

CREDIT OPINION

26 September 2019

New Issue

Rate this Research

RATINGS

Converse Bank CJSC

Domicile	Yerevan, Armenia
Long Term CRR	Ba3
Type	LT Counterparty Risk Rating - Fgn Curr
Outlook	Not Assigned
Long Term Debt	Not Assigned
Long Term Deposit	B1
Type	LT Bank Deposits - Fgn 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

Svetlana Pavlova, +7.495.228.6052
CFA
AVP-Analyst
svetlana.pavlova@moodys.com

Lev Dorf +7.495.228.6056
AVP-Analyst
lev.dorf@moodys.com

Yaroslav Sovgyra, +7.495.228.6076
CFA
Associate Managing Director
yaroslav.sovgyra@moodys.com

Converse Bank CJSC

Update following rating upgrade to B1, outlook changed to stable

Summary

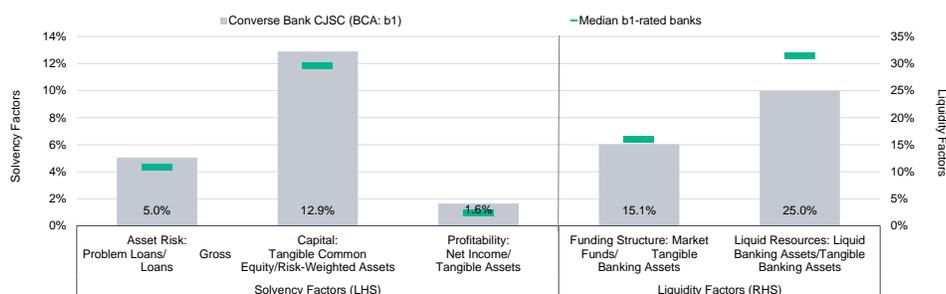
On 3 September 2019, we upgraded [Converse Bank CJSC's](#) (Converse Bank) [long-term local currency deposit rating to B1 from B2](#), which was driven by an upgrade of the bank's Baseline Credit Assessment (BCA) to b1 from b2.

The upgrade of Converse Bank's BCA reflected a combination of an improved operating environment (reflected in our revision of the [Armenian banking system's Macro Profile to Weak+](#) from Weak) and the bank's consistently sound solvency metrics. The bank's BCA remains supported by its (1) solid capital buffers; (2) diversified liquidity and funding profiles; and (3) strong financial and business support from its Argentine shareholder. At the same time, Converse Bank's b1 BCA is constrained by its high exposure to foreign-currency loans and currently low loan-loss reserve coverage of problem loans, while downside risks to the bank's asset quality stem from the loan-book seasoning after a period of rapid growth.

The bank's B1 long-term local-currency and foreign-currency deposit ratings are at the same level as the bank's BCA of b1, because a moderate probability of support from the [Government of Armenia](#) (Ba3 stable) does not result in a rating uplift.

Exhibit 1

Key financial ratios



Note: Converse Bank's data are as of 30 June 2019, peer banks data are as of year-end 2018
Source: Moody's Investors Service

Credit strengths

- » Strong financial and business support from Converse Bank's Argentine shareholder
- » Solid loss-absorption capacity, underpinned by the bank's adequate capital buffer and healthy profitability
- » Adequate liquidity and funding profiles
- » Moderate probability of government support in case of need, given the bank's solid 6% market share

Credit challenges

- » High foreign-currency exposure (67% of gross loans as of year-end 2018)
- » Currently low loan-loss reserve coverage of problem loans (40% as of 1 July 2019)
- » Downside risks to the bank's asset quality, stemming from the loan-book seasoning after a period of rapid growth

Outlook

The stable outlook on Converse Bank's long-term deposit ratings is aligned with the stable outlook on the sovereign rating and reflects our expectation that the bank's performance will remain stable over the next 12-18 months.

Factors that could lead to an upgrade

- » Converse bank's BCA, and potentially, its deposit ratings could be upgraded if the bank sustains its good asset quality, materially reduces its foreign-currency exposure, and maintains solid capital and liquidity buffers.
- » Converse Bank's deposit ratings could be upgraded following an upgrade of Armenia's sovereign rating.

Factors that could lead to a downgrade

- » Converse Bank's BCA, and potentially, its deposit ratings could be downgraded if the bank's asset quality deteriorates and strains its capital adequacy beyond our current expectations.
- » Converse Bank's deposit ratings could be downgraded following a downgrade of Armenia's sovereign rating.

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.

Key indicators

Exhibit 2

Converse Bank CJSC (Consolidated Financials) [1]

	06-19 ²	12-18 ²	12-17 ²	12-16 ²	12-15 ²	CAGR/Avg. ³
Total Assets (AMD Million)	285,819.0	281,119.4	252,735.9	190,993.3	159,016.4	18.2 ⁴
Total Assets (USD Million)	599.1	581.1	522.1	394.7	328.7	18.7 ⁴
Tangible Common Equity (AMD Million)	36,684.4	34,028.6	30,396.7	27,319.8	16,973.8	24.6 ⁴
Tangible Common Equity (USD Million)	76.9	70.3	62.8	56.5	35.1	25.1 ⁴
Problem Loans / Gross Loans (%)	5.0	4.2	5.0	6.2	9.1	5.9 ⁵
Tangible Common Equity / Risk Weighted Assets (%)	12.9	11.8	12.4	17.5	14.5	13.8 ⁶
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	25.5	22.0	24.2	23.9	37.6	26.6 ⁵
Net Interest Margin (%)	4.6	4.4	4.3	4.2	4.4	4.4 ⁵
PPI / Average RWA (%)	2.6	2.8	2.8	2.3	2.4	2.6 ⁶
Net Income / Tangible Assets (%)	1.6	1.7	1.4	0.8	-0.4	1.0 ⁵
Cost / Income Ratio (%)	55.9	55.5	58.4	68.3	67.1	61.0 ⁵
Market Funds / Tangible Banking Assets (%)	15.1	16.5	13.4	4.9	10.9	12.1 ⁵
Liquid Banking Assets / Tangible Banking Assets (%)	25.0	26.1	30.7	32.6	41.4	31.1 ⁵
Gross Loans / Due to Customers (%)	107.0	107.2	97.7	88.5	78.1	95.7 ⁵

[1] All figures and ratios are adjusted using Moody's standard adjustments. [2] Basel I; IFRS. [3] May include rounding differences due to scale of reported amounts. [4] Compound Annual Growth Rate (%) based on time period presented for the latest accounting regime. [5] Simple average of periods presented for the latest accounting regime. [6] Simple average of Basel I periods presented.

Sources: Moody's Investors Service, company filings

Profile

Converse Bank CJSC (Converse Bank) is a universal commercial bank that was ranked seventh by assets among 17 Armenian banks as of 30 June 2019. The bank has been actively developing its retail (45% of gross loans as of year-end 2018) and small and medium-sized enterprise banking segments (18% as of year-end 2018). As of the first half of 2019, Converse Bank held the third-largest mortgage portfolio among local banks and was among the top five banks by retail loans.

As of 30 June 2019, Converse Bank had a consolidated asset base of AMD286 billion (\$0.6 billion). Headquartered in Yerevan, the bank operates through a network of 35 branches.

Converse Bank's ultimate beneficiary shareholder is an Argentine businessman, Eduardo Eurnekian, who is Armenian by origin. He owns the holding company Corporacion America Group, which includes a conglomeration of different companies that are active in the administration and operation of airports in Latin America and Europe, as well as in the agriculture, energy and infrastructure sectors. Corporacion America Airports S.A. is listed on the New York Stock Exchange since 2018.

Detailed credit considerations

Strong financial and business support from its shareholder

Converse Bank benefits from financial support and business inflow because of its shareholder's connections. The shareholder provided a AMD9.5 billion (\$19.6 million) capital injection to the bank in 2016, enabling it to meet new regulatory capital requirements, and is committed to support the bank in the future both in terms of capital and funding, in case of need.

The shareholder is a net creditor to Converse Bank, given that related-party deposits exceed related-party loans. Loans to the shareholder's affiliated businesses abroad are backed by deposits and are thus risk free, and they generate sound margins, supporting the bank's profitability. The bank's funding profile and commission income also benefit from servicing the suppliers of Yerevan airport, which is under the shareholder's operation.

Asset quality is currently adequate, but has recently shown a negative trend

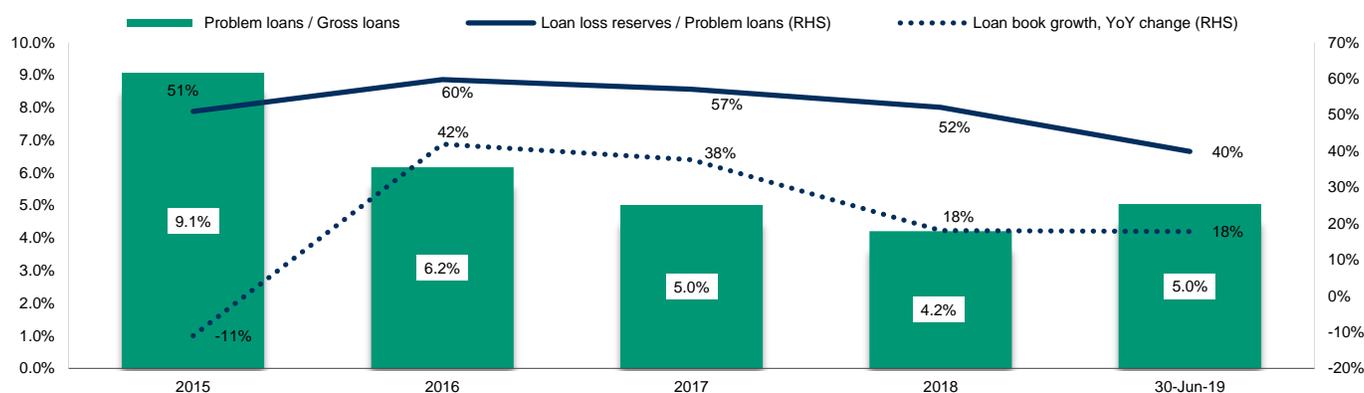
Converse Bank has a rather diversified loan-book structure, with retail loans (consumer loans and mortgages) accounting for 48% of total loans and corporate loans accounting for the rest as of 30 June 2019. The top 10 gross loans accounted for 101% of equity as of 30 June 2019 and the percentage would be materially lower if adjusted for loans backed with related-party deposits (lower than 70% of equity as of year-end 2018, according to our estimation). The concentration level is broadly in line with the Armenian banking sector

average. Net related-party exposure adjusted for cash-covered deposits from the shareholder accounted for an adequate 19% of the bank's shareholders' equity as of year-end 2018.

Converse Bank's problem loans¹ as a share of gross loans remain relatively low at 5.0% as of 30 June 2019. However, this ratio has increased from 4.2% as of year-end 2018, and the coverage of problem loans with loan-loss reserves has reduced substantially over the six-month period to just 40% as of 30 June 2019 from 52% as of year-end 2018 (see Exhibit 3).

Exhibit 3

Converse Bank's currently robust asset quality is challenged by rapid credit growth and a weak loan-loss reserve coverage



Sources: Bank's IFRS reports, Moody's Investors Service

We expect the strain on Converse Bank's asset quality to continue in the next 12-18 months on the back of the seasoning of its loan book, which showed very rapid growth in 2016-17 (around 40% per year). However, this growth moderated to 18% in H1 2019. We see additional downside risks stemming from the bank's unsecured consumer loan book, which continues to grow as a share of gross loans (20% as of Q2 2019), and overheating in this segment is a sectorwide risk for Armenian banks. Although the current rebound in the Armenian economy, with our forecast GDP growth of 4.5% annually in 2019 and 2020, suggests benign operating conditions, we believe that the bank's recent aggressive growth trajectory poses downside risks to its asset quality in the next 12-18 months.

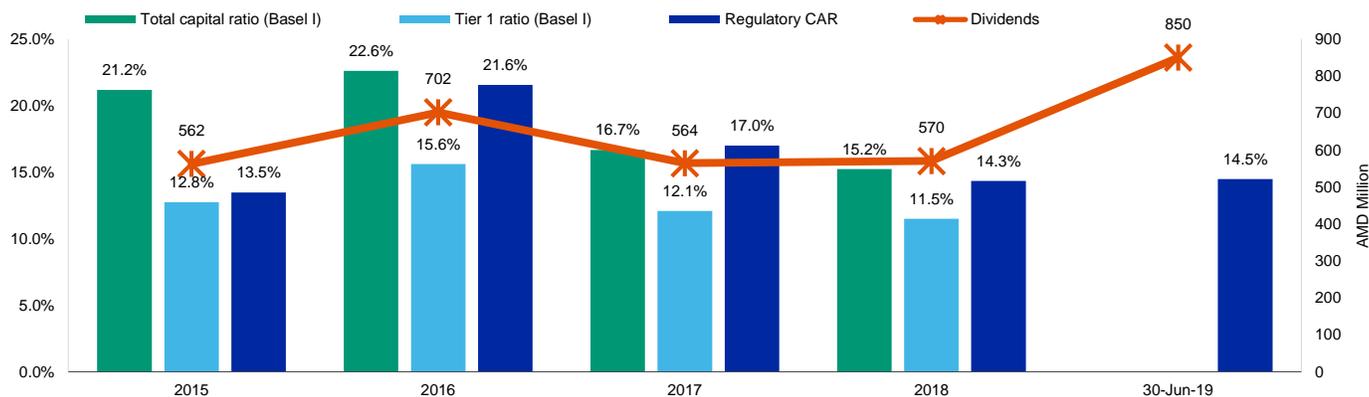
In addition, Converse Bank's exposure to foreign currency-denominated loans accounted for a high 67% of total loans as of year-end 2018, a level that, although typical for many Armenian banks, renders the bank's asset quality vulnerable to potential foreign-exchange volatility.

We assign an Asset Risk score of b3 to Converse Bank, which is two notches lower than the historical score. The negative adjustment reflects (1) our expectation that the problem loan ratio will exceed 5% in the next 12-18 months, (2) the bank's high exposure to foreign currency-denominated loans, and (3) its currently low level of loan-loss reserve coverage.

Capital adequacy has stabilized

After having declined throughout 2017 and 2018, Converse Bank's capital adequacy ratios have recently stabilized. The bank's regulatory capital adequacy ratio amounted to 14.5% as of 30 June 2019, well above the minimum required level of 12%. Its Basel I total capital adequacy ratio (15.2% as of the year-end 2018) is higher than the regulatory one, which is typical of all Armenian banks because of stricter requirements of the Central Bank of Armenia in terms of provisioning and assigning risk weights to banks' assets.

Exhibit 4

Capital adequacy has stabilized

Sources: Bank's IFRS reports, management data

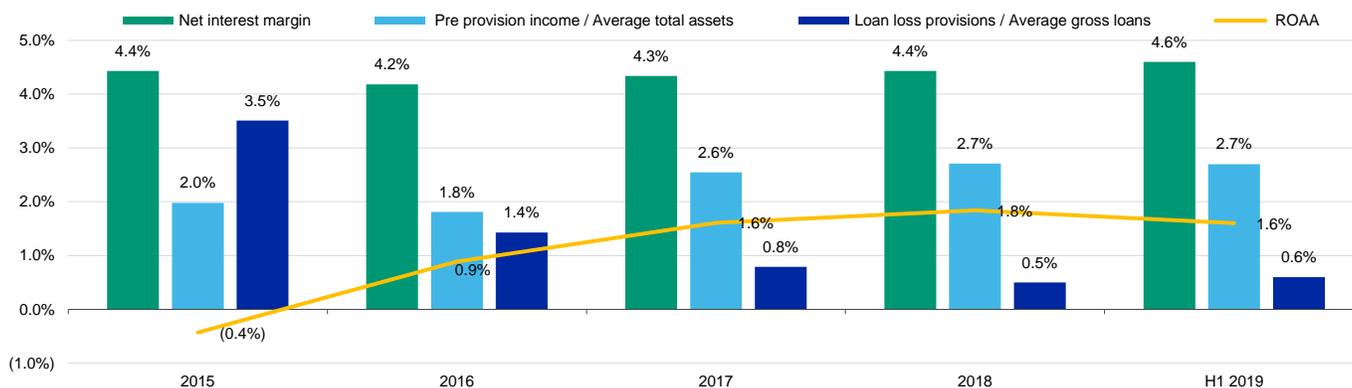
We expect stable capital adequacy in the next 12-18 months because the return on average equity (around 10%), after dividends, is sufficient to maintain the current level of capital adequacy ratios amid the projected growth in risk-weighted assets (around 9%). These expectations are reflected in our assigned Capital score of ba2, in line with the historical Macro-Adjusted score.

The shareholder is committed to providing capital support to Converse Bank in case of need, which underpins our view of the bank's sound loss-absorption buffer. The bank's capital adequacy was supported by a Tier 1 capital injection of AMD9.5 billion in 2016, following tightened regulatory minimum capital requirements of AMD30 billion for Armenian banks.

Sound profitability, supported by a focus on the retail and small and medium-sized enterprise segments and favorable economic conditions

Converse Bank consistently reports sound pre-provision profitability (at 2.6%-2.7% of average assets), underpinned by a healthy net interest margin of around 4.5%, which has recently been supported by the growing share of high-yielding consumer loans in the bank's portfolio. Fees and commissions represent a stable revenue source, generating 24%-26% of the bank's pre-provision income in 2018 and H1 2019, supported by the Converse Collection and Converse Transfer companies.

Exhibit 5

Converse Bank's profitability is sound

Sources: Bank's IFRS reports, Moody's Investors Service

The bank's return on average assets was under moderate strain in H1 2019 because of a small increase in the cost of risk (0.6% annualized, up from 0.5% in 2018). We expect this trend to continue in the next 12 months because a reduced loan-loss reserve coverage calls for additional provisions. Accordingly, we forecast that Converse Bank's return on assets will not exceed 1.5% in the next 12-18 months, with some strain from an increased cost of risk. These expectations are reflected in our assigned Profitability score of ba2, in line with the historical score.

Adequate funding and liquidity, with moderate deposit concentrations and limited reliance on market funding

Converse Bank's reliance on market funding reached 15.1% of tangible assets by 30 June 2019, as the bank was recently actively issuing bonds and attracting funds from both domestic and international development institutions to fund its lending growth. We expect this trend to continue in the next 12-18 months and forecast that Converse Bank's share of market funding will exceed 20% by year-end 2019. These expectations translate into a one-notch downward adjustment to the bank's Funding Structure score to the level of b1.

Nevertheless, we generally view the bank's funding profile as adequate, with moderate deposit concentrations and a manageable degree of market funding reliance. As of 30 June 2019, around 79% of the bank's liabilities were represented by customer accounts, almost half of which are retail deposits, including funds of high-net-worth individuals from the Armenian diaspora. Top 10 depositors accounted for 39.5% of customer funds as of 30 June 2019. The bank benefits from servicing the suppliers of Yerevan airport and pension inflows through post offices.

Converse Bank's liquidity provides a sufficient buffer against potential outflows, amounting to 25% of its tangible assets as of 30 June 2019. We adjust our Liquidity Score downward to ba3 to account for a significant proportion of securities being pledged under repurchase agreements. We expect the bank's unencumbered liquidity buffer to remain above 20% for the next 12-18 months.

Environmental, social and governance considerations

In line with our general view for the banking sector, Converse Bank has a low exposure to environmental risks (see our [environmental heat map](#) for further information) and moderate exposure to Social risks.

The most relevant social risks for banks arise from the way they interact with their customers. Social risks are particularly high in the area of data security and customer privacy, which are partly mitigated by sizable technology investments and banks' long track record of handling sensitive client data. Fines and reputational damage because of product mis-selling or other types of misconduct is a further social risk. Societal trends are also relevant in a number of areas, such as shifting customer preferences toward digital banking services increasing information technology cost, aging population concerns in several countries impacting demand for financial services or socially driven policy agendas that may translate into regulations that affect banks' revenue base. Overall, we expect banks to face moderate social risks.

Governance is highly relevant for Converse Bank, as it is to all competitors in the banking industry. Corporate governance weaknesses can lead to a deterioration in a company's credit quality, while governance strengths can benefit its credit profile. For banks operating in the Commonwealth of Independent States, we have identified key-person and related-party risks as the key governance risks. These risks are manifested in, but not limited to, heavy related-party loan concentrations and banks' heavy dependence on single individuals for business, which often gives rise to weak corporate governance and lax underwriting standards. Fraud and weak risk management have recently caused multiple bank closures and restructurings in Russia.

Governance risks are largely internal rather than externally driven. For Converse Bank, we do not have any particular governance concern, and we do not apply any corporate behavior adjustment to the bank. Converse Bank has not shown any material governance shortfall in recent years, and its risk management framework is commensurate with the bank's risk appetite. Nonetheless, corporate governance remains a key credit consideration and requires ongoing monitoring.

Support and structural considerations

Government support

We incorporate a moderate probability of support from the Armenian government, reflecting the proven sustainability of the bank's recently regained market share of around 6% in total assets, loans and retail deposits. This support assumptions does not currently result in any rating uplift, given the small gap between the sovereign rating of Ba3 and Converse Bank's BCA of b1.

Counterparty Risk (CR) Assessment

CR Assessments are opinions of how counterparty obligations are likely to be treated if a bank fails and are distinct from debt and deposit ratings in that they (1) consider only the risk of default rather than both the likelihood of default and the expected financial loss suffered in the event of default, and (2) apply to counterparty obligations and contractual commitments rather than debt or deposit instruments. The CR Assessment is an opinion of the counterparty risk related to a bank's covered bonds, contractual performance obligations (servicing), derivatives (for example, swaps), letters of credit, guarantees and liquidity facilities.

Converse Bank's CR Assessment is positioned at Ba3(cr)/NP(cr)

The CR Assessment is positioned one notch above the BCA of b1 and, therefore, above senior unsecured and deposit ratings, reflecting our view that its probability of default is lower than that of senior unsecured debt and deposits. We believe senior obligations represented by the CR Assessment will be more likely preserved to limit contagion, minimize losses and avoid disruption of critical function.

Counterparty Risk Ratings (CRRs)

CRRs are opinions of the ability of entities to honor the uncollateralized portion of non-debt counterparty financial liabilities (CRR liabilities) and also reflect the expected financial losses in the event such liabilities are not honored. CRR liabilities typically relate to transactions with unrelated parties. Examples of CRR liabilities include the uncollateralized portion of payables arising from derivatives transactions and the uncollateralized portion of liabilities under sale and repurchase agreements. CRRs are not applicable to funding commitments or other obligations associated with covered bonds, letters of credit, guarantees, servicer and trustee obligations, and other similar obligations that arise from a bank performing its essential operating functions.

Converse Bank's CRRs are positioned at Ba3/NP

Converse Bank's global CRRs are positioned at Ba3 and Not-Prime, one notch above the bank's Adjusted BCA, reflecting our view that CRR liabilities are not likely to default at the same time as the bank fails and will more likely to be preserved to minimize banking system contagion, minimize losses and avoid disruption of critical functions.

Methodology and scorecard

About Moody's Bank Scorecard

Our scorecard is designed to capture, express and explain in summary form our Rating Committee's judgment. When read in conjunction with our research, a fulsome presentation of our judgment is expressed. As a result, the output of our scorecard may materially differ from that suggested by raw data alone (though it has been calibrated to avoid the frequent need for strong divergence). The scorecard output and the individual scores are discussed in rating committees and may be adjusted up or down to reflect conditions specific to each rated entity.

Rating methodology and scorecard factors

Exhibit 6

Converse Bank CJSC

Macro Factors							
Weighted Macro Profile		Weak +	100%				
Factor	Historic Ratio	Initial Score	Expected Trend	Assigned Score	Key driver #1	Key driver #2	
Solvency							
Asset Risk							
Problem Loans / Gross Loans	5.1%	b1	←→	b3	Market risk	Collateral and provisioning coverage	
Capital							
Tangible Common Equity / Risk Weighted Assets (Basel I)	12.9%	ba2	↓	ba2			
Profitability							
Net Income / Tangible Assets	1.4%	ba2	←→	ba2			
Combined Solvency Score		ba3		b1			
Liquidity							
Funding Structure							
Market Funds / Tangible Banking Assets	16.5%	ba2	↓	ba3	Expected trend		
Liquid Resources							
Liquid Banking Assets / Tangible Banking Assets	26.1%	ba2	↓	ba3	Asset encumbrance		
Combined Liquidity Score		ba2		ba3			
Financial Profile							
Qualitative Adjustments				Adjustment			
Business Diversification				0			
Opacity and Complexity				0			
Corporate Behavior				0			
Total Qualitative Adjustments				0			
Sovereign or Affiliate constraint				-			
Scorecard Calculated BCA range				ba3 - b2			
Assigned BCA				b1			
Affiliate Support notching				0			
Adjusted BCA				b1			

Instrument Class	Loss Given Failure notching	Additional notching	Preliminary Rating Assessment	Government Support notching	Local Currency Rating	Foreign Currency Rating
Counterparty Risk Rating	1	0	ba3	-	Ba3	Ba3
Counterparty Risk Assessment	1	0	ba3 (cr)	-	Ba3(cr)	
Deposits	0	0	b1	-	B1	B1

[1] Where dashes are shown for a particular factor (or sub-factor), the score is based on non-public information.

Source: Moody's Investors Service

Ratings

Exhibit 7

Category	Moody's Rating
CONVERSE BANK CJSC	
Outlook	Stable
Counterparty Risk Rating	Ba3/NP
Bank Deposits	B1/NP
Baseline Credit Assessment	b1
Adjusted Baseline Credit Assessment	b1
Counterparty Risk Assessment	Ba3(cr)/NP(cr)

Source: Moody's Investors Service

Endnotes

- 1 Problem loans are defined as those loans that are classified as Stage 3 and corporate loans that are classified as Stage 2 as of 30 June 2019 and year-end 2018. As of year-end 2017 and earlier, problem loans included individually impaired loans and retail loans overdue by more than 90 days.

© 2019 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MOODY'S PUBLICATIONS MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER. ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$2,700,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657 AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY250,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

REPORT NUMBER 1194360

CLIENT SERVICES

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