MOODY'S
INVESTORS SERVICE

CREDIT OPINION
26 November 2019

Update

Rate this Research

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.

Contacts

Kevin G. Rose +1.212.553.0389
VP-Senior Analyst
kevin.rose@moodys.com

A. J. Sabatelle +1.212.553.4136
Associate Managing Director
angelo.sabatelle@moodys.com

Jose Mendez +1.212.553.4783
Analyst
jose.mendez@moodys.com

National Rural Utilities Coop. Finance Corp.

Credit Update of Key Rating Factors

Summary

National Rural Utilities Cooperative Finance Corporation's (CFC; A2 stable) credit profile benefits from its unique franchise position by serving as a dominant, low-cost, tax-exempt lender to the financially stable rural electric cooperative sector and maintaining a strong loan loss history. CFC's credit profile also takes into account its loan pricing flexibility which helps it meet and frequently exceed targets for coverage ratios and successful diversification of loan funding sources to supplement a well-established ability to access the wholesale short-term and long-term debt capital markets. Our view of CFC's credit profile also considers the fact that many of the larger generation and transmission cooperatives in its loan portfolio still rely extensively on coal fired generation which poses elevated carbon transition risk for those entities and is a negative credit overhang for CFC. CFC's continuing high leverage will likely remain its most pressing credit challenge even after the repayment of high cost debt during 2018 which should enhance the cooperative's future net interest income.

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

» Consistently above-average credit quality loan portfolio with no non-performing loans at August 31, 2019

» Unique franchise provides strong competitive position

» Multiple funding sources allow 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 reflects CFC's primary focus on loans to RECs to help maintain strong asset quality within the loan portfolio, particularly as the telecom loan portfolio remains a de-minimus portion of the total loan portfolio. The stable outlook also considers CFC's ongoing commitment to gradually reduce leverage, while maintaining a good liquidity profile and expanded access to private sources of funding to offset the firm's reliance on wholesale funding. CFC's high leverage, single industry concentration and single obligor concentration remain rating constraints.

Factors that Could Lead to an Upgrade

- CFC's relatively high leverage, which has modestly increased in recent periods after several years of improvement, as well as its single industry and single-obligor concentration collectively limit the prospect of a rating upgrade within the next twelve months.
- Prospects for a positive rating action exist beyond the next 12-months if the Moody's adjusted debt to adjusted capital funds metric improves to be well under 7.0x on a sustained basis, liquidity remains strong, and 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 debt capital raising efforts and capital rotation policies materially increase CFC's leverage;
- 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

	2019	2018	2017	2016	2015	2014	2013	2012	2011
Loans ($billions) [1]	25.92	25.18	24.37	23.15	21.46	20.47	20.3	18.91	19.33
Adjusted Capital Funds ($billions) [1][2]	3.01	2.91	2.80	2.77	2.70	2.66	2.74	2.55	2.6
Adjusted TIER (x) [1][3]	1.19	1.17	1.16	1.22	1.13	1.21	1.29	1.1	1.21
Adjusted Debt / Adj. Capital Funds (NIC) x [1][2][4]	7.53	7.76	7.53	7.40	7.37	7.19	7.15	7.1	7.13
Loan Loss Reserve ($millions) [1][5]	18	19	37	33	34	56	54	143	161
Loan Loss Reserve / Loans (%) [1][5]	0.07	0.07	0.15	0.14	0.16	0.27	0.27	0.76	0.83

[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, $1M, $2M, $2M, $6M, $6M, and $6M for 2019, 2018, 2017, 2016. 2015, 2014, 2013, 2012, and 2011.
Source: Moody's Investors Service, CFC SEC filings

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

CFC consistently exceeds its 1.10x TIER target

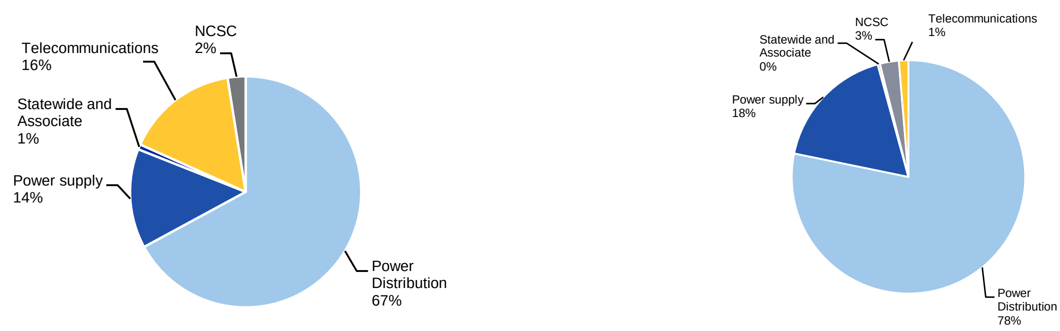
As a member-owned cooperative lender, CFC's goal is to set rates that provide its members with the lowest cost financing while also earning a margin consistent with defined financial targets to support sound credit quality. Members' loans and guarantees are priced to cover CFC's funding costs, general and administrative expenses, the loan loss provision, and a modest margin 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, 2019 was 1.27x compared to 1.13x at August 31, 2018, in both instances comfortably in excess of the target. At fiscal year ended (FYE) May 31, 2019, CFC's adjusted TIER was 1.19x compared to the 1.17x adjusted TIER at FYE 2018 and the average of 1.17x over the past three fiscal years. As expected, CFC's net interest income and related margins began to benefit on a sustainable basis beginning in the calendar year 2019, largely because of the replacement of a sizeable 10.375% collateral trust bond that matured in November 2018 with debt at substantially lower rates.

The consolidated loan portfolio is heavily weighted towards low-risk RECs

Exhibit 2

Total Loans Portfolio

As of May 31, 2005 (left), and August 31, 2019 (right)



Source: Moody's Investors Service; CFC SEC Filings

CFC's principal lending market is the REC distribution segment, which we consider to be among the least volatile and most resilient across the electric power sector. The REC distribution segment conducts relatively low risk business activities, tends to have generally steady capital requirements and employ conservative capital structures, and the majority benefit from full flexibility in setting their customers' rates. As of August 31, 2019, of the approximate 99% of CFC's loan portfolio with RECs and entities owned, operated and controlled by RECs, about 78% or $20.5 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 2019, CFC experienced $738 million in net new loan demand, primarily comprised of an increase of $603 million from the lowest risk distribution cooperatives, and an increase of $182 million and $14 million from G&T cooperatives and Statewide and associate entities, respectively,. The increases were partially offset by a $43 million decrease in loans to NCSC and an $18 million decrease in loans to RTFC. Collectively, the incremental new loan activity during 2019 was a credit positive from a portfolio perspective. The majority of new loans to distribution and G&T 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 2019, bringing CFC's total number of such borrowers to 238. Based on the latest SEC filings, CFC expects further modest increases to its outstanding loan balances during FY 2020, but somewhat less than recent years because of less refinancing opportunities and many of the cooperatives are indicating somewhat reduced financing needs.

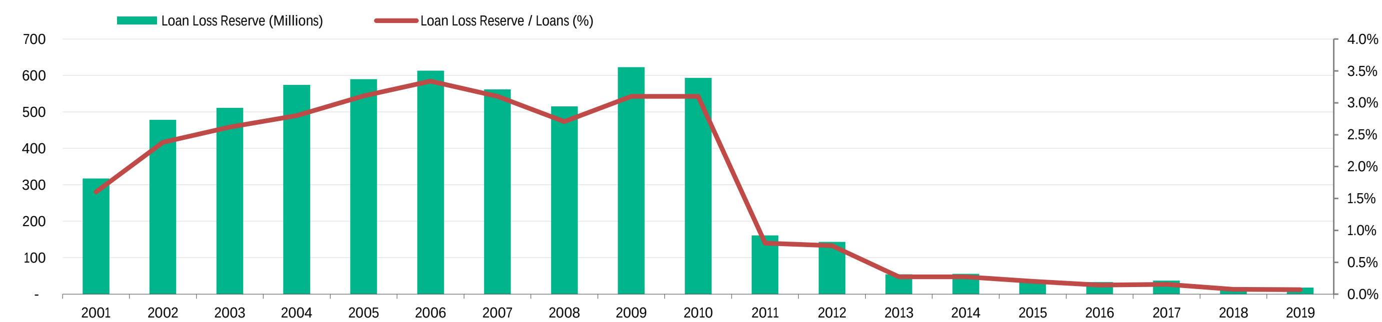
CFC is steadfast in its commitment to minimize its lending to the riskier telecommunications sector, a credit positive initiative which began over 15 years ago. The total outstanding telecommunications loans have declined by well over $4.0 billion since FY 2003 with about $351.1 million outstanding at August 31, 2019, representing just 1% of CFC's total outstanding loan portfolio.

CFC resets margins through flexible loan pricing

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 2019 when it retained 91% of about $761 million of loans that repriced during that fiscal year. The loan retention rate for fiscal years 2017-19 averaged 96%. Over the next eight quarters from August 31, 2019, approximately $919 million of CFC's long-term loan portfolio will re-price based upon the terms and conditions set forth in the specific loan documents. CFC's leading position in the marketplace 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.

High quality loan portfolio evident through declining trend in loan loss reserves

Exhibit 3
Loan Loss Reserve 2001-2019



Source: Moody's Investors Service; CFC SEC Filings

Even with the substantial loss recorded following the 2016 sale of CFC's telecommunications and cable television operations held by subsidiary formerly held by Caribbean Asset Holdings (CAH) and related loans to Innovative Communications Corp. (ICC), CFC has a strong loan loss history. The sale of CAH was completed in a manner that maximized loan-loss recoveries and satisfied a key objective for CFC since ICC defaulted on its loan in 2004. The transaction also marked the end of an expensive and litigious debt restructuring, allowing CFC to exit its foray into rural telecom lending with its balance sheet and liquidity intact. Since the cooperative's inception in 1969, there have been 31 defaults and about $513 million of cumulative net charge-offs on its loan portfolio. Sixteen defaults occurred in the electric portfolio and fifteen related to the telecom portfolio. Despite the relatively even number of defaults between the telecom and electric portfolios, more than 80% of the cumulative net charge-offs were related to the riskier telecom loans. The overall 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-maximization goals.

At August 31, 2019 (the end of first quarter for FY 2020) and at FYE 2019, CFC had no non-performing loans, and reported $11.222 million and $11.853 million of troubled debt restructuring (TDR) loans, respectively, comprising just 0.04% and 0.05%, respectively, 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.

At August 31, 2019, CFC's allowance for loan losses was about $17.6 million, compared to $17.5 million at FYE 2019 and $18.7 million at August 31, 2018. The amounts for FYE 2019 and August 31, 2019 represent about 0.07% of CFC's total loans outstanding as of both ending period dates. For the past six fiscal years 2014-2019, CFC's allowance for loan losses as a percentage of its total loans outstanding has declined from 0.27% to 0.07%.

Exhibit 4
Loan Security as of August 31, 2019

Loan Security ($ Amounts in Billions)	Secured	Secured as % of Segment	Unsecured	Unsecured as % of Segment
CFC	23.40	93%	1.84	7%
NCSC	0.62	89%	0.08	11%
RTFC	0.33	95%	0.02	5%
Total Loans	24.36	93%	1.93	7%

Source: Moody's Investors Service; CFC SEC Filings

At August 31, 2019, about 93% 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 on long-term loans is expected to amortize over the next 12 months as of August 31, 2019. In addition to providing CFC with a predictable source of annual cash flow, the loan amortization feature supports 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. That said, our assessment of CFC's credit profile incorporates a view that CFC will continue to set margins at levels that produce positive operating margins.

Steady improvement in risk management and single obligor risk

CFC has strong risk management capabilities and maintains a balance between the credit needs of its members and the requirement to insure sound credit quality of the loan and guarantee portfolio. The cooperative regularly maintains an internal risk rating system and sets exposure limits for each borrower, while also retaining 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 Federal Agriculture Mortgage Corporation, also known as Farmer Mac, a government sponsored enterprise. With respect to loan sales, at August 31, 2019, CFC had sold 890 individual loans ($1.674 billion in aggregate) to Farmer Mac and was servicing loans aggregating approximately $918.0 million.

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 $602 million as of August 31, 2019 compared to $619 million at May 31, 2019. No loans had been put to Farmer Mac for purchase, pursuant to this agreement, as of August 31, 2019.

While single obligor risk is a chronic characteristic of this issuer, exposure to the riskier telecommunications sector has declined considerably since 2004. For example, during the past nine fiscal years, none of the top ten single obligors were telecommunications borrowers and of the top twenty borrowers for the past seven fiscal years, none were telecom firms. In stark contrast, 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 prevails

At August 31, 2019, 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. Even as an increasing number of generation cooperatives are pursuing supply diversification strategies, many of the larger generation cooperatives still rely on coal as a primary fuel source for generation. For those cooperatives still relying on coal-fired resources, the potential for substantial incremental increases in capital requirements to address any elevated carbon transition risk represents a credit negative overhang. That said, rate autonomy available to power supply cooperatives provides flexibility for 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 maintains funding flexibility by preserving and increasing 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 near that level each year for the next three years.

At August 31, 2019, CFC's members provided about $4,972 million of funding, which represented about 19.5% of total debt outstanding. Of the $4,972 million, about $2,954 million represented short-term debt funding through $1,241 million in members' commercial paper, $435 million in members' investments in the daily liquidity fund and $1,278 million in the members' select notes program. The balance of members' funding at August 31, 2019 was provided by $662 million of members' MTNs and $1,356 million of members' subordinated certificates. 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, CFC has been supplementing its longer-term wholesale funding sources through two separate and successful private programs. Under the Guaranteed Underwriter Program (GUP), CFC has been able to secure almost $7.298 billion of twenty year funding from the Federal Financing Bank (FFB) of the US Treasury, of which about $5.387 billion was outstanding at August 31, 2019. 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 2039. As of August 31, 2019, CFC had up to $1.350 billion available under the GUP.

In addition, starting in FY 2007, CFC established a relationship with Farmer Mac, where Farmer Mac provides about $5.2 billion in potential funding to CFC through a note purchase facility that expires January 11, 2022 but can be automatically extended for an additional year on the anniversary date of the closing. At August 31, 2019, CFC had availability of up to about $2.238 billion of this facility. Also, effective July 31, 2015, CFC established 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 December 20, 2023. As of August 31, 2019, the full $300 million was available.

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.

Prospects for improving leverage prevail as management remains committed to reducing leverage

Due to the nature of its ownership structure, CFC does not have common stock in its capital structure. In its place, we view the deeply subordinated capital term certificates as having equity like characteristics.

CFC's leverage ratio as represented by adjusted debt to adjusted capital funds (according to Moody's calculations) averaged 7.52x during fiscal years 2015-2019.

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 (FY) 2011-2014, CFC's leverage ratio according to Moody's calculations experienced gradual increases during FY 2015-18 before achieving some improvement for FY 2019 and stood at 7.79x at the end of the first quarter of FY 2020 (August 31, 2019). The common thread in CFC's leverage during the past five fiscal years has been the need to fund its loan growth and the effects of the retirement of patronage capital. Other factors affecting leverage during this period included an impairment taken from the CAH asset disposition and declines in members' subordinated certificates outstanding during FY 2015, partially offset by the benefits of partial equity treatment afforded to additional subordinated deferrable interest debentures issued during FY 2016 and FY 2019, and an increase in total members' equity.

While CFC experienced a creeping leverage trend over the fiscal years 2015-18, the latest leverage ratio remains comparable to the 7.83x level exhibited more than 10 years ago at FYE 2009. Among the contributing factors during this ten year period were: 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.

Although the need to fund loan growth is likely to continue during FY 2020, it is likely that loan growth will be less than prior periods as the financing requirements for cooperatives in CFC's loan portfolio subside. The more moderate loan growth and good prospects for continued improvement in CFC's adjusted net interest income following the repayment of $1.0 billion of its highest coupon debt with an original maturity of November 1, 2018 should foster improvement in CFC's leverage trend in FY 2020 and beyond.

Liquidity Analysis

CFC has very good liquidity to support its commercial paper program and its variable rate tax-exempt demand bonds. While CFC has alternative funding sources from its members and from private sources, it still 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 near that level annually for the next few years.

CFC is an active capital market participant and FY 2019 funding was sourced across virtually all components of its capital structure. During various transactions in FY 2019, CFC raised $1,575 million of CTBs while paying off $1,830 million of CTBs, raised $300 million of dealer MTNs while paying off $350 million of dealer MTNs, and raised $250 million of 45-year fixed-rate subordinated notes. CFC also advanced a total of $625 million under the GUP and closed a previously approved $750 million additional commitment under the GUP, while also repricing a $125 million GUP loan at 3.5% with a 15 year final maturity. Finally, during FY 2019 CFC issued $575 million in aggregate under the Farmer Mac relationships.

During the year to date in FY 2020, CFC's total debt outstanding increased by $303 million, or 1%, to $25,464 million as of August 31, 2019, from May 31, 2019, due to an increase in borrowings to fund the increase in loans to members. The increase was primarily attributable to a net increase in member commercial paper, select notes and daily liquidity fund notes totaling $519 million, which was partially offset by a net decrease in dealer commercial paper of $115 million, a net decrease in Farmer Mac notes payable of $92 million and a net decrease in borrowings under the GUP of $23 million. As of August 31, 2019, CFC continues to have access to substantial private sources of capital, including $1,350 million under the GUP ($600 million available for advance through July 15, 2022 and $750 million available for advance through July 15, 2023) and $2,538 million under the Farmer Mac facilities, which contributes to the above average liquidity profile. Also, on September 25, 2019 CFC received a commitment letter for an additional $500 million loan facility under the GUP.

At August 31, 2019, CFC had a dealer commercial paper balance of approximately $830 million. CFC has maintained a cushion for the past several years compared to its stated intent to manage its short-term wholesale funding risk by maintaining dealer commercial paper within an approximate range between $1,000 million and $1,250 million for the foreseeable future. While CFC intends to continue utilizing commercial paper as a source of funding, it is committed to keeping future peak outstanding dealer commercial paper in line with or better than the cooperative's aforementioned intended range.

CFC manages its various committed bank facilities which we consider to be its principal form of external liquidity support and these arrangements supplement $231.1 million of cash and cash equivalents and $569.6 million of liquid, short- to intermediate-term held-to-maturity investment grade debt securities as of August 31, 2019. Through an amendment and extension process closed on November 26, 2019, CFC has two committed credit facilities aggregating $2,725 million. Specifically, CFC has a $1,315 million facility with a November 2022 expiration date and a $1,410 million facility with a November 2023 expiration date. This process resulted in an overall relatively modest reduction in available liquidity of about $250 million. With these facilities in place, the total amount of commercial paper that can be issued by CFC is capped at $2,725 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, 2019, CFC was comfortably in compliance with these covenants.

At August 31, 2019, CFC was the guarantor and liquidity provider for $311.6 million of tax-exempt bonds issued for its member cooperatives. During FYE May 31, 2019 and the first quarter of fiscal year 2020, which ended August 31, 2019, 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 2019 through September 2020, CFC reported about $2.241 billion of notes and bonds maturing, of which approximately $1,105 million are comprised of CTBs, $458 million are comprised of Member MTNs, $94 million is due under the GUP, and $171 million is due under the Farmer Mac program, leaving approximately $107 million of InterNotes, and $300 million of maturing Dealer MTNs. The larger components of the reported debt maturities for this period are $300 million of CTBs which were redeemed in October 2019, $400 million of CTBs due in January 2020, and another $400 million of CTBs due in June 2020. CFC also had $300 million of Dealer MTNs which were repaid in early November 2019. The CTBs due in January and June of 2020, although collectively sizable, are well within CFC's ability to manage given its access to substantial private capital funding sources, a large investor following and demonstrated ability to access several components of the capital markets. The remaining near term maturities across the debt capital structure throughout the period are of a much more manageable size.

Rating Methodology

The methodology for these ratings is Finance Companies Methodology published on November 25, 2019. Please see the Credit Policy page on www.moodys.com for a copy of the methodology.

Ratings

Exhibit 5

Category	Moody's Rating
NATIONAL RURAL UTILITIES COOP. FINANCE CORP.	
Outlook	Stable
Senior Secured	A1
Senior Unsecured	A2
Subordinate	A3
Commercial Paper	P-1

Source: Moody's Investors Service

REPORT NUMBER 1202268

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

MOODY'S
INVESTORS SERVICE