 2016.

Table 25 summarizes long-term and subordinated debt issuances and principal maturities, including repurchases and redemptions, during the six months ended November 30, 2016.

Table 25: Issuances and Maturities of Long-Term and Subordinated Debt⁽¹⁾

(Dollars in thousands)	Six Months Ended November 30, 2016	
	Issuances	Maturities
Long-term and subordinated debt activity:		
Collateral trust bonds	\$ —	\$ 5,000
Guaranteed Underwriter Program notes payable	100,000	19,354
Farmer Mac notes payable	—	19,193
Medium-term notes sold to members.....	131,043	168,875
Medium-term notes sold to dealers.....	463,722	343,452
Members’ subordinated certificates	1,660	3,018
Total ⁽¹⁾	<u>\$ 696,425</u>	<u>\$ 558,892</u>

⁽¹⁾Excludes unamortized debt issuance costs and discounts.

Table 26 summarizes the scheduled amortization of the principal amount of long-term debt, subordinated deferrable debt and members’ subordinated certificates as of November 30, 2016.

Table 26: Principal Maturity of Long-Term Debt and Subordinated Debt

(Dollars in thousands)	Amount Maturing ⁽¹⁾	% of Total
Fiscal year ending:		
May 31, 2017	\$ 1,799,325	9%
May 31, 2018	1,175,764	6
May 31, 2019	2,231,622	11
May 31, 2020	1,372,983	7
May 31, 2021	1,315,260	7
Thereafter	11,905,804	60
Total.....	<u>\$ 19,800,758</u>	<u>100%</u>

⁽¹⁾Excludes \$1 million in subscribed and unissued member subordinated certificates for which a payment has been received. Member loan subordinated certificates totaling \$101 million amortize annually based on the unpaid principal balance of the related loan.

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 27 displays our credit ratings as of November 30, 2016.

Table 27: Credit Ratings

	November 30, 2016		
	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
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 under the Guaranteed Underwriter Program of the USDA 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.

Projected Near-Term Sources and Uses of Liquidity

As discussed above, our primary sources of liquidity include cash flows from operations, our short-term funding portfolio, our liquidity reserve and the issuance of long-term and subordinated debt, as well as loan principal and interest payments. Our primary uses of liquidity include loan advances to members, principal and interest payments on borrowings, periodic

settlement payments related to derivative contracts, costs related to the disposition of foreclosed assets and operating expenses.

Table 28 displays our projected sources and uses of cash, by quarter, over the next six quarters through the quarter ending May 31, 2018. In projecting our liquidity position, we assume that the amount of time deposit investments will remain consistent with current levels over the next six quarters. Our assumptions 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; (ii) long-term loan scheduled amortization payments represent the scheduled long-term loan payments for loans outstanding as of November 30, 2016 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; (v) long-term loan advances reflect our current estimate of member demand for loans, which the amount and timing of are subject to change.

Table 28: Projected Sources and Uses of Liquidity⁽¹⁾

(Dollars in millions)	Projected Sources of Liquidity					Projected Uses of Liquidity			Cumulative Excess Sources (Uses) of Liquidity ⁽²⁾
	Commercial Paper Debt Issuance/Repayments	Long-Term Debt Issuance	Long-Term Loan Scheduled Amortization Payments	Other Loan Repayments	Total Projected Sources of Liquidity	Long-Term Debt Maturities ⁽³⁾	Long-Term Loan Advances	Total Projected Uses of Liquidity	
2Q17									\$ 830
3Q17	\$ 255	\$ 605	\$ 336	\$ 25	\$ 1,221	\$ 464	\$ 739	\$ 1,203	848
4Q17	—	1,015	288	—	1,303	1,440	371	1,811	340
1Q18	(50)	201	304	—	455	164	280	444	351
2Q18	(140)	154	312	—	326	123	201	324	353
3Q18	190	817	297	—	1,304	744	565	1,309	348
4Q18	—	523	275	—	798	239	567	806	340
Total.....	\$ 255	\$ 3,315	\$ 1,812	\$ 25	\$ 5,407	\$ 3,174	\$ 2,723	\$ 5,897	

⁽¹⁾The dates presented represent the end of each quarterly period through the quarter ending May 31, 2018.

⁽²⁾Cumulative excess sources (uses) of liquidity includes cash and time deposits.

⁽³⁾Long-term debt maturities also includes medium-term notes with an original maturity of one year or less.

As displayed in Table 28, we currently expect the amount of new long-term loan advances to exceed scheduled loan repayments over the next 12 months by approximately \$351 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.

Debt Covenants and Financial Ratios

We were in compliance with all covenants and conditions under our committed bank revolving line of credit agreements and senior debt indentures as of November 30, 2016. 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. These adjusted measures consist of adjusted TIER and adjusted senior debt-to-total equity ratio. We provide a reconciliation of these measurements to the most comparable GAAP measures and an explanation of the adjustments below in “Non-GAAP Financial Measures.”

Covenants—Committed Bank Revolving Line of Credit Agreements

Table 29 presents the required and actual financial ratios under our committed bank revolving line of credit agreements as of November 30, 2016 and May 31, 2016.

Table 29: Financial Covenant Ratios Under Committed Bank Revolving Line of Credit Agreements⁽¹⁾

	Requirement	Actual	
		November 30, 2016	May 31, 2016
Minimum average adjusted TIER over the six most recent fiscal quarters.....	1.025	1.21	1.26
Minimum adjusted TIER for the most recent fiscal year	1.05	1.21	1.21
Maximum ratio of adjusted senior debt-to-total equity	10.00	5.74	5.52

⁽¹⁾ 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. In addition to the adjustments made to the leverage ratio set forth under “Non-GAAP Financial Measures,” adjusted senior debt excludes guarantees to member systems that have certain investment-grade credit ratings from Moody’s and S&P.

In addition to the financial covenants, our committed bank revolving line of credit agreements generally prohibit liens on loans to members except for liens pursuant to the following:

- under terms of our indentures,
- related to taxes that are being contested or are not delinquent,
- stemming from certain legal proceedings that are being contested in good faith,
- created by CFC to secure guarantees by CFC of indebtedness, the interest on which is excludable from the gross income of the recipient for federal income tax purposes,
- granted by any subsidiary to CFC and
- to secure other indebtedness of CFC of up to \$10,000 million plus an amount equal to the incremental increase in CFC’s allocated Guaranteed Underwriter Program obligations, provided that the aggregate amount of such indebtedness may not exceed \$12,500 million. The amount of our secured indebtedness under this provision for all of our committed bank revolving line of credit agreements was \$7,157 million as of November 30, 2016.

Covenants—Debt Indentures

Table 30 presents the required and actual financial ratios as defined under our 1994 collateral trust bonds indenture and our medium-term notes indentures in the U.S. markets as of November 30, 2016 and May 31, 2016.

Table 30 : Financial Ratios Under Debt Indentures

	Requirement	Actual	
		November 30, 2016	May 31, 2016
Maximum ratio of adjusted senior debt to total equity ⁽¹⁾	20.00	7.01	7.33

⁽¹⁾ The ratio calculation includes the adjustments made to the leverage ratio under “Non-GAAP Financial Measures,” with the exception of the adjustments to exclude the noncash impact of derivative financial instruments and adjustments from total liabilities and total equity.

In addition to the above financial covenant requirement, we are required to pledge collateral pursuant to the provisions of certain of our borrowing agreements. We provide information on collateral pledged or on deposit above under “Consolidated Balance Sheet Analysis—Debt—Collateral Pledged.”

Debt Ratio Analysis

We provide the calculations for our primary debt ratios, which include the adjusted leverage and adjusted debt-to-equity ratios, and a reconciliation to the most comparable GAAP measures (the leverage and debt-to-equity ratios) below in “Non-GAAP Financial Measures.” We explain the basis for the adjustments made to derive the adjusted ratios in our 2016 Form 10-K under “MD&A—Non-GAAP Financial Measures.”

Leverage Ratio

The leverage ratio was 23.89-to-1 as of November 30, 2016, compared with 29.81-to-1 as of May 31, 2016. The decrease in the leverage ratio was due to an increase in total equity of \$229 million, primarily attributable to our reported net income for the period, and a decrease in total guarantees of \$21 million, which was partially offset by an increase in total liabilities of \$649 million due to the increase in debt to fund our loan portfolio growth.

The leverage ratio under the financial covenants of our committed bank revolving line of credit agreements is adjusted to exclude certain items, which are detailed in Table 34. The adjusted leverage ratio was 6.27-to-1 as of as of November 30, 2016, compared with 6.08-to-1 as of May 31, 2016. The increase in the adjusted leverage ratio was due to an increase in adjusted liabilities of \$864 million, attributable to the increase in debt to fund our loan portfolio growth, which was partially offset by an increase in adjusted equity of \$30 million and the decrease of \$21 million in total guarantees.

Debt-to-Equity Ratio

The debt-to-equity ratio was 23.04-to-1 as of November 30, 2016, compared with 28.69-to-1 as of May 31, 2016. The decrease in the debt-to-equity ratio was attributable to the increase in total equity of \$229 million, which was partially offset by the increase in total liabilities of \$649 million.

The adjusted debt-to-equity ratio was 6.02-to-1 as of November 30, 2016, compared with 5.82-to-1 as of May 31, 2016. The increase in the adjusted debt-to-equity ratio was attributable to the increase in adjusted liabilities of \$864 million, which was partially offset by the increase in adjusted equity of \$30 million.

MARKET RISK

Interest rate risk represents our primary market risk. Interest rate risk is the risk arising from movements in interest rates that may result in differences between the timing of contractual maturities, re-pricing characteristics and prepayments on our assets and their related liabilities.

Interest Rate Risk

Our interest rate risk exposure is primarily related to the funding of the fixed-rate loan portfolio. Our Asset Liability Committee provides oversight over maintaining our interest rate position within a prescribed policy range using approved strategies. The Asset Liability Committee reviews a complete interest rate risk analysis, reviews proposed modifications, if any, to our interest rate risk management strategy and considers adopting strategy changes. Our Asset Liability Committee monitors interest rate risk and generally meets monthly to review and discuss information such as national economic forecasts, federal funds and interest rate forecasts, interest rate gap analysis, our liquidity position, loan and debt maturities, short-term and long-term funding needs, anticipated loan demands, credit concentration risk, derivative counterparty exposure and financial forecasts. The Asset Liability Committee also discusses the composition of fixed-rate versus variable-rate lending, new funding opportunities, changes to the nature and mix of assets and liabilities for structural mismatches, and interest rate swap transactions.

Matched Funding Objective

Our funding objective is to manage the matched funding of asset and liability repricing terms within a range of total assets (excluding derivative 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

To monitor and mitigate interest rate risk in the funding of fixed-rate loans, we perform a monthly interest rate gap analysis that provides a comparison between fixed-rate assets repricing or maturing by year and fixed-rate liabilities and members' equity maturing by year.

We maintain an unmatched position on our fixed-rate assets within a targeted range of adjusted total assets. The limited unmatched position is intended to provide flexibility to ensure that we are able to match the current maturing portion of long-term fixed rate loans based on maturity date and the opportunity in the current low interest rate environment to increase the gross yield on our fixed rate assets without taking what we would consider to be excessive risk.

Table 31 displays the scheduled amortization and repricing of fixed-rate assets and liabilities outstanding as of November 30, 2016. 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 8% of our total loan portfolio as of both November 30, 2016 and May 31, 2016. 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 since it is used to match fund the variable-rate loan pool. 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 31: Interest Rate Gap Analysis

(Dollars in millions)	Prior to 5/31/17	Two Years 6/1/17 to 5/31/19	Two Years 6/1/19 to 5/31/21	Five Years 6/1/21 to 5/31/26	10 Years 6/1/26 to 5/31/36	6/1/36 and Thereafter	Total
Asset amortization and repricing	\$1,020	\$3,750	\$2,768	\$5,271	\$6,321	\$2,767	\$21,897
Liabilities and members' equity:							
Long-term debt	\$1,252	\$4,254	\$2,492	\$4,462	\$4,014	\$1,102	\$17,576
Subordinated certificates	32	109	76	916	216	649	1,998
Members' equity ⁽¹⁾	—	—	26	89	313	810	1,238
Total liabilities and members' equity.....	\$1,284	\$4,363	\$2,594	\$5,467	\$4,543	\$2,561	\$20,812
Gap ⁽²⁾	\$ (264)	\$ (613)	\$ 174	\$ (196)	\$1,778	\$ 206	\$ 1,085
Cumulative gap	(264)	(877)	(703)	(899)	879	1,085	
Cumulative gap as a % of total assets	(1.05)%	(3.49)%	(2.80)%	(3.57)%	3.50%	4.31%	
Cumulative gap as a % of adjusted total assets ⁽³⁾ ..	(1.05)	(3.50)	(2.80)	(3.58)	3.50	4.33	

⁽¹⁾Includes the portion of the allowance for loan losses and subordinated deferrable debt allocated to fund fixed-rate assets and excludes noncash adjustments from the accounting for derivative financial instruments.

⁽²⁾Calculated based on the amount of assets amortizing and repricing less total liabilities and members' equity.

⁽³⁾Adjusted total assets represents total assets reported in our condensed consolidated balance sheets less derivative assets.

The difference, or interest rate gap, of \$1,085 million between the fixed-rate loans scheduled for amortization or repricing of \$21,897 million and the fixed-rate liabilities and equity funding the loans of \$20,812 million presented in Table 31 reflects the amount of fixed-rate assets that are funded with short-term and variable-rate debt as of November 30, 2016. The gap of \$1,085 million represented 4.31% of total assets and 4.33% of adjusted total assets (total assets excluding derivative assets) as of November 30, 2016. As discussed above, we manage this gap within a prescribed range because funding long-term, fixed-rate loans with short-term and variable-rate debt may expose us to higher interest rate and liquidity risk.

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 2016 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. 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 the financial covenants in our committed bank revolving line of credit agreements and debt indentures are based on these adjusted metrics and 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.

Statements of Operations Non-GAAP Adjustments and Calculation of Adjusted TIER

Table 32 provides a reconciliation of adjusted interest expense, adjusted net interest income and adjusted net income to the comparable GAAP measures. The adjusted amounts are used in the calculation of our adjusted net interest yield and adjusted TIER.

Table 32: Adjusted Financial Measures — Income Statement

(Dollars in thousands)	Three Months Ended November 30,		Six Months Ended November 30,	
	2016	2015	2016	2015
Interest expense	\$ (183,654)	\$ (167,124)	\$ (364,734)	\$ (332,824)
Plus: Derivative cash settlements.....	(21,587)	(22,573)	(44,977)	(42,729)
Adjusted interest expense	<u>\$ (205,241)</u>	<u>\$ (189,697)</u>	<u>\$ (409,711)</u>	<u>\$ (375,553)</u>
Net interest income.....	\$ 73,502	\$ 89,201	\$ 149,257	\$ 169,617
Less: Derivative cash settlements	(21,587)	(22,573)	(44,977)	(42,729)
Adjusted net interest income	<u>\$ 51,915</u>	<u>\$ 66,628</u>	<u>\$ 104,280</u>	<u>\$ 126,888</u>
Net income (loss).....	\$ 395,304	\$ (24,488)	\$ 263,043	\$ 18,607
Less: Derivative forward value	(362,247)	78,611	(197,344)	70,472
Adjusted net income	<u>\$ 33,057</u>	<u>\$ 54,123</u>	<u>\$ 65,699</u>	<u>\$ 89,079</u>

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 in our adjusted interest expense and exclude the unrealized forward value of derivatives from our adjusted net income.

TIER Calculation

Table 33 presents our TIER and adjusted TIER for the three and six months ended November 30, 2016 and 2015.

Table 33: TIER and Adjusted TIER

	Three Months Ended November 30,		Six Months Ended November 30,	
	2016	2015	2016	2015
TIER ⁽¹⁾	<u>3.15</u>	<u>0.85</u>	<u>1.72</u>	<u>1.06</u>
Adjusted TIER ⁽²⁾	<u>1.16</u>	<u>1.29</u>	<u>1.16</u>	<u>1.24</u>

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

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

Adjustments to the Calculation of Leverage and Debt-to-Equity Ratios

Table 34 provides a reconciliation between the liabilities and equity used to calculate the leverage and debt-to-equity ratios and the adjusted leverage and adjusted debt-to-equity ratios as of November 30, 2016 and May 31, 2016. As indicated in the table below, subordinated debt is treated in the same manner as equity in calculating our adjusted leverage and adjusted debt-to-equity ratios pursuant to the financial covenants under our committed bank revolving line of credit agreements.

Table 34: Adjusted Financial Measures — Balance Sheet

<u>(Dollars in thousands)</u>	<u>November 30, 2016</u>	<u>May 31, 2016</u>
Total liabilities	\$ 24,101,644	\$ 23,452,822
Less:		
Derivative liabilities	(383,876)	(594,820)
Debt used to fund loans guaranteed by RUS	(170,503)	(173,514)
Subordinated deferrable debt	(742,208)	(742,212)
Subordinated certificates	(1,442,453)	(1,443,810)
Adjusted total liabilities	<u>\$ 21,362,604</u>	<u>\$ 20,498,466</u>
Total equity	\$ 1,046,077	\$ 817,378
Less:		
Prior year cumulative derivative forward value adjustments	520,357	299,274
Year-to-date derivative forward value (gains) losses, net	(197,344)	221,083
Accumulated other comprehensive income ⁽¹⁾	(4,091)	(4,487)
Plus:		
Subordinated certificates	1,442,453	1,443,810
Subordinated deferrable debt	742,208	742,212
Adjusted total equity	<u>\$ 3,549,660</u>	<u>\$ 3,519,270</u>
Guarantees ⁽²⁾	<u>\$ 888,337</u>	<u>\$ 909,208</u>

(1) Represents the accumulated other comprehensive income related to derivatives. Excludes \$6 million and \$7 million of accumulated other comprehensive income as of November 30, 2016 and May 31, 2016, respectively, related to the unrecognized gains on our investments. It also excludes \$10 million of accumulated other comprehensive loss related to foreclosed assets as of May 31, 2016 and \$1 million of accumulated other comprehensive loss related to a defined benefit pension plan as of November 30, 2016 and May 31, 2016.

(2) Guarantees are used in the calculation of leverage and adjusted leverage ratios below.

Table 35 displays the calculations of our leverage and debt-to-equity ratios and our adjusted leverage and debt-to-equity ratios as of November 30, 2016 and May 31, 2016.

Table 35: Leverage and Debt-to-Equity Ratios

	<u>November 30, 2016</u>	<u>May 31, 2016</u>
Leverage ratio ⁽¹⁾	<u>23.89</u>	<u>29.81</u>
Adjusted leverage ratio ⁽²⁾	<u>6.27</u>	<u>6.08</u>
Debt-to-equity ratio ⁽³⁾	<u>23.04</u>	<u>28.69</u>
Adjusted debt-to-equity ratio ⁽⁴⁾	<u>6.02</u>	<u>5.82</u>

(1) Calculated based on total liabilities and guarantees 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 and guarantees as of the end of the period divided by adjusted total equity as of the end of the period. See Table 34 for the adjustments to reconcile total liabilities and guarantees and total equity to adjusted total liabilities and guarantees and adjusted total equity.
- (3) Calculated based on total liabilities as of the end of the period divided by total equity as of the end of the period.
- (4) Calculated based on adjusted total liabilities at period end divided by adjusted total equity at period end.

Item 1. Financial Statements

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

(Dollars in thousands)	Three Months Ended November 30,		Six Months Ended November 30,	
	2016	2015	2016	2015
Interest income	\$ 257,156	\$ 256,325	\$ 513,991	\$ 502,441
Interest expense	(183,654)	(167,124)	(364,734)	(332,824)
Net interest income	73,502	89,201	149,257	169,617
Provision for loan losses.....	(738)	(1,240)	(2,666)	(5,802)
Net interest income after provision for loan losses .	72,764	87,961	146,591	163,815
Non-interest income:				
Fee and other income.....	5,097	7,031	9,627	11,732
Derivative gains (losses).....	340,660	(101,184)	152,367	(113,201)
Results of operations of foreclosed assets	(549)	2,054	(1,661)	133
Total non-interest income	345,208	(92,099)	160,333	(101,336)
Non-interest expense:				
Salaries and employee benefits	(11,451)	(10,943)	(22,875)	(22,433)
Other general and administrative expenses	(9,181)	(9,288)	(18,616)	(20,633)
Other	(517)	(9)	(960)	(366)
Total non-interest expense	(21,149)	(20,240)	(42,451)	(43,432)
Income (loss) before income taxes	396,823	(24,378)	264,473	19,047
Income tax expense	(1,519)	(110)	(1,430)	(440)
Net income (loss)	395,304	(24,488)	263,043	18,607
Less: Net (income) loss attributable to noncontrolling interests	(2,575)	351	(1,885)	581
Net income (loss) attributable to CFC	\$ 392,729	\$ (24,137)	\$ 261,158	\$ 19,188

See accompanying notes to condensed consolidated financial statements.

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

(Dollars in thousands)	Three Months Ended November 30,		Six Months Ended November 30,	
	2016	2015	2016	2015
Net income (loss)	\$ 395,304	\$ (24,488)	\$ 263,043	\$ 18,607
Other comprehensive income (loss):				
Unrealized gains (losses) on available-for-sale investment securities	(1,761)	3,550	(1,772)	2,886
Reclassification of losses on foreclosed assets to net income	—	—	9,823	—
Reclassification of derivative gains to net income	(199)	(236)	(396)	(471)
Defined benefit plan adjustments	44	44	88	88
Other comprehensive income (loss)	(1,916)	3,358	7,743	2,503
Total comprehensive income (loss)	393,388	(21,130)	270,786	21,110
Less: Total comprehensive (income) loss attributable to noncontrolling interests	(2,575)	351	(1,885)	583
Total comprehensive income (loss) attributable to CFC	\$ 390,813	\$ (20,779)	\$ 268,901	\$ 21,693

See accompanying notes to condensed consolidated financial statements.

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

(Dollars in thousands)	November 30, 2016	May 31, 2016
Assets:		
Cash and cash equivalents	\$ 190,096	\$ 204,540
Restricted cash	22,272	4,628
Time deposits.....	640,000	340,000
Investment securities available for sale, at fair value.....	86,168	87,940
Loans to members.....	23,850,712	23,162,696
Less: Allowance for loan losses.....	(33,911)	(33,258)
Loans to members, net.....	23,816,801	23,129,438
Accrued interest receivable	112,752	113,272
Other receivables	52,103	51,478
Fixed assets, net.....	119,501	112,563
Debt service reserve restricted funds.....	17,151	17,151
Foreclosed assets, net	—	102,967
Derivative assets	66,235	80,095
Other assets.....	24,642	26,128
Total assets	\$ 25,147,721	\$ 24,270,200
Liabilities:		
Accrued interest payable	\$ 135,555	\$ 132,996
Debt outstanding:		
Short-term borrowings.....	3,663,960	2,938,848
Long-term debt	17,617,227	17,473,603
Subordinated deferrable debt.....	742,208	742,212
Members' subordinated certificates:		
Membership subordinated certificates	630,233	630,063
Loan and guarantee subordinated certificates.....	591,173	593,701
Member capital securities	221,047	220,046
Total members' subordinated certificates.....	1,442,453	1,443,810
Total debt outstanding	23,465,848	22,598,473
Deferred income	74,411	78,651
Derivative liabilities	383,876	594,820
Other liabilities	41,954	47,882
Total liabilities	24,101,644	23,452,822
Commitments and contingencies.....		
Equity:		
CFC equity:		
Retained equity	1,008,685	790,234
Accumulated other comprehensive income.....	8,801	1,058
Total CFC equity	1,017,486	791,292
Noncontrolling interests	28,591	26,086
Total equity	1,046,077	817,378
Total liabilities and equity	\$ 25,147,721	\$ 24,270,200

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	Total CFC Equity	Non-controlling Interests	Total Equity
Balance as of May 31, 2016...	\$ 2,772	\$ 713,853	\$ 587,219	\$ (513,610)	\$ 790,234	\$ 1,058	\$ 791,292	\$ 26,086	\$ 817,378
Net income	—	—	—	261,158	261,158	—	261,158	1,885	263,043
Other comprehensive income..	—	—	—	—	—	7,743	7,743	—	7,743
Patronage capital retirement...	—	(42,129)	—	—	(42,129)	—	(42,129)	—	(42,129)
Other	(578)	—	—	—	(578)	—	(578)	620	42
Balance as of November 30, 2016	<u>\$ 2,194</u>	<u>\$ 671,724</u>	<u>\$ 587,219</u>	<u>\$ (252,452)</u>	<u>\$1,008,685</u>	<u>\$ 8,801</u>	<u>\$1,017,486</u>	<u>\$ 28,591</u>	<u>\$1,046,077</u>
Balance as of May 31, 2015...	\$ 2,743	\$ 668,980	\$ 501,731	\$ (293,212)	\$ 880,242	\$ 4,080	\$ 884,322	\$ 27,464	\$ 911,786
Net income	—	—	—	19,188	19,188	—	19,188	(581)	18,607
Other comprehensive income..	—	—	—	—	—	2,505	2,505	(2)	2,503
Patronage capital retirement...	—	(39,376)	—	—	(39,376)	—	(39,376)	(341)	(39,717)
Other	(540)	—	(429)	429	(540)	—	(540)	876	336
Balance as of November 30, 2015	<u>\$ 2,203</u>	<u>\$ 629,604</u>	<u>\$ 501,302</u>	<u>\$ (273,595)</u>	<u>\$ 859,514</u>	<u>\$ 6,585</u>	<u>\$ 866,099</u>	<u>\$ 27,416</u>	<u>\$ 893,515</u>

See accompanying notes to condensed consolidated financial statements.

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

(Dollars in thousands)	Six Months Ended November 30,	
	2016	2015
Cash flows from operating activities:		
Net income	\$ 263,043	\$ 18,607
Adjustments to reconcile net income to net cash provided by operating activities:		
Amortization of deferred income	(6,024)	(12,697)
Amortization of debt issuance costs and deferred charges	4,619	4,106
Amortization of discount on long-term debt	4,666	4,238
Amortization of issuance costs for revolving bank lines of credit	2,925	2,887
Depreciation and amortization	3,578	3,735
Provision for loan losses	2,666	5,802
Results of operations of foreclosed assets	1,661	(133)
Derivative forward value	(197,344)	70,472
Changes in operating assets and liabilities:		
Accrued interest receivable	520	3,051
Accrued interest payable	2,559	1,723
Deferred income	1,784	1,203
Other	(5,711)	(6,993)
Net cash provided by operating activities	78,942	96,001
Cash flows from investing activities:		
Advances on loans	(3,925,089)	(4,345,065)
Principal collections on loans	3,295,412	3,140,744
Net investment in fixed assets	(11,294)	(4,662)
Net cash proceeds from sale of foreclosed assets	47,094	—
Proceeds from foreclosed assets	4,036	2,685
Investments in foreclosed assets	—	(2,984)
Proceeds from sale of time deposits	—	145,000
Investment in time deposits	(300,000)	—
Change in restricted cash	(17,644)	(5,690)
Net cash used in investing activities	(907,485)	(1,069,972)
Cash flows from financing activities:		
Proceeds from issuances of short-term borrowings, net	750,466	437,486
Proceeds from issuances of short-term borrowings with original maturity greater than 90 days	443,960	313,337
Repayments of short term-debt with original maturity greater than 90 days	(469,314)	(335,775)
Payments for issuance costs for revolving bank lines of credit	(2,478)	(2,906)
Proceeds from issuance of long-term debt	690,277	1,484,044
Payments for retirement of long-term debt	(555,874)	(879,121)
Issuance cost of subordinated deferrable debt	(68)	—
Proceeds from issuance of members' subordinated certificates	1,660	2,838
Payments for retirement of members' subordinated certificates	(3,020)	(13,483)
Payments for retirement of patronage capital	(41,510)	(38,666)
Net cash provided by financing activities	814,099	967,754
Net decrease in cash and cash equivalents	(14,444)	(6,217)
Beginning cash and cash equivalents	204,540	248,836
Ending cash and cash equivalents	\$ 190,096	\$ 242,619

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

(Dollars in thousands)	Six Months Ended November 30,	
	2016	2015
Supplemental disclosure of cash flow information:		
Cash paid for interest.....	\$ 349,965	\$ 319,870
Cash paid for income taxes	383	72

See accompanying notes to condensed consolidated financial statements.

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)

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, generation, transmission 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 condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States (“GAAP”) for interim financial information. The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts and related disclosures. The most significant estimates and assumptions involve establishing the allowance for loan losses and determining the fair value of financial instruments and other assets and liabilities. While management makes its best judgment, actual amounts or results could differ from these estimates. The results of operations in the interim financial statements are not necessarily indicative of the results that may be expected for the full year.

These interim unaudited condensed consolidated 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, 2016 (“2016 Form 10-K”).

Principles of Consolidation

Our accompanying condensed consolidated financial statements include the accounts of CFC, Rural Telephone Finance Cooperative (“RTFC”), National Cooperative Services Corporation (“NCSC”) and subsidiaries created and controlled by CFC to hold foreclosed assets. All intercompany balances and transactions have been eliminated. RTFC was established to provide private financing for the rural telecommunications industry. NCSC 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 the for-profit and nonprofit entities that are owned, operated or controlled by, or provide significant benefits to certain members of CFC. CFC had one entity, Caribbean Asset Holdings, LLC (“CAH”), that held foreclosed assets as of May 31, 2016. On July 1, 2016, the sale of CAH was completed. As a result, we did not carry any foreclosed assets on our condensed consolidated balance sheet as of November 30, 2016. Unless stated otherwise, references to “we,” “our” or “us” relate to CFC and its consolidated entities.

Interest Income

The following table presents interest income, categorized by loan and investment type, for the three and six months ended November 30, 2016 and 2015.

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)

(Dollars in thousands)	Three Months Ended November 30,		Six Months Ended November 30,	
	2016	2015	2016	2015
Interest income on loans and investments:				
Long-term fixed-rate loans ⁽¹⁾	\$ 243,817	\$ 243,601	\$ 487,945	\$ 475,803
Long-term variable-rate loans	4,987	4,822	9,514	9,842
Line of credit loans	5,553	6,386	11,519	12,584
Restructured loans	231	130	449	130
Nonperforming loans.....	—	29	—	29
Investments	2,849	1,957	5,129	4,582
Other income, net ⁽²⁾	(281)	(600)	(565)	(529)
Total interest income.....	\$ 257,156	\$ 256,325	\$ 513,991	\$ 502,441

⁽¹⁾ Includes loan conversion fees, which are deferred and recognized in interest income using the effective interest method.

⁽²⁾ Consists of late payment fees and net amortization of deferred loan fees and loan origination costs.

Deferred income on the condensed consolidated balance sheets consists primarily of deferred loan conversion fees, which totaled \$69 million and \$71 million as of November 30, 2016 and May 31, 2016, respectively.

Interest Expense

The following table presents interest expense, categorized by debt product type, for the three and six months ended November 30, 2016 and 2015.

(Dollars in thousands)	Three Months Ended November 30,		Six Months Ended November 30,	
	2016	2015	2016	2015
Interest expense on debt: ⁽¹⁾⁽²⁾⁽³⁾				
Short-term borrowings.....	\$ 5,409	\$ 3,382	\$ 10,291	\$ 5,924
Medium-term notes	24,705	20,819	48,290	40,972
Collateral trust bonds.....	84,951	81,769	170,000	164,600
Long-term notes payable	44,261	41,269	87,390	81,354
Subordinated deferrable debt.....	9,411	4,788	18,837	9,571
Subordinated certificates	14,917	15,097	29,926	30,403
Total interest expense.....	\$ 183,654	\$ 167,124	\$ 364,734	\$ 332,824

⁽¹⁾ Represents interest expense and the amortization of discounts on debt.

⁽²⁾ Includes underwriter's fees, legal fees, printing costs and certain accounting fees, which are deferred and recognized in interest expense using the effective interest method. Also includes issuance costs related to dealer commercial paper, which are recognized immediately as incurred.

⁽³⁾ Includes fees related to funding activities, including fees paid to banks participating in our committed bank revolving line of credit agreements. Amounts are recognized as incurred or amortized on a straight-line basis over the life of the agreement.

Accounting Standards Adopted in Fiscal Year 2017

Amendments to the Consolidation Analysis

In February 2015, FASB issued ASU 2015-02, *Amendments to the Consolidation Analysis*, which is intended to improve upon and simplify the consolidation assessment required to evaluate whether organizations should consolidate certain legal entities such as limited partnerships, limited liability corporations, and securitization structures. This update was effective

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)

for us in the first quarter of fiscal year 2017. The adoption of the guidance did not impact our condensed consolidated financial statements.

Recently Issued But Not Yet Adopted Accounting Standards

Statement of Cash Flows—Restricted Cash

In November 2016, FASB issued ASU 2016-18, *Statement of Cash Flows—Restricted Cash*, which requires that a statement of cash flows explains the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The new guidance is effective for public entities in fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. This update is effective for us June 1, 2018, the first quarter of fiscal year 2019. The adoption of this guidance will change the presentation of restricted cash presented on our statement of cash flows; however, it will have no impact on our results of operations, financial condition or liquidity.

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

In June 2016, FASB issued ASU 2016-13, *Financial Instruments—Credit Losses: Measurement of Credit Losses on Financial Instruments*, which changes the accounting for credit losses on certain financial assets to an expected loss model from the incurred loss model currently in use. The new guidance will result in earlier recognition of credit losses based on measuring the expected credit losses over the estimated life of financial assets held at each reporting date. The expected loss model will be the basis for determining the allowance for credit losses for loans and leases, unfunded lending commitments, held-to-maturity debt securities and other debt instruments measured at amortized cost. In addition, the new guidance modifies the other-than-temporary impairment model for available-for-sale debt securities to require the recognition of credit losses through a valuation allowance, which allows for the reversal of credit impairments in future periods. The new guidance is effective for public entities in fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. This update is effective for us June 1, 2020, the first quarter of fiscal year 2021. Upon adoption, we will be required to record a cumulative adjustment for the effect to retained earnings. The impact on our consolidated financial statements from the adoption of this new guidance will depend on the composition and risk profile of our loan portfolio at the date of adoption.

Financial Instruments-Overall: Recognition and Measurement of Financial Assets and Financial Liabilities

In January 2016, FASB issued ASU 2016-01, *Financial Instruments-Overall: Recognition and Measurement of Financial Assets and Financial Liabilities*, which requires entities to measure certain equity investments, at fair value and recognize any changes in fair value in net income. Also, for financial liabilities measured using the fair value option, entities will be required to record changes in fair value caused by a change in instrument-specific credit risk (our own credit risk) separately in other comprehensive income. The classification and measurement guidance is effective for public entities in fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. This update will be effective for us June 1, 2018, the first quarter of fiscal year 2019. We do not expect the new guidance to have a material impact on our consolidated financial statements.

Revenue from Contracts with Customers

In May 2014, FASB issued ASU 2014-09, *Revenue from Contracts with Customers*, which clarifies the principles for recognizing revenue from contracts with customers and will replace most existing revenue recognition in GAAP when it becomes effective. In July 2015, FASB approved a one year deferral of the effective date of this standard, with a revised effective date for fiscal years beginning after December 15, 2017. Early adoption is permitted, although not prior to fiscal years beginning after December 15, 2016. The new accounting guidance, which does not apply to financial instruments, will

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)

be effective for us June 1, 2017, the first quarter of fiscal year 2018. We do not expect the new guidance to have a material impact on our consolidated financial statements, as CFC's primary business and source of revenue is from lending.

NOTE 2—VARIABLE INTEREST ENTITIES

Based on the accounting standards governing consolidations, we are required to consolidate the financial results of RTFC and NCSC because CFC is the primary beneficiary of RTFC and NCSC.

CFC manages the lending activities of RTFC and NCSC. Under separate guarantee agreements, RTFC and NCSC pay CFC a fee to indemnify them against loan losses. CFC is the sole lender to and manages the business operations of RTFC through a management agreement that is automatically renewable on an annual basis unless terminated by either party. RTFC funds its lending programs through loans from CFC. CFC is the primary source of funding to and manages the lending activities of NCSC through a management agreement that is automatically renewable on an annual basis unless terminated by either party. NCSC funds its lending programs through loans from CFC or debt guaranteed by CFC. In connection with these guarantees, NCSC must pay a guarantee fee.

RTFC and NCSC creditors have no recourse against CFC in the event of a default by RTFC and NCSC, unless there is a guarantee agreement under which CFC has guaranteed NCSC or RTFC debt obligations to a third party. CFC had guaranteed \$43 million of NCSC debt, derivative instruments and guarantees with third parties as of November 30, 2016, and CFC's maximum potential exposure for these instruments totaled \$46 million. The maturities for NCSC obligations guaranteed by CFC extend through 2031. Guarantees of NCSC debt and derivative instruments are not presented in the amount in "Note 11—Guarantees" as the debt and derivatives are reported on the condensed consolidated balance sheets. CFC guaranteed \$2 million of RTFC guarantees with third parties as of November 30, 2016. The maturities for RTFC obligations guaranteed by CFC extend through 2017. All CFC loans to RTFC and NCSC are secured by all assets and revenue of RTFC and NCSC. RTFC had total assets of \$474 million including loans outstanding to members of \$372 million, and NCSC had total assets of \$676 million including loans outstanding of \$666 million as of November 30, 2016. CFC had committed to lend RTFC up to \$4,000 million, of which \$354 million was outstanding, as of November 30, 2016. CFC had committed to provide up to \$3,000 million of credit to NCSC, of which \$690 million was outstanding, representing \$647 million of outstanding loans and \$43 million of credit enhancements as of November 30, 2016.

NOTE 3—INVESTMENT SECURITIES

Our investment securities consist of holdings of Federal Agricultural Mortgage Corporation ("Farmer Mac") preferred and common stock. The following tables present the amortized cost, gross unrealized gains and losses and fair value of our investment securities, all of which were classified as available for sale, as of November 30, 2016 and May 31, 2016.

	November 30, 2016			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
(Dollars in thousands)				
Farmer Mac—Series A Non-Cumulative Preferred Stock..	\$ 30,000	\$ 240	\$ —	\$ 30,240
Farmer Mac—Series B Non-Cumulative Preferred Stock ..	25,000	1,000	—	26,000
Farmer Mac—Series C Non-Cumulative Preferred Stock ..	25,000	100	—	25,100
Farmer Mac—Class A Common Stock	538	4,290	—	4,828
Total investment securities, available-for-sale	<u>\$ 80,538</u>	<u>\$ 5,630</u>	<u>\$ —</u>	<u>\$ 86,168</u>

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)

(Dollars in thousands)	May 31, 2016			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Farmer Mac—Series A Non-Cumulative Preferred Stock ..	\$ 30,000	\$ 780	\$ —	\$ 30,780
Farmer Mac—Series B Non-Cumulative Preferred Stock ..	25,000	2,600	—	27,600
Farmer Mac—Series C Non-Cumulative Preferred Stock ..	25,000	1,650	—	26,650
Farmer Mac—Class A Common Stock	538	2,372	—	2,910
Total investment securities, available-for-sale	<u>\$ 80,538</u>	<u>\$ 7,402</u>	<u>\$ —</u>	<u>\$ 87,940</u>

We did not have any investment securities in an unrealized loss position as of November 30, 2016 or May 31, 2016. For additional information regarding the unrealized gains (losses) recorded on our available-for-sale investment securities, see “Note 10—Equity—Accumulated Other Comprehensive Income.”

NOTE 4—LOANS AND COMMITMENTS

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 November 30, 2016 and May 31, 2016.

(Dollars in thousands)	November 30, 2016		May 31, 2016	
	Loans Outstanding	Unadvanced Commitments ⁽¹⁾	Loans Outstanding	Unadvanced Commitments ⁽¹⁾
Loan type: ⁽²⁾				
Long-term loans:				
Long-term fixed-rate loans	\$ 21,897,080	\$ —	\$ 21,390,576	\$ —
Long-term variable-rate loans	784,665	4,518,148	757,500	4,508,562
Total long-term loans ⁽³⁾	<u>22,681,745</u>	<u>4,518,148</u>	<u>22,148,076</u>	<u>4,508,562</u>
Line of credit loans	1,158,436	8,226,027	1,004,441	8,696,448
Total loans outstanding ⁽⁴⁾	<u>23,840,181</u>	<u>12,744,175</u>	<u>23,152,517</u>	<u>13,205,010</u>
Deferred loan origination costs	10,531	—	10,179	—
Loans to members	<u>\$ 23,850,712</u>	<u>\$ 12,744,175</u>	<u>\$ 23,162,696</u>	<u>\$ 13,205,010</u>
Member class: ⁽²⁾				
CFC:				
Distribution	\$ 18,327,120	\$ 8,565,094	\$ 17,674,335	\$ 8,967,730
Power supply	4,418,475	3,124,684	4,401,185	3,191,873
Statewide and associate	57,041	147,897	54,353	155,129
CFC total ⁽³⁾	<u>22,802,636</u>	<u>11,837,675</u>	<u>22,129,873</u>	<u>12,314,732</u>
RTFC	371,866	252,336	341,842	246,657
NCSC	665,679	654,164	680,802	643,621
Total loans outstanding ⁽⁴⁾	<u>\$ 23,840,181</u>	<u>\$ 12,744,175</u>	<u>\$ 23,152,517</u>	<u>\$ 13,205,010</u>

⁽¹⁾ The interest rate on unadvanced loan commitments is not set until drawn; therefore, the long-term unadvanced loan commitments have been classified in this table as variable-rate unadvanced loan commitments. However, at the time of the advance, the borrower may select a fixed or a variable rate on the new loan.

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
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(2) Includes troubled debt restructured loans.

(3) Includes long-term loans guaranteed by RUS totaling \$171 million and \$174 million as of November 30, 2016 and May 31, 2016, respectively, and long-term loans covered under the Farmer Mac standby purchase commitment agreement totaling \$861 million and \$926 million as of November 30, 2016 and May 31, 2016, respectively.

(4) Represents the unpaid principal balance excluding deferred loan origination costs.

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 November 30, 2016 and the related maturities by fiscal year and thereafter by loan type:

(Dollars in thousands)	Available Balance	Notional Maturities of Unadvanced Loan Commitments					
		2017	2018	2019	2020	2021	Thereafter
Line of credit loans	\$ 8,226,027	\$ 189,664	\$4,957,467	\$ 934,415	\$ 936,001	\$ 663,497	\$ 544,983
Long-term loans	4,518,148	610,595	638,950	960,761	743,070	813,318	751,454
Total	<u>\$12,744,175</u>	<u>\$ 800,259</u>	<u>\$5,596,417</u>	<u>\$1,895,176</u>	<u>\$1,679,071</u>	<u>\$1,476,815</u>	<u>\$1,296,437</u>

Unadvanced loan commitments related to line of credit loans are typically for periods not to exceed five years and are generally revolving facilities used for working capital and backup liquidity purposes. Historically, we have experienced a very low utilization rate on line of credit loan facilities, whether or not there is a material adverse change clause. Since we generally do not charge a fee on the unadvanced portion of the majority of our loan facilities, our borrowers will typically request long-term facilities to fund construction work plans and other capital expenditures for periods of up to five years and draw down on the facility over that time. In addition, borrowers will typically request an amount in excess of their immediate estimated loan requirements to avoid the expense related to seeking additional loan funding for unexpected items. These factors contribute to our expectation that the majority of the unadvanced loan commitments will expire without being fully drawn upon and that the total unadvanced amount does not necessarily represent future cash funding 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 \$10,129 million and \$10,757 million as of November 30, 2016 and May 31, 2016, 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 \$2,615 million and \$2,448 million as of November 30, 2016 and May 31, 2016, 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 November 30, 2016.

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)

(Dollars in thousands)	Available Balance	Notional Maturities of Unconditional Committed Lines of Credit					
		2017	2018	2019	2020	2021	Thereafter
Committed lines of credit	\$2,615,081	\$ —	\$448,508	\$613,025	\$688,067	\$418,871	\$446,610

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 \$31 million and \$64 million, at par for cash, during the six months ended November 30, 2016 and 2015, respectively. Because the loans were sold at par, we recorded immaterial losses related to unamortized deferred loan origination costs on the sale of these loans.

Credit Quality

We closely monitor loan performance trends to manage and evaluate our credit risk exposure. We seek to provide a balance between meeting the credit needs of our members while also ensuring the sound credit quality of our loan portfolio. Payment status and internal risk rating trends are key indicators, among others, of the level of credit risk within our loan portfolio.

As part of our strategy in managing our credit risk exposure, we entered into a long-term standby purchase commitment agreement with Farmer Mac on August 31, 2015, as amended on May 31, 2016. Under this agreement, we may designate certain loans to be covered under the commitment, subject to approval by Farmer Mac, and in the event any such loan later goes into material default for at least 90 days, upon request by us, Farmer Mac must purchase such loan at par value. We designated, and Farmer Mac approved, loans that had an aggregate outstanding principal balance of \$861 million as of November 30, 2016. 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 November 30, 2016.

Payment Status of Loans

The tables below present the payment status of loans outstanding by member class as of November 30, 2016 and May 31, 2016.

(Dollars in thousands)	November 30, 2016					
	Current	30-89 Days Past Due	90 Days or More Past Due ⁽¹⁾	Total Past Due	Total Financing Receivables	Nonaccrual Loans
CFC:						
Distribution	\$ 18,327,120	\$ —	\$ —	\$ —	\$18,327,120	\$ —
Power supply	4,418,475	—	—	—	4,418,475	—
Statewide and associate...	57,041	—	—	—	57,041	—
CFC total	22,802,636	—	—	—	22,802,636	—
RTFC	371,866	—	—	—	371,866	—
NCSC	665,679	—	—	—	665,679	—
Total loans outstanding ...	\$ 23,840,181	\$ —	\$ —	\$ —	\$23,840,181	\$ —
As a % of total loans	100.00%	—%	—%	—%	100.00%	—%

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(Dollars in thousands)	Current	30-89 Days Past Due	90 Days or More Past Due ⁽¹⁾	Total Past Due	Total Financing Receivables	Nonaccrual Loans
CFC:						
Distribution	\$ 17,674,335	\$ —	\$ —	\$ —	\$ 17,674,335	\$ —
Power supply	4,401,185	—	—	—	4,401,185	—
Statewide and associate...	54,353	—	—	—	54,353	—
CFC total	22,129,873	—	—	—	22,129,873	—
RTFC	338,336	—	3,506	3,506	341,842	3,506
NCSC	680,802	—	—	—	680,802	—
Total loans outstanding ...	<u>\$ 23,149,011</u>	<u>\$ —</u>	<u>\$ 3,506</u>	<u>\$ 3,506</u>	<u>\$ 23,152,517</u>	<u>\$ 3,506</u>
As a % of total loans	99.98%	—%	0.02%	0.02%	100.00%	0.02%

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

Internal Risk Ratings of Loans

We evaluate the credit quality of our loans using an internal risk rating system that employs similar criteria for all member classes. Our internal risk rating system is based on a determination of a borrower's risk of default utilizing both quantitative and qualitative measurements. We have grouped our risk ratings into the categories of pass and criticized based on the criteria below.

- (i) Pass: Borrowers that are not experiencing difficulty and/or not showing a potential or well-defined credit weakness.
- (ii) Criticized: Includes borrowers categorized as special mention, substandard and doubtful as described below:
 - 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 weakness and the full collection of principal and interest is questionable or improbable.

Borrowers included in the pass, special mention, and substandard categories are generally reflected in the general portfolio of loans. Borrowers included in the doubtful category are reflected in the impaired portfolio of loans. Each risk rating is reassessed annually following the receipt of the borrower's audited financial statements; however, interim risk rating downgrades or upgrades may take place at any time as significant events or trends occur.

The following table presents our loan portfolio by risk rating category and member class based on available data as of November 30, 2016 and May 31, 2016.

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(Dollars in thousands)	November 30, 2016			May 31, 2016		
	Pass	Criticized	Total	Pass	Criticized	Total
CFC:						
Distribution	\$ 18,303,394	\$ 23,726	\$ 18,327,120	\$ 17,640,928	\$ 33,407	\$ 17,674,335
Power supply	4,418,475	—	4,418,475	4,401,185	—	4,401,185
Statewide and associate	55,669	1,372	57,041	54,100	253	54,353
CFC total	22,777,538	25,098	22,802,636	22,096,213	33,660	22,129,873
RTFC	364,043	7,823	371,866	330,167	11,675	341,842
NCSC	659,657	6,022	665,679	678,552	2,250	680,802
Total loans outstanding	\$ 23,801,238	\$ 38,943	\$ 23,840,181	\$ 23,104,932	\$ 47,585	\$ 23,152,517

Allowance for Loan Losses

We maintain an allowance for loan losses at a level estimated by management to provide for probable losses inherent in the loan portfolio as of each balance sheet date. The tables below summarize changes, by company, in the allowance for loan losses as of and for the three and six months ended November 30, 2016 and 2015.

(Dollars in thousands)	Three Months Ended November 30, 2016			
	CFC	RTFC	NCSC	Total
Balance as of August 31, 2016	\$ 25,062	\$ 4,777	\$ 3,281	\$ 33,120
Provision for loan losses	742	(387)	383	738
Recoveries	53	—	—	53
Balance as of November 30, 2016	\$ 25,857	\$ 4,390	\$ 3,664	\$ 33,911

(Dollars in thousands)	Three Months Ended November 30, 2015			
	CFC	RTFC	NCSC	Total
Balance as of August 31, 2015	\$ 27,151	\$ 5,552	\$ 5,604	\$ 38,307
Provision for loan losses	496	366	378	1,240
Recoveries	53	—	—	53
Balance as of November 30, 2015	\$ 27,700	\$ 5,918	\$ 5,982	\$ 39,600

(Dollars in thousands)	Six Months Ended November 30, 2016			
	CFC	RTFC	NCSC	Total
Balance as of May 31, 2016	\$ 24,559	\$ 5,565	\$ 3,134	\$ 33,258
Provision for loan losses	1,192	944	530	2,666
Charge-offs	—	(2,119)	—	(2,119)
Recoveries	106	—	—	106
Balance as of November 30, 2016	\$ 25,857	\$ 4,390	\$ 3,664	\$ 33,911

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(Dollars in thousands)	Six Months Ended November 30, 2015			
	CFC	RTFC	NCSC	Total
Balance as of May 31, 2015	\$ 23,716	\$ 4,533	\$ 5,441	\$ 33,690
Provision for loan losses	3,876	1,385	541	5,802
Recoveries	108	—	—	108
Balance as of November 30, 2015	<u>\$ 27,700</u>	<u>\$ 5,918</u>	<u>\$ 5,982</u>	<u>\$ 39,600</u>

Our allowance for loan losses consists of a specific allowance for loans individually evaluated for impairment and a collective allowance for loans collectively evaluated for impairment. The tables below present, by company, the components of our allowance for loan losses and the recorded investment of the related loans as of November 30, 2016 and May 31, 2016.

(Dollars in thousands)	November 30, 2016			
	CFC	RTFC	NCSC	Total
Ending balance of the allowance:				
Collectively evaluated loans	\$ 25,857	\$ 3,171	\$ 3,664	\$ 32,692
Individually evaluated loans	—	1,219	—	1,219
Total ending balance of the allowance	<u>\$ 25,857</u>	<u>\$ 4,390</u>	<u>\$ 3,664</u>	<u>\$ 33,911</u>
Recorded investment in loans:				
Collectively evaluated loans	\$ 22,796,055	\$ 365,024	\$ 665,679	\$ 23,826,758
Individually evaluated loans	6,581	6,842	—	13,423
Total recorded investment in loans	<u>\$ 22,802,636</u>	<u>\$ 371,866</u>	<u>\$ 665,679</u>	<u>\$ 23,840,181</u>
Loans to members, net ⁽¹⁾	\$ 22,776,779	\$ 367,476	\$ 662,015	\$ 23,806,270

(Dollars in thousands)	May 31, 2016			
	CFC	RTFC	NCSC	Total
Ending balance of the allowance:				
Collectively evaluated	\$ 24,559	\$ 2,465	\$ 3,134	\$ 30,158
Individually evaluated	—	3,100	—	3,100
Total ending balance of the allowance	<u>\$ 24,559</u>	<u>\$ 5,565</u>	<u>\$ 3,134</u>	<u>\$ 33,258</u>
Recorded investment in loans:				
Collectively evaluated	\$ 22,123,157	\$ 331,244	\$ 680,802	\$ 23,135,203
Individually evaluated	6,716	10,598	—	17,314
Total recorded investment in loans	<u>\$ 22,129,873</u>	<u>\$ 341,842</u>	<u>\$ 680,802</u>	<u>\$ 23,152,517</u>
Loans to members, net ⁽¹⁾	\$ 22,105,314	\$ 336,277	\$ 677,668	\$ 23,119,259

⁽¹⁾ Excludes unamortized deferred loan origination costs of \$11 million and \$10 million as of November 30, 2016 and May 31, 2016, respectively.

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Impaired Loans

The following table provides information on loans classified as individually impaired loans as of November 30, 2016 and May 31, 2016 are summarized below.

(Dollars in thousands)	November 30, 2016		May 31, 2016	
	Recorded Investment	Related Allowance	Recorded Investment	Related Allowance
With no specific allowance recorded:				
CFC	\$ 6,581	\$ —	\$ 6,716	\$ —
With a specific allowance recorded:				
RTFC	6,842	1,219	10,598	3,100
Total impaired loans	\$ 13,423	\$ 1,219	\$ 17,314	\$ 3,100

The following table represents the average recorded investment in individually impaired loans and the interest income recognized, by company, for the three and six months ended November 30, 2016 and 2015.

(Dollars in thousands)	Three Months Ended November 30,			
	2016	2015	2016	2015
	Average Recorded Investment		Interest Income Recognized	
CFC	\$ 6,581	\$ 6,716	\$ 144	\$ 130
RTFC	6,924	9,746	87	29
Total impaired loans	\$ 13,505	\$ 16,462	\$ 231	\$ 159

(Dollars in thousands)	Six Months Ended November 30,			
	2016	2015	2016	2015
	Average Recorded Investment		Interest Income Recognized	
CFC	\$ 6,645	\$ 6,969	\$ 274	\$ 130
RTFC	8,729	6,956	175	29
Total impaired loans	\$ 15,374	\$ 13,925	\$ 449	\$ 159

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Troubled Debt Restructured (“TDR”) Loans

We did not have any loans modified as TDRs during the six months ended November 30, 2016. The following table provides a summary of loans modified as TDRs in prior periods, the performance status of these loans and the related unadvanced loan commitments, by member class, as of November 30, 2016 and May 31, 2016.

(Dollars in thousands)	November 30, 2016			May 31, 2016		
	Loans Outstanding	% of Total Loans	Unadvanced Commitments	Loans Outstanding	% of Total Loans	Unadvanced Commitments
TDR loans:						
Nonperforming TDR loans:						
RTFC	\$ —	—%	\$ —	\$ 3,506	0.01%	\$ —
Performing TDR loans:						
CFC/Distribution	6,581		—	6,716		—
RTFC	6,842		—	7,092		—
Total performing TDR loans.	13,423	0.06	—	13,808	0.06	—
Total TDR loans	\$ 13,423	0.06%	\$ —	\$ 17,314	0.07%	\$ —

As indicated in the table above, all of our TDR loans were classified as performing as of November 30, 2016. TDR loans classified as performing as of November 30, 2016 and May 31, 2016 were on accrual status as of that date.

Nonperforming Loans

We did not have any nonperforming loans, excluding TDR loans, as of November 30, 2016 and May 31, 2016. As displayed in the table above, we had nonperforming TDR loans totaling \$4 million as of May 31, 2016.

The following table shows foregone interest income for loans on nonaccrual status for the three and six months ended November 30, 2016 and 2015.

(Dollars in thousands)	Three Months Ended November 30,		Six Months Ended November 30,	
	2016	2015	2016	2015
Nonperforming loans	\$ —	\$ 12	\$ —	\$ 12
Performing TDR loans	—	—	—	166
Nonperforming TDR loans	—	33	31	46
Total	\$ —	\$ 45	\$ 31	\$ 224

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 the Guaranteed Underwriter Program of the USDA and the amount of the corresponding debt outstanding as of November 30, 2016 and May 31, 2016. See “Note 6—Short-Term Borrowings” and “Note 7—Long-Term Debt” for information on our borrowings.

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(Dollars in thousands)	November 30, 2016	May 31, 2016
Collateral trust bonds:		
2007 indenture:		
Distribution system mortgage notes	\$ 7,168,166	\$ 7,246,973
RUS guaranteed loans qualifying as permitted investments	149,075	151,687
Total pledged collateral	<u>\$ 7,317,241</u>	<u>\$ 7,398,660</u>
Collateral trust bonds outstanding	6,747,711	6,747,711
1994 indenture:		
Distribution system mortgage notes	\$ 939,559	\$ 968,030
Collateral trust bonds outstanding	795,000	800,000
Farmer Mac:		
Distribution and power supply system mortgage notes	\$ 2,627,133	\$ 2,683,806
Notes payable outstanding	2,283,929	2,303,122
Clean Renewable Energy Bonds Series 2009A:		
Distribution and power supply system mortgage notes	\$ 16,012	\$ 17,081
Notes payable outstanding	14,871	14,871
FFB:		
Distribution and power supply system mortgage notes	\$ 5,529,477	\$ 5,248,935
Notes payable outstanding	4,858,050	4,777,404

NOTE 5—FORECLOSED ASSETS

Foreclosed assets consist of operating entities or other assets acquired through lending activities in satisfaction of indebtedness. On July 1, 2016, the sale of CAH to ATN VI Holdings, LLC (“Buyer”) was completed. As a result, we did not carry any foreclosed assets on our consolidated balance sheet as of November 30, 2016.

Our net proceeds at closing totaled \$109 million, which represents the purchase price of \$144 million less agreed-upon purchase price adjustments as of the closing date. Upon closing, \$16 million of the sale proceeds was deposited into escrow to fund potential indemnification claims for a period of 15 months following the closing. In connection with the sale, RTFC provided a loan in the amount of \$60 million to Buyer to finance a portion of the transaction. ATN International, Inc., the parent corporation of Buyer, has provided a guarantee on an unsecured basis of Buyer’s obligations to RTFC pursuant to the financing.

The net proceeds at closing were subject to post-closing adjustments. The Buyer provided a statement of post-closing adjustments and we agreed upon a net amount due to us for post-closing adjustments of approximately \$1 million, which we received during the current quarter. CFC remains subject to potential indemnification claims, as specified in the Purchase Agreement. We recorded expense of less than \$1 million for the current quarter and expense of \$2 million for the six months ended November 30, 2016 related to CAH. These amounts include the combined impact of adjustments recorded at the closing date of the sale of CAH, post-closing purchase price adjustments and certain legal costs incurred pertaining to CAH.

Upon closing of the sale of CAH, we derecognized the loss of \$10 million recorded in accumulated other comprehensive income attributable to actuarial-related changes in CAH’s pension and other postretirement benefit obligations as an offset against the sale proceeds. This derecognition had no effect on our consolidated statement of operations during the three and

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six months ended November 30, 2016, as the amount was taken into consideration in the measurement of the CAH impairment loss recorded in fiscal year 2016.

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 \$3,664 million and accounted for 16% of total debt outstanding as of November 30, 2016, compared with \$2,939 million, or 13%, of total debt outstanding as of May 31, 2016.

Committed Bank Revolving Line of Credit Agreements

We had \$3,165 million and \$3,420 million of commitments under committed bank revolving line of credit agreements as of November 30, 2016 and May 31, 2016, 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.

In September 2016, NCSC assigned a total of \$50 million of its commitment to another financial institution under our committed bank revolving line of credit agreements, which consisted of \$25 million under the three-year agreement and \$25 million under the five-year agreement.

On November 18, 2016, we amended and restated the three-year and five-year committed bank revolving line of credit agreements to extend the maturity dates to November 19, 2019 and November 19, 2021, respectively, and to terminate certain third-party bank commitments totaling \$165 million under the three-year agreement and \$45 million under the five-year agreement. This reduction was partially offset by an increase in commitment amounts from certain existing banks of \$8 million under each of the three-year and five-year agreements. We also terminated NCSC's remaining commitment of \$60 million. As a result, the total commitment amount from third-parties under the three-year facility and the five-year facility is \$1,533 million and \$1,632 million, respectively, resulting in a combined total commitment amount under the two facilities of \$3,165 million.

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 November 30, 2016 and May 31, 2016.

(Dollars in millions)	November 30, 2016			May 31, 2016			Maturity	Annual Facility Fee ⁽²⁾
	Total Commitment	Letters of Credit Outstanding	Net Available for Use ⁽¹⁾	Total Commitment	Letters of Credit Outstanding	Net Available for Use ⁽¹⁾		
3-year agreement.....	\$ —	\$ —	\$ —	\$ 25	\$ —	\$ 25	October 28, 2017	7.5 bps
3-year agreement.....	—	—	—	1,640	—	1,640	November 19, 2018	7.5 bps
3-year agreement.....	1,533	—	1,533	—	—	—	November 19, 2019	7.5 bps
Total 3-year agreement	1,533	—	1,533	1,665	—	1,665		
5-year agreement.....	—	—	—	45	—	45	October 28, 2019	10 bps
5-year agreement.....	—	—	—	1,600	1	1,599	November 19, 2020	10 bps
5-year agreement.....	1,632	1	1,631	—	—	—	November 19, 2021	10 bps
Total 5-year agreement	1,632	1	1,631	1,645	1	1,644		
Total.....	\$ 3,165	\$ 1	\$ 3,164	\$ 3,310	\$ 1	\$ 3,309		

⁽¹⁾ Reflects amounts available from unaffiliated third parties that are not consolidated by CFC.

⁽²⁾ 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.

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We were in compliance with all covenants and conditions under our committed bank revolving line of credit agreements and there were no borrowings outstanding under these agreements as of November 30, 2016 and May 31, 2016.

NOTE 7—LONG-TERM DEBT

The following table displays long-term debt outstanding, by debt type, as of November 30, 2016 and May 31, 2016.

(Dollars in thousands)	November 30, 2016	May 31, 2016
Unsecured long-term debt:		
Medium-term notes sold through dealers	\$ 2,788,546	\$ 2,668,276
Medium-term notes sold to members	413,128	450,960
Subtotal medium-term notes	<u>3,201,674</u>	<u>3,119,236</u>
Unamortized discount	(452)	(537)
Debt issuance costs	(22,577)	(19,370)
Total unsecured medium-term notes	<u>3,178,645</u>	<u>3,099,329</u>
Unsecured notes payable	27,092	27,092
Unamortized discount	(434)	(496)
Debt issuance costs	(107)	(123)
Total unsecured notes payable	<u>26,551</u>	<u>26,473</u>
Total unsecured long-term debt	<u>3,205,196</u>	<u>3,125,802</u>
Secured long-term debt:		
Collateral trust bonds	7,542,711	7,547,711
Unamortized discount	(261,319)	(265,837)
Debt issuance costs	(25,577)	(28,778)
Total collateral trust bonds	<u>7,255,815</u>	<u>7,253,096</u>
Guaranteed Underwriter Program notes payable	4,858,050	4,777,404
Debt issuance costs	(278)	(293)
Total Guaranteed Underwriter Program notes payable	<u>4,857,772</u>	<u>4,777,111</u>
Farmer Mac notes payable	2,283,929	2,303,123
Other secured notes payable	14,871	14,871
Debt issuance costs	(356)	(400)
Total other secured notes payable	<u>14,515</u>	<u>14,471</u>
Total secured notes payable	<u>7,156,216</u>	<u>7,094,705</u>
Total secured long-term debt	<u>14,412,031</u>	<u>14,347,801</u>
Total long-term debt	<u>\$ 17,617,227</u>	<u>\$ 17,473,603</u>

Secured Notes Payable

As of November 30, 2016 and May 31, 2016, we had secured notes payable totaling \$4,858 million and \$4,777 million, respectively, outstanding under a bond purchase agreement 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 borrowed. 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 and Commitments” for additional information on the collateral pledged to secure notes payable under this program. During the six months ended November 30, 2016, we borrowed \$100 million under our committed loan facilities with the Federal Financing Bank. As of November 30, 2016, we had up to \$500 million available under committed loan facilities from the Federal Financing Bank

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as part of this program. On September 28, 2016, we received a commitment from RUS to guarantee a loan of \$375 million from the Federal Financing Bank under the Guaranteed Underwriter Program of the USDA. On December 1, 2016, we closed on the \$375 million committed loan facility (“Series L”) from the FFB guaranteed by RUS pursuant to the Guaranteed Underwriter Program. Under the Series L facility, we are able to borrow an additional \$375 million any time before October 15, 2019 with each advance amortizing quarterly and having a final maturity no longer than 20 years from the advance date. This new commitment increases total funding available to CFC under committed loan facilities from FFB to \$875 million on a secured basis.

As of November 30, 2016 and May 31, 2016, secured notes payable also include \$2,284 million and 2,303 million, respectively, in debt outstanding to Farmer Mac under a note purchase agreement totaling \$4,500 million. Under the terms of the note purchase agreement, we can borrow up to \$4,500 million at any time through January 11, 2020, and thereafter automatically extend the agreement 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 would not be extended beyond the remaining term. The agreement with Farmer Mac is a revolving credit facility that allows us to borrow, repay and re-borrow funds at any time through maturity or from time to time as market conditions permit, provided that the principal amount at any time outstanding is not more than the total available under the agreement.

We also have an additional revolving note purchase agreement with Farmer Mac totaling \$300 million. Under the terms of this agreement, we can borrow up to \$300 million at any time through July 31, 2018. This agreement with Farmer Mac is a revolving credit facility that allows us to borrow, repay and re-borrow funds at any time through maturity or from time to time, provided that the principal amount at any time outstanding is not more than the total available under the agreement. As of November 30, 2016 and May 31, 2016, we had no notes payable outstanding under this revolving note purchase agreement with Farmer Mac.

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 Farmer Mac agreements. See “Note 4—Loans and Commitments” for additional information on the collateral pledged to secure notes payable under these programs.

As of November 30, 2016 and May 31, 2016, we were in compliance with all covenants and conditions under our senior debt indentures.

NOTE 8—SUBORDINATED DEFERRABLE DEBT

The following table presents subordinated deferrable debt outstanding as of November 30, 2016 and May 31, 2016.

(Dollars in thousands)	November 30, 2016	May 31, 2016
	Amount	Amount
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
Debt issuance costs	(7,792)	(7,788)
Total subordinated deferrable debt	<u>\$ 742,208</u>	<u>\$ 742,212</u>

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NOTE 9—DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES

Use of Derivatives

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 over-the-counter (“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. 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 and other receivables 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 and derivative forward value amounts, are recognized in our 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 recorded in earnings together with offsetting changes in the fair value of the hedged item and any related ineffectiveness. Changes in the fair value of derivatives designated as qualifying cash flow hedges are recorded as a component of other comprehensive income (“OCI”), to the extent that the hedge relationships are effective, and reclassified accumulated other comprehensive income (“AOCI”) to earnings using the effective interest method over the term of the forecasted transaction. Any ineffectiveness in the hedging relationship is recognized as a component of derivative gains (losses) in our consolidated statement of operations.

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

We typically designate treasury rate locks as cash flow hedges of forecasted debt issuances. Accordingly, changes in the fair value of the derivative instruments are recorded as a component of OCI and reclassified to interest expense when the forecasted transaction occurs using the effective interest method. Any ineffectiveness in the hedging relationship is recognized as a component of derivative gains (losses) in our consolidated statements of operations. We did not have any derivatives designated as accounting hedges as of November 30, 2016 and May 31, 2016.

Outstanding Notional Amount of Derivatives

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 November 30, 2016 and May 31, 2016. The substantial majority of our interest rate swaps use an index based on the London Interbank Offered Rate (“LIBOR”) for either the pay or receive leg of the swap agreement.

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(Dollars in thousands)	November 30, 2016			May 31, 2016		
	Notional Amount ⁽¹⁾	Weighted-Average Rate Paid	Weighted-Average Rate Received	Notional Amount ⁽²⁾	Weighted-Average Rate Paid	Weighted-Average Rate Received
Pay fixed swaps.....	\$ 6,821,181	2.91%	0.86%	\$ 6,661,471	2.95%	0.63%
Receive fixed swaps.....	4,299,000	1.32	2.73	3,499,000	1.02	2.82
Total interest rate swaps.....	\$11,120,181	2.30	1.58	\$10,160,471	2.29	1.39

⁽¹⁾Excludes \$112 million notional amount of forward-starting swaps outstanding as of November 30, 2016. These swaps had an effective start date of July 31, 2018.

⁽²⁾Excludes \$40 million notional amount of forward-starting swap outstanding as of May 31, 2016. These swaps had an effective start date of June 30, 2016.

Although the notional amount of swaps displayed in the above table excludes forward-starting swaps, we have recorded the fair value of these swaps as of November 30, 2016 and May 31, 2016 in our condensed consolidated financial statements.

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 as of November 30, 2016 and May 31, 2016.

(Dollars in thousands)	November 30, 2016		May 31, 2016	
	Fair Value	Notional Balance ⁽¹⁾	Fair Value	Notional Balance ⁽²⁾
Derivative assets	\$ 66,235	\$ 3,652,992	\$ 80,095	\$ 2,879,567
Derivative liabilities.....	(383,876)	7,467,189	(594,820)	7,280,904
Total	\$ (317,641)	\$ 11,120,181	\$ (514,725)	\$ 10,160,471

⁽¹⁾Excludes \$112 million notional amount of forward-starting swaps outstanding as of November 30, 2016. These swaps had an effective start date of July 31, 2018. However, the fair value of these swaps as of November 30, 2016 is included in the above table and in our condensed consolidated financial statements.

⁽²⁾Excludes \$40 million notional amount of forward-starting swap outstanding as of May 31, 2016. These swaps had an effective start date of June 30, 2016. However, the fair value of these swaps as of May 31, 2016 is included in the above table and in our condensed consolidated financial statements.

All of our master swap agreements include legally enforceable 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 November 30, 2016 and May 31, 2016, and provides information on the impact of netting provisions and collateral pledged.

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November 30, 2016

(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	Gross Amount Not Offset in the Balance Sheet		Net Amount
				Financial Instruments	Cash Collateral Pledged	
Derivative assets:						
Interest rate swaps.....	\$ 66,235	\$ —	\$ 66,235	\$ 63,915	\$ —	\$ 2,320
Derivative liabilities:						
Interest rate swaps.....	383,876	—	383,876	63,915	—	319,961

May 31, 2016

(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	Gross Amount Not Offset in the Balance Sheet		Net Amount
				Financial Instruments	Cash Collateral Pledged	
Derivative assets:						
Interest rate swaps.....	\$ 80,095	\$ —	\$ 80,095	\$ 80,095	\$ —	\$ —
Derivative liabilities:						
Interest rate swaps.....	594,820	—	594,820	80,095	—	514,725

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 and derivative forward value. Derivative cash settlements represent net contractual interest expense accruals on interest rate swaps during the period. The derivative forward value represents 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 the three and six months ended November 30, 2016 and 2015.

(Dollars in thousands)	Three Months Ended November 30,		Six Months Ended November 30,	
	2016	2015	2016	2015
Derivative cash settlements.....	\$ (21,587)	\$ (22,573)	\$ (44,977)	\$ (42,729)
Derivative forward value gains (losses).	362,247	(78,611)	197,344	(70,472)
Derivative gains (losses).....	<u>\$ 340,660</u>	<u>\$ (101,184)</u>	<u>\$ 152,367</u>	<u>\$ (113,201)</u>

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 to 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 mark-to-market value, as defined in the agreement, as of termination date.

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Our senior unsecured credit ratings from Moody's and S&P were A2 and A, respectively, as of November 30, 2016. Both Moody's and S&P had our ratings on stable outlook as of November 30, 2016. The following table displays the notional amounts of our derivative contracts with rating triggers as of November 30, 2016 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⁾	\$ 61,260	\$ (15,113)	\$ —	\$ (15,113)
Falls below Baa1/BBB+ ⁽²⁾	7,258,627	(197,465)	1,817	(195,648)
Falls to or below Baa2/BBB ⁽³⁾⁽⁴⁾	232,998	—	2,071	2,071
Falls below Baa3/BBB-	376,226	(24,502)	—	(24,502)
Total.....	<u>\$ 7,929,111</u>	<u>\$ (237,080)</u>	<u>\$ 3,888</u>	<u>\$ (233,192)</u>

⁽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⁾ Excludes \$56 million notional amount of a forward-starting swap with an effective start date of July 31, 2018, which was outstanding as of November 30, 2016.

⁽³⁾ Excludes \$56 million notional amount of a forward-starting swap with an effective start date of July 31, 2018, which was outstanding as of November 30, 2016.

⁽⁴⁾ 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.

The aggregate fair value amount, excluding and including the credit risk valuation adjustment, of all interest rate swaps with rating triggers that were in a net liability position was \$237 million and \$236 million, respectively, as of November 30, 2016.

NOTE 10—EQUITY

Total equity increased by \$229 million during the six months ended November 30, 2016 to \$1,046 million as of November 30, 2016. The increase in total equity was primarily attributable to our net income of \$263 million for the period, partially offset by the patronage capital retirement of \$42 million. The following table presents the components of equity as of November 30, 2016 and May 31, 2016.

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(Dollars in thousands)	November 30, 2016	May 31, 2016
Membership fees.....	\$ 972	\$ 974
Educational fund.....	1,222	1,798
Total membership fees and educational fund.....	<u>2,194</u>	<u>2,772</u>
Patronage capital allocated.....	671,724	713,853
Members' capital reserve.....	587,219	587,219
Unallocated net loss:		
Current-year derivative forward value income (loss).....	194,211	(220,827)
Prior-year cumulative derivative forward value losses.....	(507,904)	(287,077)
Current year cumulative derivative forward value losses.....	<u>(313,693)</u>	<u>(507,904)</u>
Other unallocated net income (loss).....	61,241	(5,706)
Unallocated net loss.....	<u>(252,452)</u>	<u>(513,610)</u>
CFC retained equity.....	1,008,685	790,234
Accumulated other comprehensive income.....	8,801	1,058
Total CFC equity.....	<u>1,017,486</u>	<u>791,292</u>
Noncontrolling interests.....	28,591	26,086
Total equity.....	<u>\$ 1,046,077</u>	<u>\$ 817,378</u>

In July 2016, the CFC Board of Directors authorized the allocation of the fiscal year 2016 net earnings as follows: \$1 million to the Cooperative Educational Fund, \$86 million to the members' capital reserve and \$84 million to members in the form of patronage capital.

In July 2016, the CFC Board of Directors authorized the retirement of allocated net earnings totaling \$42 million, representing 50% of the fiscal year 2016 allocation. This amount was returned to members in cash in the second quarter of fiscal year 2017. Future allocations and retirements of net earnings may be made annually as determined by the CFC Board of Directors with due regard for its 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 and regulations.

Accumulated Other Comprehensive Income

The following tables summarize, by component, the activity in the accumulated other comprehensive income as of and for the three and six months ended November 30, 2016 and 2015.

(Dollars in thousands)	Three Months Ended November 30, 2016				
	Unrealized Gains (Losses) AFS Securities	Unrealized Gains Derivatives	Unrealized Losses Foreclosed Assets	Unrealized Losses Defined Benefit Plan	Total
Beginning balance.....	\$ 7,391	\$ 4,290	\$ —	\$ (964)	\$ 10,717
Unrealized losses.....	(1,761)	—	—	—	(1,761)
Losses reclassified into earnings.....	—	—	—	44	44
Gains reclassified into earnings.....	—	(199)	—	—	(199)
Other comprehensive income (loss).....	<u>(1,761)</u>	<u>(199)</u>	<u>—</u>	<u>44</u>	<u>(1,916)</u>
Ending balance.....	<u>\$ 5,630</u>	<u>\$ 4,091</u>	<u>\$ —</u>	<u>\$ (920)</u>	<u>\$ 8,801</u>

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Three Months Ended November 30, 2015

(Dollars in thousands)	Unrealized Gains (Losses) AFS Securities	Unrealized Gains Derivatives	Unrealized Losses Foreclosed Assets	Unrealized Losses Defined Benefit Plan	Total
Beginning balance	\$ 3,270	\$ 5,137	\$ (4,248)	\$ (933)	\$ 3,226
Unrealized gains	3,550	—	—	—	3,550
Losses reclassified into earnings	—	—	—	44	44
Gains reclassified into earnings	—	(235)	—	—	(235)
Other comprehensive income	3,550	(235)	—	44	3,359
Ending balance	<u>\$ 6,820</u>	<u>\$ 4,902</u>	<u>\$ (4,248)</u>	<u>\$ (889)</u>	<u>\$ 6,585</u>

Six Months Ended November 30, 2016

(Dollars in thousands)	Unrealized Gains (Losses) AFS Securities	Unrealized Gains Derivatives	Unrealized Losses Foreclosed Assets	Unrealized Losses Defined Benefit Plan	Total
Beginning balance	\$ 7,402	\$ 4,487	\$ (9,823)	\$ (1,008)	\$ 1,058
Unrealized gains	(1,772)	—	—	—	(1,772)
Losses reclassified into earnings	—	—	9,823	88	9,911
Gains reclassified into earnings	—	(396)	—	—	(396)
Other comprehensive income	(1,772)	(396)	9,823	88	7,743
Ending balance	<u>\$ 5,630</u>	<u>\$ 4,091</u>	<u>\$ —</u>	<u>\$ (920)</u>	<u>\$ 8,801</u>

Six Months Ended November 30, 2015

(Dollars in thousands)	Unrealized Gains (Losses) AFS Securities	Unrealized Gains Derivatives	Unrealized Losses Foreclosed Assets	Unrealized Losses Defined Benefit Plan	Total
Beginning balance	\$ 3,934	\$ 5,371	\$ (4,248)	\$ (977)	\$ 4,080
Unrealized gains	2,886	—	—	—	2,886
Losses reclassified into earnings	—	—	—	88	88
Gains reclassified into earnings	—	(469)	—	—	(469)
Other comprehensive income	2,886	(469)	—	88	2,505
Ending balance	<u>\$ 6,820</u>	<u>\$ 4,902</u>	<u>\$ (4,248)</u>	<u>\$ (889)</u>	<u>\$ 6,585</u>

We expect to reclassify approximately \$1 million of amounts in accumulated other comprehensive income related to unrealized derivative gains into earnings over the next 12 months.

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NOTE 11—GUARANTEES

The following table summarizes total guarantees by type of guarantee and member class as of November 30, 2016 and May 31, 2016.

(Dollars in thousands)	November 30, 2016	May 31, 2016
Total by type:		
Long-term tax-exempt bonds	\$ 469,525	\$ 475,965
Letters of credit	305,325	319,596
Other guarantees.....	113,487	113,647
Total	<u>\$ 888,337</u>	<u>\$ 909,208</u>
Total by member class:		
CFC:		
Distribution	\$ 122,033	\$ 127,890
Power supply.....	740,343	759,345
Statewide and associate.....	5,068	5,054
CFC total	<u>867,444</u>	<u>892,289</u>
RTFC	1,574	1,574
NCSC	19,319	15,345
Total	<u>\$ 888,337</u>	<u>\$ 909,208</u>

The maturities for the long-term tax-exempt bonds and the related guarantees run through calendar year 2042. Amounts in the table represent the outstanding principal amount of the guaranteed bonds. As of November 30, 2016, our maximum potential exposure for the \$69 million of fixed-rate tax-exempt bonds is \$96 million, representing principal and interest. Of the amounts shown in the table above for long-term tax-exempt bonds, \$400 million and \$406 million as of November 30, 2016 and May 31, 2016, respectively, are adjustable or floating-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 could be required to pay related to the remaining adjustable and floating-rate bonds. Many of these bonds have a call provision that allows us to call the bond in the event of a default. This would limit our exposure to future interest payments on these bonds. Generally our maximum potential exposure is secured by mortgage liens on the systems' assets and future revenue. If a system's debt is accelerated because of a determination that the interest thereon is not tax-exempt, the system's obligation to reimburse us for any guarantee payments will be treated as a long-term loan.

The maturities for letters of credit run through calendar year 2026. The amounts shown in the table above represent our maximum potential exposure, of which \$129 million is secured as of November 30, 2016. As of November 30, 2016 and May 31, 2016, the letters of credit include \$76 million to provide the standby liquidity for adjustable and floating-rate tax-exempt bonds issued for the benefit of our members, respectively. Security provisions include a mortgage lien on substantially all of the system's assets, future revenue and the system's investment in our commercial paper.

In addition to the letters of credit listed in the table above, under master letter of credit facilities in place as of November 30, 2016, we may be required to issue up to an additional \$84 million in letters of credit to third parties for the benefit of our members. As of November 30, 2016, all of our master letter of credit facilities were subject to material adverse change clauses at the time of issuance. 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.

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The maturities for other guarantees listed in the table run through calendar year 2025. The maximum potential exposure for these other guarantees is \$114 million, all of which is unsecured.

As of November 30, 2016 and May 31, 2016, we had \$290 million and \$308 million of guarantees, respectively, representing 33% and 34%, respectively, of total guarantees, under which our right of recovery from our members was not secured.

In addition to the guarantees described above, as of November 30, 2016, we were the liquidity provider for a total of \$476 million of variable-rate tax-exempt bonds 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. During the six months ended November 30, 2016, we were not required to perform as liquidity provider pursuant to these obligations.

Guarantee Liability

As of November 30, 2016 and May 31, 2016, we recorded a guarantee liability of \$16 million and \$17 million respectively, which represents the contingent and noncontingent exposures related to guarantees and liquidity obligations. The contingent guarantee liability as of November 30, 2016 and May 31, 2016 was \$1 million based on management's estimate of exposure to losses within the guarantee portfolio. The remaining balance of the total guarantee liability of \$15 million and \$16 million as of November 30, 2016 and May 31, 2016, 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 2016 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 November 30, 2016 and May 31, 2016. The table also displays the classification within the fair value hierarchy of the valuation technique used in estimating fair value.

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(Dollars in thousands)	November 30, 2016		Fair Value Measurements Using		
	Carrying Value	Fair Value	Level 1	Level 2	Level 3
Assets:					
Cash and cash equivalents.....	\$ 190,096	\$ 190,096	\$ 190,096	\$ —	\$ —
Restricted cash	22,272	22,272	22,272	—	—
Time deposits	640,000	640,000	—	640,000	—
Investment securities, available for sale	86,168	86,168	86,168	—	—
Deferred compensation investments	4,498	4,498	4,498	—	—
Loans to members, net	23,816,801	23,479,241	—	—	23,479,241
Accrued interest receivable	112,752	112,752	—	112,752	—
Debt service reserve funds	17,151	17,151	17,151	—	—
Derivative assets	66,235	66,235	—	66,235	—
Liabilities:					
Short-term borrowings	\$ 3,663,960	\$ 3,663,751	\$ 1,670,192	\$ 1,993,559	\$ —
Long-term debt.....	17,617,227	18,295,297	—	11,145,168	7,150,129
Accrued interest payable	135,555	135,555	—	135,555	—
Guarantee liability	16,444	18,141	—	—	18,141
Derivative liabilities	383,876	383,876	—	383,876	—
Subordinated deferrable debt	742,208	772,460	—	772,460	—
Members' subordinated certificates	1,442,453	1,442,476	—	—	1,442,476

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(Dollars in thousands)	May 31, 2016		Fair Value Measurements Using		
	Carrying Value	Fair Value	Level 1	Level 2	Level 3
Assets:					
Cash and cash equivalents.....	\$ 204,540	\$ 204,540	\$ 204,540	\$ —	\$ —
Restricted cash	4,628	4,628	4,628	—	—
Time deposits	340,000	340,000	—	340,000	—
Investment securities, available for sale	87,940	87,940	87,940	—	—
Deferred compensation investments	4,326	4,326	4,326	—	—
Loans to members, net	23,129,438	23,297,924	—	—	23,297,924
Accrued interest receivable.....	113,272	113,272	—	113,272	—
Debt service reserve funds	17,151	17,151	17,151	—	—
Derivative assets	80,095	80,095	—	80,095	—
Liabilities:					
Short-term borrowings	\$ 2,938,848	\$ 2,938,716	\$ 1,185,959	\$ 1,752,757	\$ —
Long-term debt.....	17,473,603	18,577,261	—	11,327,004	7,250,257
Accrued interest payable.....	132,996	132,996	—	132,996	—
Guarantee liability.....	17,109	19,019	—	—	19,019
Derivative liabilities.....	594,820	594,820	—	594,820	—
Subordinated deferrable debt	742,212	751,395	—	751,395	—
Members' subordinated certificates	1,443,810	1,443,834	—	—	1,443,834

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 six months ended November 30, 2016 and 2015.

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 November 30, 2016 and May 31, 2016, and the classification of the valuation technique within the fair value hierarchy.

(Dollars in thousands)	November 30, 2016			May 31, 2016		
	Level 1	Level 2	Total	Level 1	Level 2	Total
Investment securities available for sale ...	\$ 86,168	\$ —	\$ 86,168	\$ 87,940	\$ —	\$ 87,940
Deferred compensation investments.....	4,498	—	4,498	4,326	—	4,326
Derivative assets.....	—	66,235	66,235	—	80,095	80,095
Derivative liabilities	—	383,876	383,876	—	594,820	594,820

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Nonrecurring Fair Value

The following table presents the carrying value and fair value of assets reported in our condensed consolidated financial statements at fair value on a nonrecurring basis as of November 30, 2016 and May 31, 2016, and unrealized losses for the three and six months ended November 30, 2016 and 2015.

(Dollars in thousands)	Level 3 Fair Value		Unrealized Losses Three Months Ended November 30,		Unrealized Losses Six Months Ended November 30,	
	November 30, 2016	May 31, 2016	2016	2015	2016	2015
Impaired loans, net of specific reserves.....	\$ —	\$ 7,498	\$ —	\$ (1,190)	\$ —	\$ (2,011)

Significant Unobservable Level 3 Inputs

Impaired Loans

We utilize the fair value of estimated cash flows or the collateral underlying the loan to determine the fair value and specific allowance for impaired loans. The valuation technique used to determine fair value of the impaired loans provided by both our internal staff and third-party specialists includes market multiples (i.e., comparable companies). The significant unobservable inputs used in the determination of fair value for individually impaired loans is a multiple of earnings before interest, taxes, depreciation and amortization based on various factors (i.e., financial condition of the borrower). In estimating the fair value of the collateral, we may use third-party valuation specialists, internal estimates or a combination of both. The significant unobservable inputs for estimating the fair value of impaired collateral-dependent loans are reviewed by our Credit Risk Management group to assess the reasonableness of the assumptions used and the accuracy of the work performed. In cases where we rely on third-party inputs, we use the final unadjusted third-party valuation analysis as support for any adjustments to our consolidated financial statements and disclosures.

Because of the limited amount of impaired loans as of November 30, 2016 and May 31, 2016, we do not believe that potential changes in the significant unobservable inputs used in the determination of the fair value for impaired loans will have a material impact on the fair value measurement of these assets or our results of operations.

NOTE 13—BUSINESS SEGMENTS

The following tables display segment results for the three and six months ended November 30, 2016 and 2015, and assets attributable to each segment as of November 30, 2016 and 2015.

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(Dollars in thousands)	Three Months Ended November 30, 2016			
	CFC	Other	Elimination	Consolidated Total
Statement of operations:				
Interest income.....	\$ 254,689	\$ 11,129	\$ (8,662)	\$ 257,156
Interest expense	(183,395)	(8,934)	8,675	(183,654)
Net interest income	71,294	2,195	13	73,502
Provision for loan losses	(738)	—	—	(738)
Net interest income after provision for loan losses	<u>70,556</u>	<u>2,195</u>	<u>13</u>	<u>72,764</u>
Non-interest income:				
Fee and other income.....	4,628	1,727	(1,258)	5,097
Derivative gains	337,602	3,058	—	340,660
Results of operations of foreclosed assets	(549)	—	—	(549)
Total non-interest income	341,681	4,785	(1,258)	345,208
Non-interest expense:				
General and administrative expenses.....	(18,991)	(1,641)	—	(20,632)
Other	(517)	(1,245)	1,245	(517)
Total non-interest expense	(19,508)	(2,886)	1,245	(21,149)
Income before income taxes	<u>392,729</u>	<u>4,094</u>	<u>—</u>	<u>396,823</u>
Income tax expense.....	—	(1,519)	—	(1,519)
Net income	<u>\$ 392,729</u>	<u>\$ 2,575</u>	<u>\$ —</u>	<u>\$ 395,304</u>

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(Dollars in thousands)	Three Months Ended November 30, 2015			
	CFC	Other	Elimination	Consolidated Total
Statement of operations:				
Interest income.....	\$ 253,625	\$ 11,476	\$ (8,776)	\$ 256,325
Interest expense	(166,807)	(9,093)	8,776	(167,124)
Net interest income	86,818	2,383	—	89,201
Provision for loan losses	(1,240)	—	—	(1,240)
Net interest income after provision for loan losses	85,578	2,383	—	87,961
Non-interest income:				
Fee and other income.....	6,080	2,096	(1,145)	7,031
Derivative losses	(99,963)	(1,221)	—	(101,184)
Results of operations from foreclosed assets.....	2,054	—	—	2,054
Total non-interest income	(91,829)	875	(1,145)	(92,099)
Non-interest expense:				
General and administrative expenses.....	(17,877)	(2,609)	255	(20,231)
Other	(9)	(890)	890	(9)
Total non-interest expense	(17,886)	(3,499)	1,145	(20,240)
Loss before income taxes.....	(24,137)	(241)	—	(24,378)
Income tax expense.....	—	(110)	—	(110)
Net loss	\$ (24,137)	\$ (351)	\$ —	\$ (24,488)

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)

(Dollars in thousands)	Six Months Ended November 30, 2016			
	CFC	Other	Elimination	Consolidated Total
Statement of operations:				
Interest income.....	\$ 508,706	\$ 22,351	\$ (17,066)	\$ 513,991
Interest expense	(364,227)	(17,610)	17,103	(364,734)
Net interest income	144,479	4,741	37	149,257
Provision for loan losses	(2,666)	—	—	(2,666)
Net interest income after provision for loan losses	141,813	4,741	37	146,591
Non-interest income:				
Fee and other income.....	8,956	2,624	(1,953)	9,627
Derivative gains	150,780	1,587	—	152,367
Results of operations of foreclosed assets	(1,661)	—	—	(1,661)
Total non-interest income	158,075	4,211	(1,953)	160,333
Non-interest expense:				
General and administrative expenses.....	(37,770)	(3,721)	—	(41,491)
Other	(960)	(1,916)	1,916	(960)
Total non-interest expense	(38,730)	(5,637)	1,916	(42,451)
Income before income taxes	261,158	3,315	—	264,473
Income tax expense.....	—	(1,430)	—	(1,430)
Net income	\$ 261,158	\$ 1,885	\$ —	\$ 263,043

	November 30, 2016			
	CFC	Other	Elimination	Consolidated Total
Assets:				
Total loans outstanding.....	\$ 23,803,060	\$ 1,037,545	\$ (1,000,424)	\$ 23,840,181
Deferred origination costs.....	10,531	—	—	10,531
Less: Allowance for loan losses	(33,911)	—	—	(33,911)
Loans to members, net.....	23,779,680	1,037,545	(1,000,424)	23,816,801
Other assets	1,318,908	112,264	(100,252)	1,330,920
Total assets	\$ 25,098,588	\$ 1,149,809	\$ (1,100,676)	\$ 25,147,721

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)

Six Months Ended November 30, 2015

(Dollars in thousands)	CFC	Other	Elimination	Consolidated Total
Statement of operations:				
Interest income.....	\$ 496,676	\$ 23,326	\$ (17,561)	\$ 502,441
Interest expense	(332,189)	(18,196)	17,561	(332,824)
Net interest income	164,487	5,130	—	169,617
Provision for loan losses	(5,802)	—	—	(5,802)
Net interest income after provision for loan losses	158,685	5,130	—	163,815
Non-interest income:				
Fee and other income.....	10,679	2,914	(1,861)	11,732
Derivative losses	(111,790)	(1,411)	—	(113,201)
Results of operations of foreclosed assets	133	—	—	133
Total non-interest income	(100,978)	1,503	(1,861)	(101,336)
Non-interest expense:				
General and administrative expenses.....	(38,153)	(5,421)	508	(43,066)
Other	(366)	(1,353)	1,353	(366)
Total non-interest expense	(38,519)	(6,774)	1,861	(43,432)
Income before income taxes	19,188	(141)	—	19,047
Income tax expense.....	—	(440)	—	(440)
Net income (loss)	\$ 19,188	\$ (581)	\$ —	\$ 18,607

November 30, 2015

	CFC	Other	Elimination	Consolidated Total
Assets:				
Total loans outstanding.....	\$ 22,621,617	\$ 1,069,542	\$ (1,027,511)	\$ 22,663,648
Deferred origination costs.....	9,881	—	—	9,881
Less: Allowance for loan losses	(39,600)	—	—	(39,600)
Loans to members, net.....	22,591,898	1,069,542	(1,027,511)	22,633,929
Other assets	1,203,916	119,388	(106,251)	1,217,053
Total assets	\$ 23,795,814	\$ 1,188,930	\$ (1,133,762)	\$ 23,850,982

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 November 30, 2016 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. In June 2015, RTFC received a notice of deficiency from the Virgin Islands Bureau of Internal Revenue (“BIR”) alleging that RTFC owed tax or other amounts, plus interest, in connection with tax years 1996 and 1997, and 1999 through 2005. On September 4, 2015, RTFC filed a petition with the District Court of the Virgin Islands in response to the notice of deficiency. In January 2017, RTFC and the BIR reached an agreement in this matter under which the notice of deficiency will be canceled and the action will be jointly dismissed with prejudice. No further proceedings are anticipated at this time.

Item 1A. Risk Factors

Refer to “Part I—Item 1A. Risk Factors” in our 2016 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 2016 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
10.1*	— Amendment No.1 dated as of November 18, 2016 to the Amended and Restated Revolving Credit Agreement dated as of November 19, 2015 maturing on November 19, 2019
10.2*	— Amendment No.1 dated as of November 18, 2016 to the Amended and Restated Revolving Credit Agreement dated as of November 19, 2015 maturing on November 19, 2021
10.3*	— Series L Bond Purchase Agreement between the Registrant, Federal Financing Bank and Rural Utilities Service dated as of December 1, 2016 for up to \$375,000,000
10.4*	— Series L Future Advance Bond from the Registrant to the Federal Financing Bank dated as of December 1, 2016 for up to \$375,000,000 maturing on October 15, 2039
10.5*	— Third Amended, Restated and Consolidated Pledge Agreement dated as of December 1, 2016 between the Registrant, the Rural Utilities Service and U.S. Bank National Association
10.6*	— Third Amended, Restated and Consolidated Bond Guarantee Agreement dated as of December 1, 2016 between the Registrant and the Rural Utilities Service
10.7*	— Amended and Restated Master Sale and Servicing Agreement, dated as of August 12, 2011, by and between the Registrant and the Federal Agricultural Mortgage Corporation, as amended by Amendment No. 1 dated as of November 28, 2016
10.8	— Independent Contractor Services Agreement, dated September 1, 2016, between the Company and S L Lilly & Associates, LLC. Incorporated by reference to Exhibit 10.1 to our form 8-K filed on September 1, 2016.
12*	— Computation of Ratio of Earnings to Fixed Charges
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.

^ Identifies a management contract or compensatory plan or arrangement.

†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: January 13, 2017

By: /s/ J. ANDREW DON

J. Andrew Don

Senior Vice President and Chief Financial Officer

By: /s/ ROBERT E. GEIER

Robert E. Geier

Controller (Principal Accounting Officer)

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION

Computation of Ratio of Earnings to Fixed Charges

(Dollars in thousands)	Six Months Ended	Year Ended May 31,				
	November 30, 2016	2016	2015	2014	2013	2012
Earnings:						
Net income (loss).....	\$ 263,043	\$ (51,516)	\$ (18,927)	\$ 192,926	\$ 358,087	\$ (148,797)
Add: Fixed charges.....	364,734	681,850	635,684	654,655	692,025	761,849
Less: Interest capitalized ⁽¹⁾	—	—	—	—	—	(71)
Income available for fixed charges	<u>\$ 627,777</u>	<u>\$ 630,334</u>	<u>\$ 616,757</u>	<u>\$ 847,581</u>	<u>\$ 1,050,112</u>	<u>\$ 612,981</u>
Fixed charges:						
Interest expense on borrowings ⁽²⁾ ..	\$ 364,734	\$ 681,850	\$ 635,684	\$ 654,655	\$ 692,025	\$ 761,778
Interest expense capitalized.....	—	—	—	—	—	71
Total fixed charges.....	<u>\$ 364,734</u>	<u>\$ 681,850</u>	<u>\$ 635,684</u>	<u>\$ 654,655</u>	<u>\$ 692,025</u>	<u>\$ 761,849</u>
Ratio of earnings to fixed charges.	<u>1.72</u>	<u>0.92</u>	<u>0.97</u>	<u>1.29</u>	<u>1.52</u>	<u>0.80</u>

⁽¹⁾Interest capitalized consists of interest paid in connection with financing the construction of our new headquarters building during the construction period.

⁽²⁾Interest expense includes the amortization of debt discounts and issuance costs.

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: January 13, 2017

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.

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: January 13, 2017

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.

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 November 30, 2016 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: January 13, 2017

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.

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 November 30, 2016 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: January 13, 2017

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.