NON-GAAP FINANCIAL MEASURES

Below we discuss each of the non-GAAP financial measures and provide a reconciliation of our non-GAAP financial measures to the most comparable U.S. GAAP financial measures. We believe our non-GAAP financial measures, which are not a substitute for U.S. GAAP and may not be consistent with similarly titled non-GAAP financial 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) establishing performance goals; (ii) budgeting and forecasting; (iii) comparing period-to-period operating results, analyzing changes in results and identifying potential trends; and (iv) making compensation decisions. In addition, certain of the financial covenants in our committed bank revolving line of credit agreements and debt indentures are based on non-GAAP financial measures.

Statements of Operations Non-GAAP Financial Measures

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, 2023 and 2022, 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.

Net Income and Adjusted Net Income

Table 34 provides a reconciliation of adjusted interest expense, adjusted net interest income, adjusted total revenue and adjusted net income to the comparable U.S. GAAP measures. These adjusted measures 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, 2023.

Table 34: Adjusted Net Income

	Year Ended May 31,										
(Dollars in thousands)		2023		2022		2021		2020		2019	
Adjusted net interest income:		_									
Interest income	\$ 1	1,351,729	\$	1,141,243	\$	1,116,601	\$	1,151,286	\$	1,135,670	
Interest expense	(1	1,036,508)		(705,534)		(702,063)		(821,089)		(836,209)	
Include: Derivative cash settlements interest income (expense) ⁽¹⁾		33,577		(101,385)		(115,645)		(55,873)		(43,611)	
Adjusted interest expense	(1	1,002,931)		(806,919)		(817,708)		(876,962)		(879,820)	
Adjusted net interest income	\$	348,798	\$	334,324	\$	298,893	\$	274,324	\$	255,850	
Adjusted total revenue:											
Net interest income	\$	315,221	\$	435,709	\$	414,538	\$	330,197	\$	299,461	
Fee and other income		18,134		17,193		18,929		22,961		15,355	
Total revenue		333,355		452,902		433,467		353,158		314,816	
Include: Derivative cash settlements interest income (expense) ⁽¹⁾		33,577		(101,385)		(115,645)		(55,873)		(43,611)	
Adjusted total revenue	\$	366,932	\$	351,517	\$	317,822	\$	297,285	\$	271,205	
Adjusted net income:											
Net income (loss)	\$	501,587	\$	798,537	\$	813,978	\$	(589,430)	\$	(151,210)	
Exclude: Derivative forward value gains (losses) ⁽²⁾ .		252,267		557,867		621,946		(734,278)		(319,730)	
Adjusted net income	\$	249,320	\$	240,670	\$	192,032	\$	144,848	\$	168,520	

⁽¹⁾ Represents the net periodic contractual interest expense amount on our interest rate swaps during the reporting period.

We primarily fund our loan portfolio through the issuance of debt. However, we use derivatives as economic hedges as part of our strategy to manage the interest rate risk associated with funding our loan portfolio. We therefore consider the interest expense incurred on our derivatives to be part of our funding cost in addition to the interest expense on our debt. As such, we add net periodic derivative cash settlements interest expense amounts to our reported interest expense to derive our adjusted interest expense and adjusted net interest income. We exclude unrealized derivative forward value gains and losses from our adjusted total revenue and adjusted net income.

TIER and Adjusted TIER

Table 35 displays the calculation of our TIER and adjusted TIER for each fiscal year in the five-year period ended May 31, 2023.

Table 35: TIER and Adjusted TIER

	Year Ended May 31,						
	2023	2022	2021	2021 2020			
TIER (1)	1.48	2.13	2.16	0.28	0.82		
Adjusted TIER (2)	1.25	1.30	1.23	1.17	1.19		

⁽²⁾ 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.

Liabilities and Equity and Adjusted Liabilities and Equity

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 U.S. GAAP financial measure, is useful to investors in evaluating our financial condition. We adjust the comparable U.S. GAAP financial 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 an 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 U.S. 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 reflects management's perspective on our operations and, therefore, we believe is a useful financial measure for investors.

Table 36 provides a reconciliation between our total liabilities and total equity and the adjusted amounts used in the calculation of our adjusted debt-to-equity ratio as of the end of each fiscal year in the five-year period ended May 31, 2023. As indicated in Table 36, subordinated debt is treated in the same manner as equity in calculating our adjusted debt-to-equity ratio.

⁽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.

Table 36: Adjusted Liabilities and Equity

	May 31,						
(Dollars in thousands)	2023	2023 2022		2020	2019		
Adjusted total liabilities:							
Total liabilities	\$31,422,811	\$29,109,413	\$28,238,484	\$27,508,783	\$25,820,490		
Exclude:							
Derivative liabilities	115,074	128,282	584,989	1,258,459	391,724		
Debt used to fund loans guaranteed by RUS	122,873	131,128	139,136	146,764	153,991		
Subordinated deferrable debt	1,283,436	986,518	986,315	986,119	986,020		
Subordinated certificates	1,223,126	1,234,161	1,254,660	1,339,618	1,357,129		
Adjusted total liabilities	\$28,678,302	\$26,629,324	\$25,273,384	\$23,777,823	\$22,931,626		
Adjusted total equity:							
Total equity	\$ 2,589,249	\$ 2,141,969	\$ 1,399,879	\$ 648,822	\$ 1,303,882		
Exclude:							
Prior fiscal year-end cumulative derivative forward value gains (losses) ⁽¹⁾	90,831	(467,036)	(1,088,982)	(354,704)	(34,974)		
Year-to-date derivative forward value gains (losses) ⁽¹⁾	252,267	557,867	621,946	(734,278)	(319,730)		
Period-end cumulative derivative forward value gains (losses) ⁽¹⁾	343,098	90,831	(467,036)	(1,088,982)	(354,704)		
AOCI attributable to derivatives ⁽²⁾	1,001	1,341	1,718	2,130	2,571		
Subtotal	344,099	92,172	(465,318)	(1,086,852)	(352,133)		
Include:							
Subordinated deferrable debt	1,283,436	986,518	986,315	986,119	986,020		
Subordinated certificates	1,223,126	1,234,161	1,254,660	1,339,618	1,357,129		
Subtotal	2,506,562	2,220,679	2,240,975	2,325,737	2,343,149		
Adjusted total equity	\$ 4,751,712	\$ 4,270,476	\$ 4,106,172	\$ 4,061,411	\$ 3,999,164		

⁽¹⁾ Represents consolidated total derivative forward value gains (losses).

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

Table 37 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, 2023.

⁽²⁾ Represents the AOCI amount related to derivatives. See "Note 11—Equity" for the additional components of AOCI.

Table 37: Debt-to-Equity Ratio and Adjusted Debt-to-Equity Ratio

	May 31,								
(Dollars in thousands)	2023	2022	2021	2020	2019				
Debt-to-equity ratio:									
Total liabilities	\$31,422,811	\$ 29,109,413	\$28,238,484	\$27,508,783	\$25,820,490				
Total equity	2,589,249	2,141,969	1,399,879	648,822	1,303,882				
Debt-to-equity ratio (1)	12.14	13.59	20.17	42.40	19.80				
Adjusted debt-to-equity ratio:									
Adjusted total liabilities ⁽²⁾	\$28,678,302	\$ 26,629,324	\$25,273,384	\$23,777,823	\$22,931,626				
Adjusted total equity ⁽²⁾	4,751,712	4,270,476	4,106,172	4,061,411	3,999,164				
Adjusted debt-to-equity ratio (3)	6.04	6.24	6.15	5.85	5.73				

⁽¹⁾ Calculated based on total liabilities at period-end divided by total equity at period-end.

Total CFC Equity and Members' Equity

Members' equity excludes the noncash impact of derivative forward value gains (losses) and foreign currency adjustments recorded in net income and amounts recorded in accumulated other comprehensive income. Because these amounts generally have not been realized, they are not available to members and are excluded by the CFC Board of Directors in determining the annual allocation of adjusted net income to patronage capital, to the members' capital reserve and to other member funds. Table 38 provides a reconciliation of members' equity to total CFC equity as of May 31, 2023 and 2022. We present the components of accumulated other comprehensive income in "Note 11—Equity."

Table 38: Members' Equity

	May 31,				
(Dollars in thousands)		2023	2022		
Members' equity:					
Total CFC equity	\$	2,562,059	\$	2,114,573	
Exclude:					
Accumulated other comprehensive income		8,343		2,258	
Period-end cumulative derivative forward value gains attributable					
to CFC ⁽¹⁾		342,624		92,363	
Subtotal		350,967		94,621	
Members' equity	\$	2,211,092	\$	2,019,952	
	\$	350,967	\$	94,621	

⁽¹⁾Represents period-end cumulative derivative forward value gains for CFC only, as total CFC equity does not include the noncontrolling interests of the variable interest entities NCSC and RTFC, which we are required to consolidate. We report the separate results of operations for CFC in "Note 16—Business Segments." The period-end cumulative derivative forward value total gain amounts as of May 31, 2023 and 2022 are presented above in Table 36.

⁽²⁾ See Table 36 above for details on the calculation of these non-GAAP financial measures and the reconciliation to the most comparable U.S. GAAP financial measures.

⁽³⁾ Calculated based on adjusted total liabilities at period-end divided by adjusted total equity at period-end.