

CREDIT OPINION

30 November 2017

Update

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RATINGS

National Rural Utilities Coop. Finance Corp.

Domicile	Dulles, Virginia, United States
Long Term Rating	A2
Type	Senior Unsecured - Dom Curr
Outlook	Stable

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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National Rural Utilities Coop. Finance Corp.

Credit Update of Key Rating Factors

Summary

The sound credit profile of National Rural Utilities Cooperative Finance Corporation (CFC) benefits substantially from its consistently high quality asset portfolio and its unique market position as the dominant lender to electric cooperatives. Its excellent competitive position includes an ability to effectively price member loans to cover costs and earn targeted margins, an exceptional track record of managing credit restructurings, and a strong risk management program. The credit profile is also underpinned by a consistent, above average performance of CFC's loan portfolio, along with management's success in substantially shrinking the higher risk telecommunications loan portfolio to a very modest level, lowering the degree of single obligor exposure across the loan portfolio and reducing the cooperative's reliance on capital markets to fund its business. The credit profile is also supported by what we consider to be the above average credit quality of CFC's electric cooperative member base, with most of its unrated borrowers exhibiting strong investment grade credit characteristics. The most pressing credit challenge for CFC is the degree of leverage within the capital structure, which has been creeping upward and which we consider high, even though somewhat tempered by the very strong performance of the loan portfolio. Even as CFC remains committed to restoring an improving trend for its leverage ratio going forward, we expect the continuing high leverage, by our calculations, to be a pressing credit risk factor.

Credit Strengths

- » Loan and guarantee portfolio dominated by rural electric cooperatives (RECs)
- » Loan pricing flexibility enables CFC to meet and often exceed targeted coverage ratios
- » July 1, 2016 closing on sale of Caribbean Asset Holdings (CAH)
- » Consistently above average credit quality loan portfolio with no non-performing loans at August 31, 2017
- » Unique franchise provides strong competitive position
- » Diversification of funding sources allows for less reliance on capital markets

Credit Challenges

- » Single industry concentration
- » High leverage which is challenging to reduce particularly when loan growth is strong

Rating Outlook

The stable rating outlook incorporates our view that any loan growth among RECs will help maintain strong asset quality within the loan portfolio, particularly since the telecom loan portfolio has become a de-minimus portion of the total loan portfolio. The stable outlook also considers CFC's ongoing commitment to gradually lower leverage, and an expectation that CFC will maintain sufficient liquidity as well as access to private sources of funding to mitigate the firm's reliance on wholesale funding. The rating is constrained by relatively high leverage, and single industry and single obligor concentration.

Factors that Could Lead to an Upgrade

- » Although CFC has satisfactorily addressed its past exposure to certain foreclosed assets following the closing on the sale of CAH in the first quarter of fiscal year (FY) 2017, the firm's relatively high leverage, which has modestly increased in recent periods after several years of improvement, limits the prospect of a rating upgrade within the next twelve months.
- » Prospects for a positive rating action exist beyond the 12-month horizon if the Moody's adjusted debt to adjusted capital funds metric improves to be well under 7.0x on a sustainable basis, liquidity remains strong, alternatives to wholesale capital market funding increase in number and depth, while CFC continues to maintain a relatively clean portfolio with no new large non-performing assets. This is particularly the case if the CFC loan portfolio can continue to demonstrate an ability to produce stable financial results which exceed the 1.1x adjusted times interest earned ratio (TIER) target on a consistent basis.

Factors that Could Lead to a Downgrade

- » A negative rating action could result if one or more new large problem loans surfaced within CFC's portfolio;
- » If the cooperative's strategy began to focus on growing its lending to non-core electric cooperative markets;
- » If ongoing capital raising and capital retention efforts materially increase CFC's leverage on a sustained basis;
- » If CFC's access to private sources of long-term capital become constrained;
- » If CFC fails to maintain an adequate liquidity profile, including ample access to multi-year bank credit facilities.

Key Indicators

Exhibit 1

	2017	2016	2015	2014	2013	2012	2011	2010	2009
Loans (\$billions) [1]	24.37	23.15	21.46	20.47	20.3	18.91	19.33	19.34	20.19
Adjusted Capital Funds (\$billions) [1][2]	2.80	2.77	2.70	2.66	2.74	2.55	2.6	2.49	2.36
Adjusted TIER(x) [1][3]	1.16	1.22	1.13	1.21	1.29	1.1	1.21	1.12	1.1
Adjusted Debt / Adj. Capital Funds (NIC) x [1][2][4]	7.53	7.40	7.37	7.19	7.15	7.1	7.13	7.22	7.83
Loan Loss Reserve (\$millions) [1][5]	37	33	34	56	54	143	161	593	623
Loan Loss Reserve / Loans (%) [1][5]	0.15	0.14	0.16	0.27	0.27	0.76	0.83	3.07	3.09

[1] Fiscal year ends May 31st. [2] Members' Equity is adjusted for derivative forward value and foreign currency adjustments. [3] Net margin adjusted to exclude derivative forward value and foreign currency adjustments. Cost of funds adjusted to include derivative cash settlements. [4] Members capital securities receive equity credit, as determined by Moody's. [5] Excludes loss reserves for guarantee portfolio of \$1M, \$1M, \$1M, \$2M, \$2M, \$6M, \$6M, \$6M and \$12M for 2017, 2016, 2015, 2014, 2013, 2012, 2011, 2010, and 2009.

Source: Moody's Investors Service, CFC SEC filings

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moody's.com for the most updated credit rating action information and rating history.

Corporate Profile

Headquartered in Dulles, Virginia, CFC is a member-owned cooperative association, non-bank financial institution exclusively serving rural electric and telecommunication utilities. CFC was organized in April 1969 by RECs to provide an economical alternative to federally subsidized funds from the Rural Utilities Service (RUS) of the U.S. Department of Agriculture.

Loans to telecommunication members are made through Rural Telephone Finance Cooperative (RTFC), a private cooperative association formed to provide financing for its rural telecommunications members and affiliates. Loans are also made through National Cooperative Services Corporation (NCSC), a member-owned cooperative association, which primarily provides specialized financing and services to entities owned, operated and controlled by RECs.

Detailed Credit Considerations

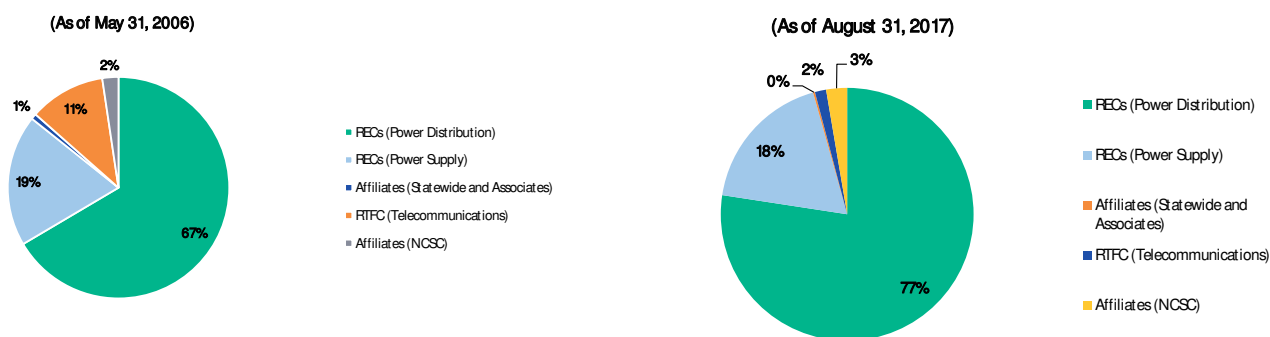
Exceeding the TIER target has long been the norm

CFC's goal as a member-owned cooperative lender is to set rates at levels that will provide its members with the lowest cost financing while earning a margin consistent with defined financial targets to support its overall credit position. Loans and guarantees supplied to members are priced to cover its funding costs, general and administrative expenses, the loan loss provision, and a modest margin in order to maintain an adjusted TIER of at least 1.10x. CFC's adjusted TIER typically exceeds its minimum target and for the three months ended August 31, 2017 was 1.16x, the same level for the three-months ended August 31, 2016 and comfortably in excess of the target. At fiscal year ended (FYE) May 31, 2017, CFC's adjusted TIER was 1.16x compared to the 1.22x adjusted TIER at FYE 2016 and the average of 1.17x over the past three fiscal years. The modest year over year reduction in adjusted TIER for FYE 2017 largely reflects the decrease in adjusted net interest income and a negative variance in the provision for loan losses. CFC's ability to strengthen net interest income and related margins on a sustained basis is expected to improve during the calendar year 2019 with the maturity of a sizeable, high coupon collateral trust bond expected to mature in November 2018.

Loans to low-risk RECs dominate the consolidated loan portfolio

Exhibit 2

Total Loans & Guarantees Portfolio



Source: Moody's Investors Service, CFC SEC filings

We view the electric distribution segment, which is CFC's principal lending market, to be among the least volatile and most resilient across the electric power sector owing to the relatively low risk nature of operating these businesses, the generally steady capital requirements, the conservative capital structure employed by most RECs and the ability of the majority of CFC's members to pass through cost increases to their customers without first obtaining state regulatory approval. CFC's members weathered the recession period of several years ago without experiencing excessive financial stress and many of them are showing signs of steady, albeit gradual signs of growth, even after the effects of customers' efficiency and conservation efforts. As of August 31, 2017, of the approximate 99% of CFC's loan portfolio with RECs and entities owned, operated and controlled by RECs, about 78% or \$19.1 billion of loans were with rural electric distribution cooperatives, a segment that we consider to have strong investment grade credit qualities. The majority of the remaining loans are to generation and transmission (G&T) cooperatives. Of the G&T cooperatives rated by Moody's, most of whom are CFC's borrowers, the vast majority have investment grade credit qualities.

During FY 2017, CFC experienced \$1.204 billion in net new loan demand, comprised of an increase of \$1.151 billion from the lowest risk distribution cooperatives and an increase of \$0.104 billion from G&T cooperatives, partially offset by a \$0.067 billion decrease in loans to NCSC. Collectively, the incremental new loan activity during 2017 was a credit positive from a portfolio perspective. The new loans to distribution cooperatives were used to make additional capital investments and to refinance loans from other lenders. The loan volume was also influenced by the addition of 3 more "100% borrowers" in FY 2017, bringing CFC's total number of such borrowers to 224. Based on the latest SEC filings, we expect further increases to the outstanding loan balances during FY 2018.

CFC has proactively reduced its lending to the riskier telecommunications sector, a credit positive initiative, as total outstanding loans have declined by well over \$4.0 billion since FY 2003 to \$352.5 million at August 31, 2017, representing just 1% of CFC's total outstanding loan portfolio. That said, the affiliate RTFC, did provide lender financing of \$60 million to the purchaser of CAH.

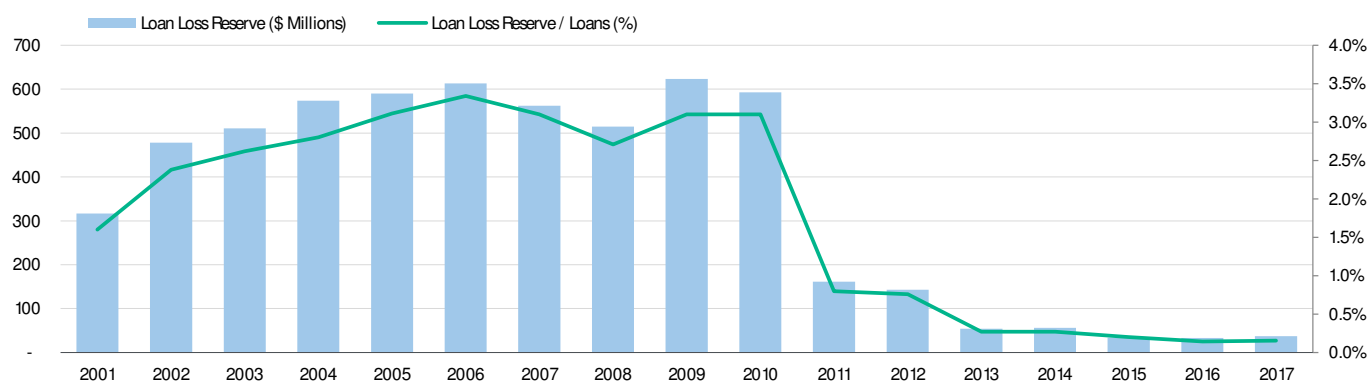
Loan pricing flexibility facilitates resetting of CFC margins

CFC's credit quality benefits from its ability to reset margins sufficiently to maintain its targeted adjusted TIER of 1.10x. CFC manages this policy by having terms and conditions in nearly all of its customers' loan documents that allow for a variety of re-pricing mechanisms. CFC again exhibited a high loan retention rate in FY 2017 when it retained 98% of about \$987 million of loans that repriced during that fiscal year. The loan retention rate for fiscal years 2015-17 averaged 97%. Over the next eight quarters, approximately \$2.6 billion of CFC's fixed rate loan portfolio will re-price based upon the terms and conditions set forth in the specific loan documents. CFC's leading position in the market place coupled with the flexibility of its electric cooperative borrowers to set rates as necessary to cover their expenses and maintain required covenants helps to effectively carry out this strategy.

Improvement in loan portfolio performance contributes to declines in loan loss reserves

Exhibit 3

Loan Loss Reserve 2001-2017



Source: Moody's Investors Service; CFC SEC filings

In a credit positive development during July 2016, CFC completed the sale of its telecommunications and cable television operations held by subsidiary CAH to a subsidiary of ATN International, Inc. for net proceeds of approximately \$109 million. Completion of the transaction in a manner that maximized loan-loss recoveries satisfied a key objective for CFC since Innovative Communications Corp. (ICC) defaulted on its loan in 2004. It also marked the end of an expensive and litigious debt restructuring, allowing CFC to exit its foray into riskier telecom cooperative lending with its balance sheet and liquidity intact.

Even with the substantial loan loss recorded from CAH and related loans to ICC, CFC has a strong loan loss history. Since the cooperative's inception in 1969, CFC has had about \$595.7 million in cumulative net losses on its loan portfolio prior to recovery, with about \$432.6 million related to the telecom portfolio and about \$163.1 million related to the electric portfolio. CFC reports that during this 48-year history there have been 16 defaults and six losses in the electric utility portfolio and that net write-offs for the electric portfolio totaled \$86 million. The low loan write-off history demonstrates the historically high credit quality of CFC's portfolio, the strength of the collateral typically pledged to CFC, the essentiality of the electric distribution business, and the ability of CFC to take a long-term view concerning debt restructurings due to its unique relationship with its customer base and the fact that CFC does not have profit-driven goals.

At August 31, 2017 (the end of first quarter for FY 2018) and at FYE 2017, CFC reported \$12.973 million and \$13.173 million of troubled debt restructuring (TDR) loans, respectively, in both instances comprising just 0.05% of its total loans outstanding. All of CFC's TDR loans for the same two periods were performing according to the terms of their respective restructured loan agreement and on accrual status as of the respective reported dates. By comparison, CFC had \$17.314 million of TDR loans at FYE 2016, representing about 0.07% of total loans outstanding. Of this amount, CFC reported \$3.506 million (or 0.01% of its total loan portfolio) as nonperformers and on

nonaccrual status. For a historical perspective, the level of non-accrual loans at FYE 2011 was \$465.3 million (or 2.41% of CFC's loan portfolio) primarily reflecting a large restructured loan to CoServ. On September 13, 2012, CoServ fully repaid the loan.

During the first quarter of FY 2018, which ended August 31, 2017, CFC's allowance for loan losses was \$37.078 million, reflecting a slight decrease compared to \$37.376 million at FYE 2017. These amounts represented 0.15% of CFC's total loans outstanding as of both ending period dates. The slight decrease was primarily attributable to a decline in the specific reserve for loans individually evaluated for impairment. For the past five fiscal years 2013-2017, CFC's allowance for loan losses as a percentage of its total loans outstanding has ranged from 0.14%-0.28%.

Exhibit 4

Loan Security as of August 31, 2017

Loan Security (\$ Amounts in Billions)	Secured	Secured as % of Segment	Unsecured	Unsecured as % of Segment
CFC	21.82	92%	1.80	8%
NCSC	0.50	76%	0.16	24%
RTFC	0.34	97%	0.01	3%
Total Loans	22.66	92%	1.97	8%

Source: Moody's Investors Service, CFC SEC filings

At August 31, 2017, about 92% of CFC's total loan portfolio was secured. Loans are typically secured on parity with other secured lenders (primarily RUS), if any, by a mortgage lien on the borrower's total assets and a pledge of future revenues with certain exceptions typical for utility mortgages. This strong security position has helped to provide high recovery values for CFC in past problem loan restructurings and often enables CFC to receive the payment of interest and principal while a borrower is operating in bankruptcy. The majority of CFC's unsecured loans reflect primarily short-term lines of credit with RECs.

An additional feature in CFC's portfolio is the fact that the vast majority of CFC loans amortize principal payments over time. To that end, approximately \$1.3 billion of principal is expected to amortize over the next 12 months. In addition to providing CFC with a predictable source of annual cash flow, the loan amortization feature improves the overall credit quality of the CFC loan portfolio as it reduces individual cooperative's annual refinancing risk while gradually reducing leverage across the electric cooperative system.

Unique franchise provides strong competitive position

CFC enjoys strong support from its member cooperatives as it provides them with attractive and customized financing alternatives. The value of the CFC franchise is evident through the broad participation by the RECs in CFC's offering of member capital securities as well as the steadily increasing members' investment amount that helps to fund CFC's operations. CFC's unique franchise position is magnified by the financial institution's status as a tax-exempt cooperative association with a primary operating objective to provide low cost funding to its members. As such, operating margin and earnings profitability metrics, which are important factors in assessing the credit quality of for-profit financial institutions, have limited value when assessing CFC's credit risk profile.

Steady improvement in risk management and single obligor risk

CFC continues to strengthen its risk management capabilities and strives to maintain a balance between the credit needs of its members and the requirement to insure sound credit quality of the loan and guarantee portfolio. In addition to maintaining an internal risk rating system and setting exposure limits for each borrower, CFC also retains an independent bank consulting firm to provide an annual third party assessment of the functioning of the risk rating system.

Additionally, CFC has increased its ability to syndicate new and existing loan transactions and has developed expertise in selling portfolios of loans to targeted investors. With respect to loan sales, at August 31, 2017, CFC had sold 883 individual loans (\$1.550 billion in aggregate) to Farmer Mac and was servicing loans aggregating approximately \$1.042 billion.

Furthermore, as part of CFC's strategy to manage its credit risk exposure, the cooperative executed a long-term standby purchase commitment agreement with Farmer Mac effective August 31, 2015, as amended on May 31, 2016. This agreement allows CFC to designate certain loans to be covered under the commitment, subject to approval by Farmer Mac, and if any such designated loan subsequently goes into material default for at least 90 days, upon request by CFC, Farmer Mac must purchase such loan at par value. CFC designated, and Farmer Mac approved loans that had an aggregate outstanding principal balance of \$802 million as of August 31,

2017 compared with \$843 million at May 31, 2017. No loans had been put to Farmer Mac for purchase, pursuant to this agreement, as of August 31, 2017.

While single obligor risk is a chronic characteristic of this issuer, we observe that for the past seven fiscal years, none of the top ten single obligors were telecommunications borrowers and that of the top twenty borrowers for the past five fiscal years, none were telecom firms. In contrast, our historical calculations at FYE 2004 placed five of the top ten and six of the top 20 CFC loan exposures with telecommunications borrowers.

Single industry concentration

At August 31, 2017, about 99% of CFC's loans and guarantees were made to RECs and their affiliates. As such, trends in the rural electric utility's aggregate credit quality will directly impact CFC. Over the next several years, RECs will face additional challenges, all of which have the potential to increase the cost of providing electric service to rural areas. Since many of the larger generation cooperatives still rely on coal as a primary fuel source for generation, substantial incremental increases in capital requirements to address any future environmental mandates still represent a credit negative overhang. Federal renewable energy standards could also be implemented which would likely add to the cost of electricity. That said, we fully expect any incremental cost to be passed along to the distribution cooperatives and ultimately to the end-use customer. The RECs' ability to seamlessly pass along higher operating and capital costs to their customer base is an important factor in maintaining credit quality across the RECs and at CFC.

CFC is maintaining access to diverse sources of funding

As with many finance companies, CFC is dependent upon access to the long-term and short-term capital markets for refunding debt maturities and financing its business. In addition to annual operating cash flow, member loan repayments approximate \$1.3 billion for the next twelve months and are expected to be in about \$1.3 billion each year for the next three years.

At August 31, 2017, CFC's members provided about \$4,401 million of funding, which represented about 19% of total debt outstanding. Of the \$4,401 million, about \$2,365 million represented short-term debt funding through \$1,050 million in members' commercial paper, \$586 million in members' investments in the daily liquidity fund and \$729 million in the members' select notes program. We consider the members' investments to be a "sticky" form of core funding. CFC uses the dealer commercial paper market to supplement any short-term funding requirements.

Since FY 2006, longer-term funding sources have been supplemented through two separate and successful private programs. Under the Guaranteed Underwriter Program (GUP), CFC has been able to secure almost \$6.548 billion of twenty year funding from the Federal Financing Bank (FFB) of the US Treasury, of which about \$5.073 billion was outstanding at August 31, 2017. Access to the GUP provides CFC with a reliable, low-cost source of long-dated financing as current GUP debt maturities occur in 2025 through 2037. As of August 31, 2017, CFC had up to \$625 million available under the GUP. Moreover, on November 9, 2017, CFC closed on an additional commitment from the RUS to guarantee a loan from the FFB for an additional \$750 million commitment under the GUP, bringing the total available amount under the GUP to \$1,375 million.

In addition, starting in FY 2007, CFC established a relationship with Farmer Mac, where Farmer Mac now provides about \$4.5 billion in potential funding to CFC through a note purchase facility that expires January 11, 2020 but can be automatically extended for an additional year on the anniversary date of the closing. At August 31, 2017, CFC had availability of up to about \$2.0 billion of this facility. Also, since July 31, 2015, CFC has had a second committed \$300 million revolving note purchase agreement with Farmer Mac under which it can borrow up to the committed amount at any time through July 31, 2018. As of August 31, 2017, the full \$300 million was available. CFC has indicated that it does not intend to renew this agreement.

Notwithstanding CFC's relationship with its members, Farmer Mac, and its access to FFB funding under the GUP, CFC still remains dependent upon wholesale short-term and long-term funding. CFC's primary sources of long-term capital market funding include secured collateral trust bonds (CTBs), unsecured medium term notes (MTNs), and subordinated deferrable debt.

For more information on capital market access, see liquidity section below.

Leverage has crept upward in recent years to fund loan growth but opportunities exist to reverse this trend and management remains committed to improving leverage

Due to the tax-exempt status of its business, CFC does not have common stock in its capital structure. In its place, we view the deeply subordinated capital term certificates as equity.

Although CFC largely funds incremental loan volume with debt, it remains committed to reducing leverage over time. That said, after largely holding leverage in check during fiscal years 2011-2014, CFC's ratio of adjusted funded debt to adjusted members' equity (according to Moody's calculations) has been increasing for the past three fiscal years and stood at 7.72x at the end of the first quarter of FY 2018 (August 31, 2017). CFC's leverage increased in FY 2017 and again in the first quarter of FY 2018 owing to financing of new loan growth and the retirement of patronage capital. By comparison, CFC's leverage increased in fiscal year 2015 due to an impairment taken from the CAH asset disposition, incremental debt outstanding to fund new loan growth and a decline in equity as CFC members subordinated certificates outstanding declined by about \$107 million. The increase in CFC's leverage was less pronounced in FY 2016, owing primarily to the benefits of partial equity treatment afforded to additional subordinated deferrable interest debentures issued and an increase in total members' equity during the fiscal year. The modest loan growth trend is expected to continue during FY 2018 resulting in additional modest increment to CFC's leverage. Even as the leverage ratio has increased to fund loan volume growth, the leverage ratio is still slightly better today compared to the 7.9x exhibited at FYE 2008, owing to members investing in member capital securities, the increase in excess margin set aside to permanent member capital reserve, the change in CFC's equity retention plan, the additional equity it transferred after revising its loan loss allowance, and the benefits of partial equity treatment afforded to additional subordinated deferrable interest debentures issued in FY 2016. We anticipate an opportunity for CFC to reverse its increasing leverage trend beginning towards the end of calendar year 2018 when the cooperative's adjusted net interest income will very likely benefit from replacing the highest coupon debt maturing in that year under an assumed substantially lower interest rate. The leverage metric averaged 7.3x during fiscal years 2013-2017.

Liquidity Analysis

CFC has a short-term rating of Prime-1 for its commercial paper and its variable rate tax-exempt demand bonds. While CFC has alternative funding sources from its members and from private sources, it remains dependent on the capital markets as a funding source. In addition to annual operating cash flow, member loan amortization payments are expected to approximate \$1.3 billion for the next twelve months and are expected to be about \$1.2 billion annually for the next few years.

CFC is an active market participant and FY 2017 funding was sourced across almost all components of its capital structure. During various transactions in FY 2017, CFC raised \$650 million of MTNs, \$197 million of InterNotes, and \$1.25 billion of CTBs. CFC also advanced a total of \$250 million under the GUP and closed a previously approved \$375 million additional commitment under the GUP. Finally, during FY 2017 CFC issued a \$250 million 30-year note and a \$100 million short-term note under the Farmer Mac note purchase agreements.

During the year to date in FY 2018, CFC issued \$350 million of 5-year fixed-rate MTNs, advanced \$100 million under the GUP and closed on an additional commitment of up to \$750 million of funding under the GUP. CFC continues to have access to substantial private sources of capital, including \$1,375 million under the GUP and \$2.3 billion under the Farmer Mac facilities.

At August 31, 2017, CFC had a dealer commercial paper balance of approximately \$510 million, and no bank bid notes outstanding. With the \$510 million dealer commercial paper outstanding at August 31, 2017, and less than \$1.0 billion as of the past three FYE closing dates, CFC has been maintaining a cushion compared to its stated intent to manage its short-term wholesale funding risk by maintaining dealer commercial paper and bank bid notes within an approximate range between \$1,000 million and \$1,250 million for the foreseeable future. While we anticipate CFC to continue utilizing commercial paper as a source of funding during the current low short-term interest rate environment, we expect any future peak outstanding dealer commercial paper and bank bid notes outstanding will remain in line with or better than the cooperative's previously noted intended range.

NRUC proactively manages its various committed bank facilities which we consider to be its principal form of external liquidity support and these arrangements supplement \$396 million of cash, cash equivalents and time deposits as of August 31, 2017. Through an amendment and extension process completed effective November 20, 2017, CFC has two committed credit facilities aggregating \$3,085 million. Specifically, CFC has a \$1,492.5 million facility with a November 20, 2020 expiration date and a \$1,592.5 million facility with a November 20, 2022 expiration date. This process results in an overall relatively modest reduction in available liquidity

of about \$80 million. With these facilities in place, the total amount of commercial paper that can be issued by CFC is capped at the aforementioned \$3,085 million. These credit facilities do not contain a MAC clause but have financial covenants which are set at levels that provide substantial cushion. The agreements require an adjusted TIER average of 1.025x for the last six quarters, a minimum adjusted TIER for the most recent fiscal year of 1.05x, and a maximum senior debt to equity ratio to not be more than 10.0x, in all cases as defined in the agreements. At August 31, 2017, CFC was comfortably in compliance with these covenants with an adjusted TIER of 1.16x for the most recent FYE 2017, an average adjusted TIER over the six most recent fiscal quarters of 1.17x and a senior debt to equity ratio of 5.77x.

At August 31, 2017, CFC was the guarantor and liquidity provider for \$402 million of tax-exempt bonds issued for its member cooperatives. During the FYE May 31, 2017 and the first quarter of fiscal year 2018, which ended August 31, 2017, no tax-exempt bonds were put to CFC to purchase pursuant to its obligation as liquidity provider.

Prospectively, for the one year period from October 2017 through September 2018, CFC reported about \$1.7 billion of notes and bonds maturing, of which approximately \$423 million are comprised of Member MTNs, \$54 million is due under the GUP, and \$295 million is due under the Farmer Mac program, leaving approximately \$4 million of InterNotes, \$200 million of maturing Dealer MTNs and \$705 million of CTBs. The larger components of the remaining near term debt maturities are \$700 million of CTBs due in February 2018, \$200 million of dealer MTNs due in April 2018 and \$250 million of Farmer Mac notes due in September 2018. The \$700 million of CTBs due in February 2018, although a sizable sum, is well within CFC's ability to manage given its large investor following and demonstrated ability to access the market. The balance of the near term maturities are of a much more manageable size.

Rating Methodology

The methodologies used in these ratings were Finance Company Global Rating Methodology published in December 2016, and U.S. Electric Generation & Transmission Cooperatives published in April 2013. Please see the Credit Policy page on www.moody.com for a copy of these methodologies.

Ratings

Exhibit 5

Category	Moody's Rating
NATIONAL RURAL UTILITIES COOP. FINANCE CORP.	
Outlook	Stable
Bkd LT IRB/PC	A2
Senior Secured	A1
Senior Unsecured	A2
Subordinate	A3 (hyb)
Commercial Paper	P-1
Bkd Other Short Term	VMIG 1

Source: Moody's Investors Service

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