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. Below we provide a discussion of each of these non-GAAP measures and provide a reconciliation of our adjusted measures to the most comparable GAAP measures in this section. We believe our non-GAAP adjusted metrics, which are not a substitute for GAAP and may not be consistent with similarly titled non-GAAP measures used by other companies, provide meaningful information and are useful to investors because management evaluates performance based on these metrics for purposes of: (i) budgeting and forecasting; (ii) comparing period-to-period operating results, analyzing changes in results and identifying potential trends; (iii) making compensation decisions; and (iv) informing the establishment of short- and long-term strategic goals. In addition, certain of the financial covenants in our committed bank revolving line of credit agreements and debt indentures are based on these non-GAAP adjusted measures.

Statements of Operations Non-GAAP Adjustments

One of our primary performance measures is TIER, which is a measure indicating our ability to cover the interest expense requirements on our debt. TIER is calculated by adding the interest expense to net income prior to the cumulative effect of change in accounting principle and dividing that total by the interest expense. We adjust the TIER calculation to add the derivative cash settlements expense to the interest expense and to remove the derivative forward value gains (losses) and foreign currency adjustments from total net income. Adding the cash settlements expense back to interest expense also has a corresponding effect on our adjusted net interest income.

We use derivatives to manage interest rate risk on our funding of the loan portfolio. The derivative cash settlements expense represents the amount that we receive from or pay to our counterparties based on the interest rate indexes in our derivatives that do not qualify for hedge accounting. We adjust the reported interest expense to include the derivative cash settlements expense. We use the adjusted cost of funding to set interest rates on loans to our members and believe that the interest expense adjusted to include derivative cash settlements expense represents our total cost of funding for the period. TIER calculated by adding the derivative cash settlements expense to the interest expense reflects management's perspective on our operations and, therefore, we believe that it represents a useful financial measure for investors.

The derivative forward value gains (losses) and foreign currency adjustments do not represent our cash inflows or outflows during the current period and, therefore, do not affect our current ability to cover our debt service obligations. The derivative forward value gains (losses) included in the derivative gains (losses) line of the statement of operations represents a present value estimate of the future cash inflows or outflows that will be recognized as net cash settlements expense for all periods through the maturity of our derivatives that do not qualify for hedge accounting. We have not issued foreign-denominated debt since 2007, and as of May 31, 2020 and 2019, there were no foreign currency derivative instruments outstanding.

For operational management and decision-making purposes, we subtract derivative forward value gains (losses) and foreign currency adjustments from our net income when calculating TIER and for other net income presentation purposes. In addition, since the derivative forward value gains (losses) and foreign currency adjustments do not represent current-period cash flows, we do not allocate such funds to our members and, therefore, exclude the derivative forward value gains (losses) and foreign currency adjustments from net income in calculating the amount of net income to be allocated to our members. TIER calculated by excluding the derivative forward value gains (losses) and foreign currency adjustments from net income reflects management's perspective on our operations and, therefore, we believe that it represents a useful financial measure for investors.

Total equity includes the noncash impact of derivative forward value gains (losses) and foreign currency adjustments recorded in net income. It also includes as a component of accumulated other comprehensive income the impact of changes in the fair value of derivatives designated as cash flow hedges as well as the remaining transition adjustment recorded when we adopted the accounting guidance that required all derivatives be recorded on the balance sheet at fair value. In evaluating our debt-to-equity ratio discussed further below, we make adjustments to equity similar to the adjustments made in calculating TIER. We exclude from total equity the cumulative impact of changes in derivative forward value gains (losses) and foreign currency adjustments and amounts included in accumulated other comprehensive income related to derivatives designated for cash flow hedge accounting and the remaining derivative transition adjustment to derive non-GAAP adjusted equity.

Table 39 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 for each fiscal year in the five-year period ended May 31, 2020.

Table 39: Adjusted Financial Measures—Income Statement

	Year Ended May 31,				
(Dollars in thousands)	**2020**	**2019**	**2018**	**2017**	**2016**
Interest expense	**$ (821,089)**	$ (836,209)	$ (792,735)	$ (741,738)	$ (681,850)
Include: Derivative cash settlements expense	**(55,873)**	(43,611)	(74,281)	(84,478)	(88,758)
Adjusted interest expense	**$ (876,962)**	$ (879,820)	$ (867,016)	$ (826,216)	$ (770,608)
Net interest income	**$ 330,197**	$ 299,461	$ 284,622	$ 294,896	$ 330,786
Include: Derivative cash settlements expense	**(55,873)**	(43,611)	(74,281)	(84,478)	(88,758)
Adjusted net interest income	**$ 274,324**	$ 255,850	$ 210,341	$ 210,418	$ 242,028
Net income (loss)	**$ (589,430)**	$ (151,210)	$ 457,364	$ 312,099	$ (51,516)
Exclude: Derivative forward value gains (losses)	**(734,278)**	(319,730)	306,002	179,381	(221,083)
Adjusted net income	**$ 144,848**	$ 168,520	$ 151,362	$ 132,718	$ 169,567

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

TIER and Adjusted TIER

Table 40 displays the calculation of our TIER and adjusted TIER for each fiscal year in the five-year period ended May 31, 2020.

Table 40: TIER and Adjusted TIER

	Year Ended May 31,				
	2020	**2019**	**2018**	**2017**	**2016**
TIER [(1)]	**0.28**	0.82	1.58	1.42	0.92
Adjusted TIER [(2)]	**1.17**	1.19	1.17	1.16	1.22

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

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

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

Management relies on the adjusted debt-to-equity ratio as a key measure in managing our business. We therefore believe that this adjusted measure, in combination with the comparable GAAP measure, is useful to investors in evaluating performance. We adjust the comparable GAAP measure to:

- exclude debt used to fund loans that are guaranteed by RUS from total liabilities;
- exclude from total liabilities, and add to total equity, debt with equity characteristics issued to our members and in the capital markets; and
- exclude the noncash impact of derivative financial instruments and foreign currency adjustments from total liabilities and total equity.

We are an eligible lender under a RUS loan guarantee program. Loans issued under this program carry the U.S. government's guarantee of all interest and principal payments. We have little or no risk associated with the collection of principal and interest payments on these loans. Therefore, we believe there is little or no risk related to the repayment of the liabilities used to fund RUS-guaranteed loans and we subtract such liabilities from total liabilities to calculate our adjusted debt-to-equity ratio.

Members may be required to purchase subordinated certificates as a condition of membership and as a condition to obtaining a loan or guarantee. The subordinated certificates are accounted for as debt under GAAP. The subordinated certificates have long-dated maturities and pay no interest or pay interest that is below market, and under certain conditions we are prohibited from making interest payments to members on the subordinated certificates. For computing our adjusted debt-to-equity ratio we subtract members' subordinated certificates from total liabilities and add members' subordinated certificates to total equity.

We also sell subordinated deferrable debt in the capital markets with maturities of up to 30 years and the option to defer interest payments. The characteristics of subordination, deferrable interest and long-dated maturity are all equity characteristics. In calculating our adjusted debt-to-equity ratio, we subtract subordinated deferrable debt from total liabilities and add it to total equity.

We record derivative instruments at fair value on our consolidated balance sheets. For computing our adjusted debt-to-equity ratio we exclude the noncash impact of our derivative accounting from liabilities and equity. Also, for computing our adjusted debt-to-equity ratio we exclude the impact of foreign currency valuation adjustments from liabilities and equity. The debt-to-equity ratio adjusted to exclude the effect of foreign currency translation reflect management's perspective on our operations and, therefore, we believe is a useful financial measure for investors.

Table 41 provides a reconciliation between the liabilities and equity used to calculate the debt-to-equity ratio and the adjusted debt-to-equity ratio as of the end of each fiscal year in the five-year period ended May 31, 2020. As indicated in the following table, subordinated debt is treated in the same manner as equity in calculating our adjusted-debt-to-equity ratio.

Table 41: Adjusted Financial Measures—Balance Sheet

	May 31,				
(Dollars in thousands)	**2020**	**2019**	**2018**	**2017**	**2016**
Total liabilities	**$ 27,508,783**	$ 25,820,490	$25,184,351	$24,106,887	$23,452,822
Exclude:					
Derivative liabilities	**1,258,459**	391,724	275,932	385,337	594,820
Debt used to fund loans guaranteed by RUS	**146,764**	153,991	160,865	167,395	173,514
Subordinated deferrable debt	**986,119**	986,020	742,410	742,274	742,212
Subordinated certificates	**1,339,618**	1,357,129	1,379,982	1,419,025	1,443,810
Adjusted total liabilities	**$ 23,777,823**	$ 22,931,626	$ 22,625,162	$ 21,392,856	$ 20,498,466
Total equity	**$ 648,822**	$ 1,303,882	$ 1,505,853	$ 1,098,805	$ 817,378
Exclude:					
Prior fiscal year-end cumulative derivative forward value losses	**(354,704)**	(34,974)	(340,976)	(520,357)	(299,274)
Current-year derivative forward value gains (losses)	**(734,278)**	(319,730)	306,002	179,381	(221,083)
Accumulated other comprehensive income attributable to derivatives [(1)]	**2,130**	2,571	1,980	3,702	4,487
Include:					
Subordinated deferrable debt	**986,119**	986,020	742,410	742,274	742,212
Subordinated certificates	**1,339,618**	1,357,129	1,379,982	1,419,025	1,443,810
Adjusted total equity	**$ 4,061,411**	$ 3,999,164	$ 3,661,239	$ 3,597,378	$ 3,519,270

[(1)] Represents AOCI related to derivatives. See "Note 11—Equity" for the components of AOCI.

Table 42 displays the calculations of our debt-to-equity and adjusted debt-to-equity ratios as of the end of each fiscal year during the five-year period ended May 31, 2020.

Table 42: Debt-to-Equity Ratio

	May 31,				
	2020	2019	2018	2017	2016
Debt-to-equity ratio [(1)]	**42.40**	19.80	16.72	21.94	28.69
Adjusted debt-to-equity ratio [(2)]	**5.85**	5.73	6.18	5.95	5.82

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

Members' Equity

Member's equity includes the noncash impact of derivative forward value gains (losses) and foreign currency adjustments recorded in net income. It also includes amounts recorded in accumulated other comprehensive income. We provide the components of accumulated other comprehensive income in "Note 11—Equity." Because these amounts generally have not been realized, they are not available to members and are excluded by CFC's Board of Directors in determining the annual allocation of adjusted net income to patronage capital, members' capital reserve and other member funds.

Table 43 provides a reconciliation of members' equity to total CFC equity as of May 31, 2020 and 2019.

Table 43: Members' Equity

	May 31,	
(Dollars in thousands)	**2020**	**2019**
Member's equity:		
Total CFC equity	**$ 626,121**	$ 1,276,735
Excludes:		
Accumulated other comprehensive loss	**(1,910)**	(147)
Current period-end cumulative derivative forward value losses	**(1,079,739)**	(348,965)
Subtotal	**(1,081,649)**	(349,112)
Members' equity	**$ 1,707,770**	$ 1,625,847