

CREDIT OPINION

19 October 2021

Update



Rate this Research

RATINGS

Doha Bank Q.P.S.C

Domicile	DOHA, Qatar
Long Term CRR	A3
Туре	LT Counterparty Risk Rating - Fgn Curr
Outlook	Not Assigned
Long Term Debt	(P)Baa1
Туре	Senior Unsecured MTN - Fgn Curr
Outlook	Not Assigned
Long Term Deposit	Baa1
Туре	LT Bank Deposits - Fgn Curr
Outlook	Stable

Please see the <u>ratings section</u> at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

Contacts

Alexios Philippides +357.2569.3031 VP-Senior Analyst alexios.philippides@moodys.com

Francois Planchard

Associate Analyst
francois.planchard@moodys.com

Henry MacNevin +44.20.7772.1635 Associate Managing Director henry.macnevin@moodys.com

Sean Marion +44.20.7772.1056 MD-Financial Institutions sean.marion@moodys.com

Doha Bank Q.P.S.C

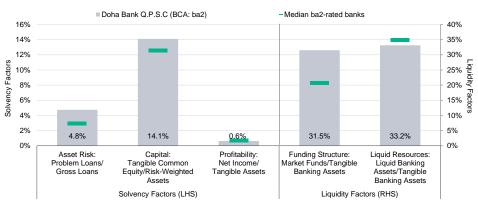
Update to credit analysis

Summary

<u>Doha Bank Q.P.S.C's</u> (DHBK) Baa1 deposit ratings reflect (1) the bank's ba2 Baseline Credit Assessment (BCA); and (2) four notches of rating uplift from our assessment of a very high likelihood of support from the <u>Government of Qatar</u> (Aa3 stable) in the event of need.

DHBK's ba2 standalone BCA reflects its (1) relatively weak asset quality, elevated provisioning charges, and high borrower and sector concentrations; (2) high market funding reliance; and (3) still-evolving corporate governance structure. However, the BCA also reflects the bank's (1) moderate capital metrics that are well above regulatory requirements; and (2) its adequate liquidity buffers that somewhat moderate it short-term external market funding reliance. Efforts to reduce exposure to high risk sectors and increase lending to Qatari government-related entities would help moderate high asset risks in the future.

Exhibit 1
Rating Scorecard - Key financial ratios



These are our <u>Banks Methodology</u> scorecard ratios. Asset risk and profitability reflect the weaker of the three-year average and the latest figure. Capital is the latest reported figure. Funding structure and liquid resources reflect the latest fiscal year-end figures.

Source: Moody's Investors Service

Credit strengths

- » Moderate capital metrics well above requirements
- » Adequate liquidity buffers
- » Very high likelihood of support from the Qatari authorities, in case of need

Credit challenges

- » Weak asset quality along with high borrower and sector concentrations
- » High market funding reliance and concentrated deposit base
- » Corporate governance structure is evolving

Outlook

The stable outlook on DHBK's long-term ratings captures our expectation that the bank's standalone BCA of ba2 balances its relatively weak asset quality, concentrations on both sides of the balance sheet, and high market funding reliance with adequate capital and liquidity.

In addition, the stable outlook takes into account DHBK's asset recovery efforts and ongoing implementation of its strategy to shift its exposures to lower-risk segments.

Factors that could lead to an upgrade

» Upward pressure on DHBK's ratings could materialise in the event of a significant improvement in the bank's risk profile and asset quality, combined with sustainably higher profitability, as well as, higher core capital.

Factors that could lead to a downgrade

» Downward rating pressure for DHBK could materialise in the event of a material deterioration in asset quality, a decline in core equity, sustained profitability pressures and/or a material weakening in the bank's funding and liquidity profile, such as from a significant outflow of market funds and deposits.

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.moodys.com for the most updated credit rating action information and rating history.

Key indicators

Exhibit 2

Doha Bank Q.P.S.C (Consolidated Financials) [1]

	06-21 ²	12-20 ²	12-19 ²	12-18 ²	12-17 ²	CAGR/Avg.3
Total Assets (QAR Million)	109,315.3	103,540.3	108,208.4	96,132.4	93,495.3	4.64
Total Assets (USD Million)	30,023.4	28,437.3	29,719.4	26,400.9	25,671.4	4.64
Tangible Common Equity (QAR Million)	10,020.6	9,641.6	9,162.9	8,960.5	10,874.6	(2.3)4
Tangible Common Equity (USD Million)	2,752.1	2,648.1	2,516.6	2,460.8	2,985.9	(2.3)4
Problem Loans / Gross Loans (%)	4.7	4.9	4.6	4.9	2.9	4.4 ⁵
Tangible Common Equity / Risk Weighted Assets (%)	14.1	13.4	11.6	11.6	13.8	12.9 ⁶
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	27.6	27.2	24.1	23.2	13.7	23.1 ⁵
Net Interest Margin (%)	2.1	1.9	1.7	2.0	2.2	2.0 ⁵
PPI / Average RWA (%)	2.9	2.5	2.0	1.9	2.0	2.2 ⁶
Net Income / Tangible Assets (%)	0.9	0.5	0.5	0.6	1.0	0.75
Cost / Income Ratio (%)	30.5	32.3	39.5	40.3	40.7	36.6 ⁵
Market Funds / Tangible Banking Assets (%)	30.7	31.5	31.6	26.7	18.6	27.8 ⁵
Liquid Banking Assets / Tangible Banking Assets (%)	31.2	33.2	35.9	34.7	33.0	33.6 ⁵
Gross Loans / Due to Customers (%)	126.5	124.1	120.6	116.1	104.5	118.4 ⁵

^[-] Further to the publication of our revised methodology in July 2021, for issuers that have "high trigger" additional Tier 1 instruments outstanding, not all ratios included in this report reflect the change in treatment of these instruments. [1] All figures and ratios are adjusted using Moody's standard adjustments. [2] Basel III - fully loaded or transitional phase-in; IFRS. [3] May include rounding differences because of the scale of reported amounts. [4] Compound annual growth rate (%) based on the periods for the latest accounting regime. [5] Simple average of periods for the latest accounting regime. [6] Simple average of Basel III periods.

Sources: Moody's Investors Service and company filings

Profile

DHBK provides retail, wholesale and international banking services, as well as treasury and investment products and services. As of June 2021, DHBK operated through a network of 24 domestic branches in Qatar, six international branches (Dubai, Abu Dhabi, Kuwait City, Mumbai, Kochi and Chennai) and representative offices in a number of other countries.

As of June 2021, DHBK reported total consolidated assets of QAR109.3 billion (\$30.0 billion) and was the fifth-largest bank in Qatar with a market share of 6.2%. The bank also held a 6.2% share in terms of total loans.

DHBK was incorporated in Qatar in 1979. The bank's ordinary shares are listed on the Qatar Stock Exchange (ticker: DHBK). As of June 2021, the DHBK's largest shareholder was Qatar Holding LLC, a wholly owned subsidiary of Qatar Investment Authority (QIA)¹, which held 17.15% of its total share capital.

Detailed credit considerations

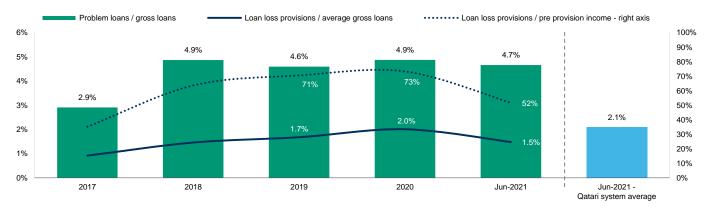
Relatively weak asset quality along with high borrower and sector concentrations

Our assessment of DHBK's asset risk reflects our expectation that its loan quality will remain relatively weak, considering both its reported problem loans and a high level of loans with a significant increase in credit risk (stage 2 loans under IFRS 9 accounting standards). Our ba3 Asset Risk score also reflects sizeable borrower and sector concentrations, particularly to the volatile real estate and contracting sectors despite a recent reduction. The bank is working to grow low-risk public sector lending in Qatar that will help moderate these risks in the future. DHBK also reduced its exposures out its United Arab Emirates (UAE) and Kuwait branches in the past year that had reported high problem loans.

As of the end of June 2021, DHBK's adjusted problem loan ratio (defined as IFRS 9 stage 3 loans, net of interest in suspense over gross loans) was 4.7%, broadly stable compared to 4.9% as of the end of 2020 and 4.6% at the end of 2019 (see Exhibit 3). The ratio remains substantially higher than the 2.1% local average and the 2.9% median for similarly-rated banks globally. Cost of risk (loan loss provisions/average gross loans) remained elevated at 1.5% during the first half of 2021, compared to 2.0% in 2020, with loan loss provisions consuming 52% of pre-provision income. We consider the 42% coverage of problem loans by provisions (stage 3 expected credit losses/stage 3 loans, net of interest in suspense) as of June 2021 to be low, having declined from 83% at the end of 2019 following large write-offs of fully provisioned loans.

Exhibit 3

DHBK's asset quality has been relatively weak and its problem loan ratio higher than the system average



Source: Moody's Investors Service

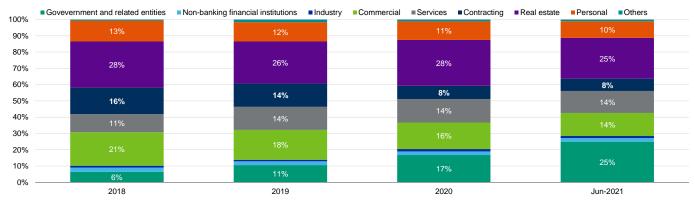
Part of the impact on the bank's asset quality from the recent decline in economic activity has been deferred by extensive government support measures to borrowers impacted from the pandemic-related measures, such as loan payment deferrals. In line with other Qatari banks, we therefore expect some loan quality deterioration as these measurers are gradually lifted. Loan payment deferrals in Oatar were extended until the end of 2021.

The bank also reported a high stage 2 loan balance of 25% of total loans as of the end of June 2021 (end-2020: 28%). This is driven by significant restructured exposures and given the bank's high concentration to construction and real estate, as well as, to the service sector that includes hospitality and hotels that were impacted from the restrictions on movement. Given the higher risk of these loans it is likely that part of this stage 2 amount will ultimately become non-performing.

DHBK's asset quality is also at risk from single-borrower concentrations, whereby the aggregate balance of its top 20 borrowers' facilities (funded and unfunded) is high relative to the bank's tangible common equity, and sector concentrations. Although the former is a common feature of banks operating in the GCC, it exposes the bank to transition risk of large borrowers. Further, DHBK remains heavily exposed to the challenged and inherently volatile real estate sector at 25% of total loans as of the end of June 2021 and contracting at 8% (see Exhibit 4), although the contracting exposure has declined from 14% as of the end of 2019. DHBK's exposure to the real estate sector and to contracting remains significantly higher than the system average. Similarly to other Qatari banks, DHBK's exposure to low-risk public sector entities at 25% of total loans as of the end of June 2021, up from 17% at the end of 2020, moderates asset risk in the portfolio. The bank's exposure to government and government-related entities remains below the 33% system average as of June 2021.

Exhibit 4

DHBK has a high concentration to challenged and cyclical sectors, such as real estate and contracting Loan book breakdown as of the end of June 2021



Sources: Bank's financial statements and Moody's Investors Service

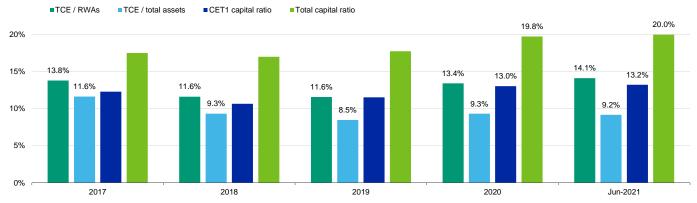
Moderate capital metrics well above requirements

DHBK's capitalisation is substantially above regulatory requirements. Although capital metrics have improved, we consider them to be moderate in light of the aforementioned asset risk challenges and relatively low problem loan provisioning coverage. We expect the bank's capitalisation to remain broadly stable over the next 12-18 months because of a conservative dividend policy. DHBK fully retained 2019 profits and paid a cash dividend equivalent to 33% of 2020 profits.

DHBK's tangible common equity (TCE)-to-risk-weighted assets (RWAs) ratio progressively strengthened to 14.1% as of the end of June 2021 (see Exhibit 5) because of a reduction in credit RWAs and earnings retention. DHBK's regulatory Common Equity Tier 1 (CET1) capital ratio and total capital ratio stood at 13.2% and 20.0% as of the end of June 2021 and exceed the regulatory minimums. The minimum CET1 ratio requirement was 8.5%, and the minimum total capital ratio requirement was 13.5% and included a bank-specific Pilar II capital charge of 1.0%.

Exhibit 5

DHBK capitalisation is moderate but has been improving Evolution of risk-weighted and leverage capital metrics



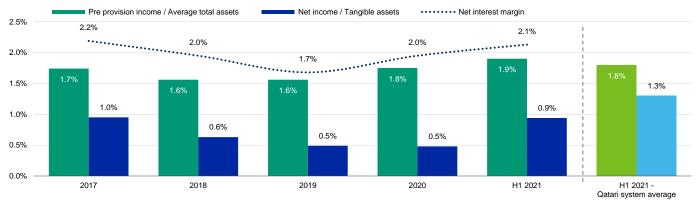
Source: Moody's Investors Service

Bottom-line profitability improving but under pressure from elevated cost of risk

We expect profitability to remain somewhat subdued because of elevated cost of risk. Additionally, we expect that the bank's profitability will be constrained by a strategic shift to focus lending towards lower-yielding government related business amid a highly competitive operating environment and low interest rates, however, this will also help de-risk DHBK's loan book at the same time. Ongoing focus on both cost of funds and operating cost control will help mitigate some of this downside pressure.

DHBK's adjusted net income to tangible assets ratio improved to 0.9% during the first half of 2021² compared to 0.5% during 2020, although below the 1.3% local system average (see Exhibit 6). The bank's bottom-line profitability improved during the first half of 2021, mainly driven by higher net interest income, and a reduction in loan loss provisions and operating expenses. The bank's net interest margin progressed to 2.1% during the first half of 2021 from 2.0% in full-year 2020, mainly due to a reduction of interest expenses. Pre-provision profitability, at 1.9% of average assets during the first half of 2021, benefits from the bank's established market position. The bank's efficiency also improved during this period, with a cost-to-income ratio of 30.5% (2020: 32.3%), also somewhat weaker than a 24.2% system average.

Exhibit 6
DHBK's bottom-line profitability improves



Source: Moody's Investors Service

High market funding reliance and concentrated deposit base, somewhat moderated by adequate liquidity buffers

DHBK's continues to rely heavily on potentially confidence-sensitive market and external funding given that loan growth has been stronger than domestic customer deposit growth. Furthermore, the bank's deposit base is fairly concentrated and a portion of deposits come from non-residents. These risks are somewhat mitigated by the bank's liquidity buffers. We expect external market funding reliance to remain high as the bank grows its lending book and domestic funding sources remain tight.

Market funding constituted 31% of DHBK's tangible banking assets as of the end of June 2021 and 32% at the end of 2020. Over 80% of market funds were short term (less than one year in maturity) at the end of 2020 based on the last available disclosures, a large part of which were short-term loans to banks and repo borrowings that drive some asset encumbrance, leading to substantial asset and liability maturity mismatches. The bank increased its long term funding in the first half of 2021, including through a \$500 million five year senior bond issuance and other term facilities that will help reduce some of these mismatches.

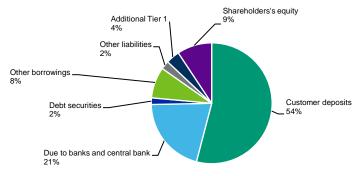
DHBK liquidity buffers at 31% of tangible banking assets as of the end of June 2021, mainly in the form of Qatari government securities and cash and cash equivalents, help moderate the significant event risks related to the bank's reliance on confidence-sensitive and short-term funding. The bank reported a Basel Liquidity Coverage Ratio (LCR) of 99.6% as of end-2020 (end-2019: 134.6%), marginally below the 100% limit, and a Qatar Central Bank liquidity ratio of 123% well above the relevant 100% limit. We expect that the LCR improved during 2021 because of the above-mentioned long-term borrowings.

Customer deposits made up 54% of liabilities and equity as of the end of June 2021 (see Exhibit 7). The net loans to deposits ratio rose to 122% as of the end of June 2021, from 119% as of the end of 2020 because loans grew faster than deposits. These trends are systemic and credit growth in Qatar has outpaced deposit growth in the last few years and the systemwide loan-to-deposit ratio has been rising above the 100% loan-to-deposit cap.

Exhibit 7

Deposits make up a large part of DHBK's funding base, however the bank also has high reliance on market funding

Total liabilities and equity breakdown as of June 2021



Sources: Bank's financial statements, Moody's Investors Service

DHBK's deposit concentrations are fairly high with government and government-related entities' deposits representing - in line with other Qatari banks - a sizeable 28% of the bank's deposit base as of the end of June 2021 and corporate deposits a further 50%. Similarly to other banks in the country, a significant portion of the customer deposits also comes from non-residents that include institutional and private banking clients, and these deposits are therefore significantly more confidence sensitive.

Corporate governance structure is evolving

DHBK's overall risk profile remains constrained by its dependence on few key personnel and high overall management turnover, underpinning our one-notch qualitative adjustment for Corporate Behaviour in the bank's standalone assessment.

In recent years, the bank has hired experienced bankers heading key business units, however, senior management turnover remains high. The bank has a new acting chief financial officer, while the current chief risk officer has been with the bank since 2020. The chief strategy corporate performance and marketing officer, the chief wholesale banking officer and the chief treasury and investment officer have been in there positions since 2019.

Source of facts and figures cited in this report

Unless noted otherwise, data related to systemwide trends is sourced from the central bank. Bank-specific figures originate from the bank's reports and all figures pare based on our own chart of account and may be adjusted for analytical purposes. Please refer to the document <u>Financial Statement Adjustments in the Analysis of Financial Institutions</u> published on 9 August 2018.

ESG considerations

DHBK has a low direct exposure to Environmental risks because its lending to the hydrocarbon sector is fairly limited. However, similarly to domestic peers, the bank has a sizeable indirect exposure to environmental risks, mainly relating to carbon transition, because of the very large dependence of the Qatari economy and the government's revenues on the hydrocarbon industry. Qatari banks are highly interlinked with the domestic sovereign given their direct lending to government-related entities and holdings of government securities, the sovereign's economic footprint and employment of Qatari nationals, and the extraordinary government support that we impute for the banks in case of need. Additionally, the gradual incorporation of environmental considerations in the asset allocation process of international investors that extend funding to Qatari banks could also be a transmission channel of environmental risks for the banks over the longer term. See our Environmental risks heat map for further information.

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 sizeable 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 are other social risks. Social trends are also relevant in a number of areas, such as shifting customer preferences towards digital banking services increasing information technology cost, ageing population concerns in several countries affecting the demand for financial services or

socially driven policy agendas translating into regulations that affect banks' revenue base. Overall, we consider banks to face moderate social risks. See our Social risks heat map for further information.

Governance is highly relevant for DHBK, as it is to all players in the banking industry. Corporate governance weaknesses can lead to a deterioration in a bank's credit quality, while governance strengths can benefit its credit profile. Although governance risks are largely internal rather than externally driven, in addition to DHBK's specific governance challenges detailed earlier in the report, in the GCC, governments along with government-related issuers, tend to have a large footprint on the overall economy. Consequently, they are often among the largest borrowers, depositors and — in some cases — shareholders in the banks across the GCC. For DHBK and other GCC banks, corporate governance remains a key credit consideration and requires constant monitoring.

Support and structural considerations

Government support considerations

DHBK's Baa1 deposit ratings incorporate four notches of government support uplift from its ba2 BCA because of our assessment of a very high probability of support from the Qatari authorities, in case of need. This assessment is based on (1) the demonstrated willingness of the Qatari government to provide support to local banks through capital injections and the purchase of real estate and equity investment portfolios from banks in the past; (2) the 17.15% shareholding in DHBK by the QIA; and (3) the bank's importance to the local financial system, with a market share of around 6% in deposits as of June 2021.

Counterparty Risk (CR) Assessment

DHBK's CR Assessment is positioned at A3(cr)/P-2(cr)

Prior to government support, the CR Assessment is positioned one notch above the bank's Adjusted BCA of ba1, reflecting our view that its probability of default is lower than that of deposits. Senior obligations represented by the CR Assessment will be more likely preserved to limit contagion, minimise losses and avoid disruption of critical functions. The CR Assessment also benefits from government support uplift, in line with our support assumptions on deposits.

Counterparty Risk Ratings (CRRs)

DHBK's CRRs are positioned at A3/P-2

For jurisdictions with a non-operational resolution regime, such as Qatar, the starting point for the CRR is one notch above the bank's Adjusted BCA. Similarly to other ratings, the CRRs of DHBK also benefit from four notches of government uplift.

Methodology and scorecard

About Moody's Bank Scorecard

Our Bank 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.

FINANCIAL INSTITUTIONS MOODY'S INVESTORS SERVICE

Rating methodology and scorecard factors

Exhibit 8

Doha Bank Q.P.S.C

Macro Factors						
Weighted Macro Profile Strong	100%					
Factor	Historic Ratio	Initial Score	Expected Trend	Assigned Score	Key driver #1	Key driver #2
Solvency						
Asset Risk						
Problem Loans / Gross Loans	4.8%	baa3	$\downarrow\downarrow$	ba3	Single name concentration	Sector concentration
Capital						
Tangible Common Equity / Risk Weighted Assets (Basel III - transitional phase-in)	14.1%	a3	\leftrightarrow	baa3	Expected trend	Stress capital resilience
Profitability						
Net Income / Tangible Assets	0.6%	ba1	1	ba1	Expected trend	
Combined Solvency Score		baa2		ba1		
Liquidity						
Funding Structure						
Market Funds / Tangible Banking Assets	31.5%	ba2	\leftrightarrow	b1	Term structure	Deposit quality
Liquid Resources						
Liquid Banking Assets / Tangible Banking Assets	33.2%	a3	\leftrightarrow	baa2	Asset encumbrance	
Combined Liquidity Score		baa3		ba2		
Financial Profile				ba1		
Qualitative Adjustments				Adjustment		
Business Diversification				0		
Opacity and Complexity				0		
Corporate Behavior				-1		
Total Qualitative Adjustments				-1		
Sovereign or Affiliate constraint				Aa3		
BCA Scorecard-indicated Outcome - Range				ba1 - ba3		
Assigned BCA				ba2		
Affiliate Support notching				0		
Adjusted BCA				ba2		

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	ba1	4	A3	A3
Counterparty Risk Assessment	1	0	ba1 (cr)	4	A3(cr)	
Deposits	0	0	ba2	4	Baa1	Baa1
Senior unsecured bank debt	0	0	ba2	4		(P)Baa1
Dated subordinated bank debt	-1	0	ba3	2		(P)Ba1

^[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 9

Category	Moody's Rating		
DOHA BANK Q.P.S.C			
Outlook	Stable		
Counterparty Risk Rating	A3/P-2		
Bank Deposits	Baa1/P-2		
Baseline Credit Assessment	ba2		
Adjusted Baseline Credit Assessment	ba2		
Counterparty Risk Assessment	A3(cr)/P-2(cr)		
Senior Unsecured MTN	(P)Baa1		
Subordinate MTN	(P)Ba1		
DOHA FINANCE LIMITED			
Outlook	Stable		
Bkd Senior Unsecured	Baa1		
Bkd Subordinate MTN	(P)Ba1		
Source: Moody's Investors Service			

Endnotes

- 1 The QIA is the sovereign wealth fund of the State of Qatar. It was created in 2005.
- 2 In line with Moody's standard adjustments we include payments for the bank's Additional Tier 1 (AT1) instruments in interest expense, whereas the bank reports them under dividend distributions. The unadjusted net income/tangible asset ratios was 1.12% in the in the first half of June 2021.

© 2021 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 CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. 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 APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS, DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER 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. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND 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, ASSESSMENTS, OTHER OPINIONS, AND 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, ASSESSMENTS, OTHER OPINIONS OR 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.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND 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 its 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, ASSESSMENT, 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 credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.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 657AFSL 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 credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY550,000,000.

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

REPORT NUMBER

1304665

CLIENT SERVICES

 Americas
 1-212-553-1653

 Asia Pacific
 852-3551-3077

 Japan
 81-3-5408-4100

 EMEA
 44-20-7772-5454

