

## CREDIT OPINION

7 August 2025

# Update



#### **RATINGS**

#### GarantiBank International N.V.

Domicile	Amsterdam, Netherlands
Long Term CRR	A3
Туре	LT Counterparty Risk Rating - Fgn Curr
Outlook	Not Assigned
Long Term Debt	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

Fabio lannò +33.1.5330.3356 VP-Sr Credit Officer fabio.ianno@moodys.com

Giorgio Violetta +33.1.5330.3410
Ratings Associate
giorgio.violetta@moodys.com

Olivier Panis +33.1.5330.5987 Associate Managing Director olivier.panis@moodys.com

#### **CLIENT SERVICES**

 Americas
 1-212-553-1653

 Asia Pacific
 852-3551-3077

 Japan
 81-3-5408-4100

 EMEA
 44-20-7772-5454

# GarantiBank International N.V.

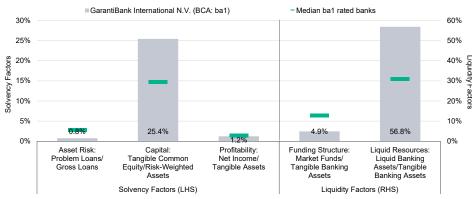
# Update to credit analysis

## **Summary**

GarantiBank International N.V.'s (GBI) long-term deposit ratings of Baa1 reflect the bank's Baseline Credit Assessment (BCA) of ba1; a one notch uplift of affiliate support from the bank's ultimate parent Banco Bilbao Vizcaya Argentaria, S.A. (BBVA, A2 review direction uncertain/A3 review for upgrade, baa2¹) leading to the Adjusted BCA of baa3; and the outcome of our advanced Loss Given Failure (LGF) analysis, which results in two notches of uplift. GBI's ratings do not benefit from any government support uplift due to its limited size relative to the Dutch banking sector.

GBI's BCA of ba1 reflects its strong capitalization, ample liquidity base, and good profitability, as well as its high concentration in terms of geographies and counterparties. The BCA also incorporates GBI's alignment with the strategic priorities set by BBVA and the contained potential risk transmission from its exposure to emerging economies and to its direct parent, Turkiye Garanti Bankasi A.S. (Garanti BBVA, Ba2 stable, ba3).

Exhibit 1
Rating Scorecard - Key financial ratios



Source: Moody's Ratings

# **Credit strengths**

- » Strong capitalisation and good internal capital generation support the bank's ability to withstand shocks
- » Good profitability, although inherently volatile
- » Solid liquidity profile

# **Credit challenges**

- » High single-name concentrations pose risk on asset quality
- » Material exposure to Turkiye
- » Retail deposits exclusively collected through internet and call centers

### **Outlook**

The outlook on GBI's long-term deposit ratings is stable, reflecting our expectation that over the next 12 to 18 months, the volume of GBI's corporate deposits relative to the bank's assets will remain consistent with very low loss given failure according to our LGF analysis.

The stable outlook also reflects our unchanged assumption of affiliate support from BBVA, and our expectation that the bank's Adjusted BCA of baa3 is unlikely to change in the next 12 to 18 months.

# Factors that could lead to an upgrade

An upgrade of the deposit ratings could be triggered by a sustained high volume of bail-in-able debt, resulting in a lower expected loss for deposits under our Advanced LGF analysis.

The deposit ratings could also be upgraded following an upgrade of the bank's Adjusted BCA, which could result from a concomitant upgrade of the GBI's BCA and an upgrade of BBVA's BCA or an assessment of stronger affiliate support from BBVA. An upgrade of GBI's BCA could be triggered by sustained level of earnings generation and capitalisation, combined with higher degree of business diversification.

### Factors that could lead to a downgrade

GBI's long-term deposit rating could be downgraded as a result of a lower volume of junior deposits, resulting in higher expected loss.

A downgrade of the bank's BCA could result from increased asset risk, a material deterioration in the bank's profitability and capitalization, and a material weakening of the bank's liquidity.

A downgrade of GBI's Adjusted BCA could also result from a reduced assessment of affiliate support from BBVA.

A downgrade of GBI's BCA and Adjusted BCA would likely result in a downgrade of all the bank's long-term ratings and assessments, all things equal.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on https://ratings.moodys.com for the most updated credit rating action information and rating history.

# **Key indicators**

Exhibit 2
GarantiBank International N.V. (Unconsolidated Financials) [1]

	12-24 <sup>2</sup>	12-23 <sup>2</sup>	12-22 <sup>2</sup>	12-21 <sup>2</sup>	12-20 <sup>2</sup>	CAGR/Avg.3
Total Assets (EUR Million)	8,243.6	5,782.5	5,105.7	4,129.9	3,430.2	24.5 <sup>4</sup>
Total Assets (USD Million)	8,536.3	6,387.7	5,449.1	4,679.6	4,197.0	19.4 <sup>4</sup>
Tangible Common Equity (EUR Million)	842.4	743.1	644.1	603.8	585.3	9.5 <sup>4</sup>
Tangible Common Equity (USD Million)	872.3	820.9	687.4	684.1	716.2	5.1 <sup>4</sup>
Problem Loans / Gross Loans (%)	0.6	1.0	0.6	0.9	1.0	0.85
Tangible Common Equity / Risk Weighted Assets (%)	25.4	25.5	22.7	22.4	24.1	24.0 <sup>6</sup>
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	2.6	3.5	2.3	3.8	3.5	3.2 <sup>5</sup>
Net Interest Margin (%)	2.6	3.1	1.9	1.4	1.3	2.1 <sup>5</sup>
PPI / Average RWA (%)	4.5	4.8	1.9	1.1	0.6	2.6 <sup>6</sup>
Net Income / Tangible Assets (%)	1.2	1.7	0.8	0.4	0.2	0.95
Cost / Income Ratio (%)	30.3	27.9	48.0	60.2	73.8	48.0 <sup>5</sup>
Market Funds / Tangible Banking Assets (%)	4.9	5.1	6.6	10.6	10.3	7.5 <sup>5</sup>
Liquid Banking Assets / Tangible Banking Assets (%)	56.8	53.5	49.2	37.5	37.4	46.9 <sup>5</sup>
Gross Loans / Due to Customers (%)	50.6	57.0	64.4	84.4	86.6	68.6 <sup>5</sup>

<sup>[1]</sup> 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 Ratings and company filings

#### **Profile**

GarantiBank International N.V. (GBI) is a medium-sized Dutch bank<sup>2</sup> (€8.2 billion of total assets as of December 2024) with a branch in Germany and representative offices in Switzerland and Turkiye. Established in 1990 in Amsterdam, the bank is a wholly owned subsidiary of Garanti BBVA (Turkiye) and ultimately controlled by BBVA (Spain). GBI provides financial solutions to retail, corporate and institutional clients in the areas of trade and commodity finance, corporate banking and global markets sales.

Following BBVA's acquisition of a controlling stake in GBI's parent, Garanti BBVA, GBI has become a member of the BBVA group. Consequently, GBI is under the supervision of the European Central Bank's (ECB) Single Supervisory Mechanism, jointly with De Nederlandsche Bank (DNB, the Dutch supervisor). GBI has aligned its risk management framework with the risk policies and procedures of its Spanish parent, which has led to a complete overhaul of its governance, and credit and investment policies.

The bank's commercial activities are essentially split into four divisions:

- 1. Trade and Commodity Finance, which focuses on firms physically trading commodities in regional and global markets
- 2. Corporate Banking, which combines activities in corporate lending, Islamic finance and receivables finance, as well as payments services for corporate clients
- 3. Global Markets Sales, which offers advisory and execution services to institutional and high-net-worth individual clients
- 4. Retail Banking, whereby GBI serves as a savings bank in both the Netherlands and Germany, and has recently expanded into residential mortgage lending in the Netherlands

#### **Detailed credit considerations**

### GBI's Macro Profile reflects a material exposure to Turkiye and the short-term nature of the loan book

As of year-end 2024, GBI's exposure to the Dutch economy (Macro Profile score of Strong+) amounted to 44% of the total exposure including central bank's deposits (13% excluding deposits to DNB), whereas its total exposure to European countries was 71%<sup>3</sup> (54% excluding deposits to DNB). However, GBI is also exposed to the weaker operating environment of Turkiye (Macro Profile of Weak+), leading to an assigned weighted Macro Profile of Moderate+.

GBI's exposures to Turkiye increased to 18% as of year-end 2024 (28% excluding deposits to DNB) from 15% (22% excluding deposits to DNB) as of year-end 2023. These exposures are significant, and the risks arising are material given the weak operating environment

and strained funding conditions in Turkiye. We expect deposits to DNB to remain significant over the outlook period, and we do not anticipate exposure to Turkiye increasing as a proportion of the loan book.

We also caution that trade finance exposures being short-term in nature and exposed to volatile commodity prices, we expect the macro adjusted scores in the scorecard to be slightly more volatile. Therefore, GBI's weighted Macro Profile of Strong- has been adjusted down by one notch to Moderate+ to reflect such limitations and the unstable macroeconomic conditions in Turkiye.

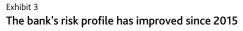
# Largely collateralised credit portfolio, which has yielded minimal losses in recent years, but exhibits high concentrations

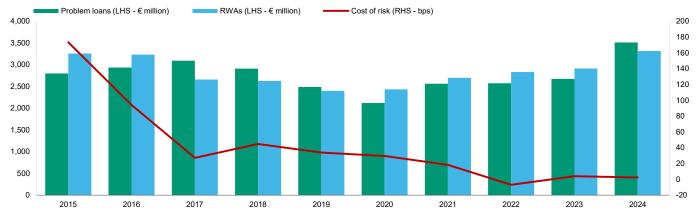
We assign an asset risk score of ba3, seven notches below the macro-adjusted score, to reflect the low level of non-performing loans accounting for around 0.6% of gross loans at end-2024, but also the structurally concentrated nature of the bank's exposures in terms of corporate borrowers and geographies. The assigned score also takes into account the bank's fast growth strategy, with loans increasing by over 30% in 2024, primarily driven by expansion within its existing corporate portfolio, growth in the retail segment, and its entry into the Dutch residential mortgage market, although this has not led to asset quality deterioration so far, as reflected in the bank's low NPL ratio.

Single-name concentrations are elevated, with the top 20 exposures representing around 254% of the bank's Common Equity Tier 1 (CET1) capital as of year-end 2024. In addition, GBI's on- and off-balance-sheet exposures to Turkish counterparts amounted to €1.6 billion as of December 2024, representing 18% of its exposures (28% excluding deposits to DNB). Almost all of these exposures are to corporate banking and trade finance loans, which are short term in nature and can be closed at relatively short notice.

Notwithstanding the increase in 2024, Turkish exposures remain well below historical levels. Following BBVA's acquisition of a controlling stake in GBI's direct shareholder in 2015, the bank undertook a material de-risking of its balance sheet. Yet, exposures to Turkish counterparties and loan concentrations, despite improvements, remain elevated.

Following the adoption of BBVA's risk policies, the bank's total related-party exposures decreased significantly to 13% of CET1 capital as of year-end 2024 (from 26% as of year-end 2017).





Sources: Company data and Moody's Ratings

## Strong capital base and good track record of internal capital generation

We assign a capital score of a2, reflecting the bank's strong capitalisation and its ability to absorb potential shocks, our view that the bank could access capital in case of need being it part of a large European banking group such as BBVA. The assigned score is one notch below the macro-adjusted score to reflect the expected increase in risk-weighted assets driven by the bank's commercial growth, as well as GBI's transition from the Internal Ratings Based Approach (IRB) to the Standardised Approach (SA) for credit risk calculation, which we expect will offset internal capital generation.

As of year-end 2024, GBI reported a strong CET1 ratio of 23.9%, increasing from an already high 23.6% a year earlier. GBI has not distributed dividends in recent years, which has supported internal capital generation.

The bank's CET1 is largely above the bank's 8.95% SREP <sup>4</sup> minimum requirement set for 2024. The Pillar 2 Requirement on total capital decreased for consecutive years to 2.55% in 2024 (45 bps decrease) from 3% in 2023 and 3.5% in 2022, also indicative of lower risk profile.

### Good profitability albeit exposed to inherent earnings volatility

We assign a profitability score of ba2, three notches below the macro-adjusted score, reflecting the bank's good profitability supported by loan growth, low cost of risk and good efficiency, but also our view that the bank's business mix and the concentrated nature of its loan book exposes the bank to inherent earnings volatility. We expect the bank to maintain good operating efficiency, but also anticipate a decline in loan margins going forward with lower interest rates.

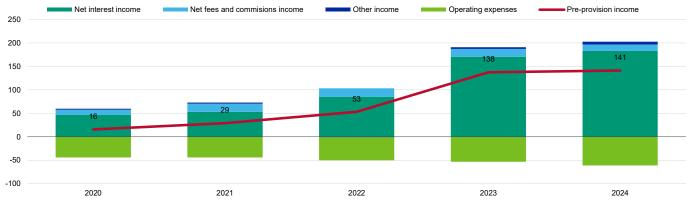
After reaching a record high net income over tangible assets of 1.74% in 2023, profitability declined to 1.23% in 2024, primarily due to the short maturity of the loan book, which resulted in quicker repricing than most banks once interest rates in Europe started to decline, while the pass-through of lower rates to GBI's depositors remained slower, putting additional pressure on margins. The negative rate effect was mitigated by a volume effect as the loan book increased by over 30% in 2024.

In 2024 the bank's revenues grew by 6% supported by a 7% increase in net interest income driven by higher volumes. This volume effect more than offset the decline in net interest margin, which fell to 262 basis points (bps) from 314 bps in 2023, as well as a 19% drop in net commission income, which accounted for 7% of revenues (down from 9% in 2023).

Exhibit 4

Strong loan growth supported net interest income in 2024

Breakdown of pre-provision income in € million



Sources: Company data and Moody's Ratings

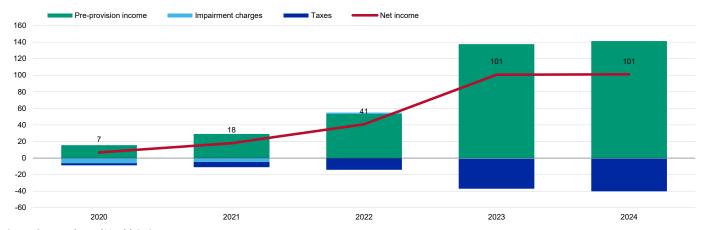
Historically, GBI's cost efficiency has been relatively strong, thanks to the absence of a physical branch network. The Moody's-calculated cost-to-income ratio was low at 30% in 2024. Operating expenses increased by 15% to €61 million in 2024, but the bank managed to maintain solid pre-provision income (PPI), as the revenue growth was sufficient to absorb the higher cost base. The declining inflation in the Netherlands will also ease the pressure on operating expenses for GBI.

The cost of risk remained very low at 2 bps of average loans to customers in 2024 compared with 4 bps in 2023. We expect the cost of risk to increase in the next 12 to 18 months due to the ongoing slowdown in the global economy and geopolitical uncertainties, but to remain overall contained.

Exhibit 5

Very low impairment charges supported GBI's profitability in the last two years

Breakdown of net income in € million



Source: Company data and Moody's Ratings

#### Strong liquidity but some reliance on concentrated corporate deposits

We assign a ba1 score to funding structure and a baa1 score to liquidity, leading to a combined liquidity score of baa3, four notches below the macro-adjusted score. The assigned score reflects the bank's ample deposit and liquidity base, but also its lack of market access and the corporate and online nature of its deposits that we consider less sticky than ordinary retail deposits.

As of year-end 2024, almost 90% of the balance sheet was deposit funded, out of which over 45% are retail deposits collected primarily through the internet or call centers in the Netherlands and in Germany. Corporate deposits accounted for 55% of the customer deposit base at year-end 2024. These are mostly denominated in USD, which are in larger part attracted through the provision of trade finance or cash management services. GBI exhibits substantial concentration in such a deposit client base, as is the case of most small-sized institutions. Large corporate deposits are more sensitive to confidence and pricing, as they are typically larger and uninsured. Interbank funding accounts for around 4%, consisting predominantly of bilateral wholesale funding and money market borrowings.

GBI mitigates its funding risks by maintaining ample liquidity on its balance sheet, with the loan-to-deposit ratio standing at 51% as of year-end 2024. As of year-end 2024, GBI's liquid assets represented 52% of total assets. The bank's liquidity coverage ratio amounted to 342% as of December 2024 decreasing from 939% as of December 2023, mainly due to the strong increase in the corporate deposit base. Additionally, the short duration of a large proportion of its assets confers flexibility to GBI in monitoring its credit risk and balance-sheet structure, and limits the bank's maturity mismatch.

#### **ESG** considerations

GarantiBank International N.V.'s ESG credit impact score is CIS-2

Exhibit 6

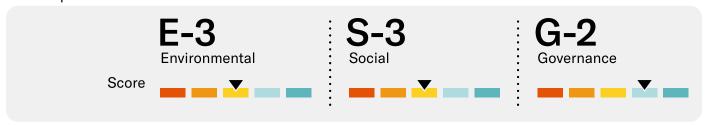
ESG credit impact score



Source: Moody's Ratings

GBI's CIS-2 indicates that ESG considerations do not have a material impact on the current rating.

Exhibit 7
ESG issuer profile scores



Source: Moody's Ratings

### **Environmental**

GBI faces moderate environmental risks primarily because of its portfolio exposure to carbon transition risk as a diversified bank. In line with its peers, GBI is exposed to mounting business risks and stakeholder pressure to meet broader carbon transition goals. In response, GBI is actively developing its comprehensive risk management and climate risk reporting frameworks, and transitioning its lending portfolios to achieve carbon neutrality targets.

#### **Social**

GBI is exposed to moderate social risks related to regulatory and litigation risks, requiring high compliance standards. These risks are mitigated by GBI's developed policies and procedures. GBI's high cyber and personal data risks are mitigated by the group's sound IT framework.

#### Governance

GBI faces low governance risks, reflecting satisfactory governance practices. GBI has aligned its risk management framework with the risk policies and procedures of its Spanish parent, which has led to a complete overhaul of its governance, and credit and investment policies.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click <a href="here">here</a> to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

# Support and structural considerations

### Affiliate support

GBI's Adjusted BCA of baa3 is positioned one notch above the bank's BCA of ba1, benefiting from Moody's unchanged assumption of a moderate probability of affiliate support from its ultimate parent BBVA. Our assumption considers the size of the bank, its inclusion within the scope of the ECB's supervision of BBVA and the reputational risks given GBI's use of BBVA's name.

### Loss Given Failure analysis

GBI is domiciled in the Netherlands, which we consider an operational resolution regime (ORR). Thus, we apply our advanced Loss Given Failure (LGF) analysis, using our standard assumptions. GBI has a material amount of corporate deposits, which we consider as junior to retail deposits and other deposits eligible for guarantee scheme.

Our LGF analysis indicates a very low loss given failure for junior deposits, leading us to assign two notches uplift above the bank's Adjusted BCA of baa3.

### **Government support considerations**

We expect a low probability of government support for GBI, resulting in no uplift to the banks' ratings.

# 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 unadjusted accounting 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 8

**Rating Factors** 

Macro Factors			
Weighted Macro Profile	Moderate	100%	
	+		

Factor	Historic Ratio	Initial Score	Expected Trend	Assigned Score	Key driver #1	Key driver #2
Solvency	Katio	Score	rend			
Asset Risk						
Problem Loans / Gross Loans	0.8%	a2	<b>\</b>	ba3	Single name concentration	Geographical concentration
Capital						
Tangible Common Equity / Risk Weighted Assets (Basel III - transitional phase-in)	25.4%	a1	$\leftrightarrow$	a2	Access to capital	Risk-weighted capitalisation
Profitability						
Net Income / Tangible Assets	1.2%	baa2	$\leftrightarrow$	ba2	Expected trend	Earnings quality
Combined Solvency Score		a2		baa3		
Liquidity						
Funding Structure						
Market Funds / Tangible Banking Assets	4.9%	a2	$\leftrightarrow$	ba1	Deposit quality	Lack of market access
Liquid Resources						
Liquid Banking Assets / Tangible Banking Assets	56.8%	a2	$\leftrightarrow$	baa1	Stock of liquid assets	
Combined Liquidity Score		a2		baa3		
Financial Profile		a2		baa3		
Qualitative Adjustments				Adjustment		
Business Diversification				0		
Opacity and Complexity				0		
Corporate Behavior				0		
Total Qualitative Adjustments				0		
Sovereign or Affiliate constraint				Aaa		
BCA Scorecard-indicated Outcome - Range				baa2 - ba1		
Assigned BCA				ba1		
Affiliate Support notching				-		
Adjusted BCA				baa3		

Balance Sheet	in-scope	% in-scope	at-failure	% at-failure	
	(EUR Million)		(EUR Million)		
Other liabilities	1,051	12.8%	1,759	21.4%	
Deposits	6,936	84.2%	6,229	75.6%	
Preferred deposits	5,133	62.3%	4,876	59.2%	
Junior deposits	1,803	21.9%	1,353	16.4%	
Equity	247	3.0%	247	3.0%	
Total Tangible Banking Assets	8,234	100.0%	8,234	100.0%	

Debt Class	De Jure	De Jure waterfall De Facto waterfall		Not	Notching		Assigned	Additional Preliminary		
	Instrumen volume + subordinatio	ordinatio	Instrument on volume + subordinatio	ordination	•	De Facto	Notching Guidance vs. Adjusted BCA	LGF notching	Notching	g Rating Assessment
Counterparty Risk Rating	19.4%	19.4%	19.4%	19.4%	3	3	3	3	0	a3
Counterparty Risk Assessment	19.4%	19.4%	19.4%	19.4%	3	3	3	3	0	a3 (cr)
Deposits	19.4%	3.0%	19.4%	3.0%	2	2	2	2	0	baa1

Instrument Class	Loss Given Failure notching		Preliminary Rating Assessment	Government Support notching	Local Currency Rating	Foreign Currency Rating
Counterparty Risk Rating	3	0	a3	0	A3	A3
Counterparty Risk Assessment	3	0	a3 (cr)	0	A3(cr)	
Deposits	2	0	baa1	0	Baa1	Baa1

<sup>[1]</sup> Where dashes are shown for a particular factor (or sub-factor), the score is based on non-public information. Source: Moody's Ratings

# **Ratings**

Exhibit 9

Category	Moody's Rating
GARANTIBANK INTERNATIONAL N.V.	
Outlook	Stable
Counterparty Risk Rating	A3/P-2
Bank Deposits	Baa1/P-2
Baseline Credit Assessment	ba1
Adjusted Baseline Credit Assessment	baa3
Counterparty Risk Assessment	A3(cr)/P-2(cr)
PARENT: TURKIYE GARANTI BANKASI A.S.	
Outlook	Stable
Counterparty Risk Rating -Fgn Curr	Ba2/NP
Counterparty Risk Rating -Dom Curr	Ba1/NP
Bank Deposits	Ba2/NP
NSR Bank Deposits	Aaa.tr/TR-1
Baseline Credit Assessment	ba3
Adjusted Baseline Credit Assessment	ba2
Counterparty Risk Assessment	Ba1(cr)/NP(cr)
Senior Unsecured MTN	(P)Ba2
Subordinate	B1 (hyb)
Other Short Term	(P)NP
Source: Moody's Ratings	

# **Endnotes**

- 1 The ratings shown are BBVA's deposit rating, senior unsecured debt rating and Baseline Credit Assessment.
- 2 Netherlands Banking System Profile
- <u>3</u> including the Netherlands, the UK, Germany, Switzerland and France
- **<u>4</u>** Supervisory Review and Evaluation Process

© 2025 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 OR OTHERWISE MADE AVAILABLE BY MOODY'S (COLLECTIVELY, "MATERIALS") 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 MATERIALS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S MATERIALS 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 MATERIALS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES OR OTHERWISE MAKES AVAILABLE ITS MATERIALS 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 MATERIALS 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 MATERIALS 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. FOR CLARITY, NO INFORMATION CONTAINED HEREIN MAY BE USED TO DEVELOP, IMPROVE, TRAIN OR RETRAIN ANY SOFTWARE PROGRAM OR DATABASE, INCLUDING, BUT NOT LIMITED TO, FOR ANY ARTIFICIAL INTELLIGENCE, MACHINE LEARNING OR NATURAL LANGUAGE PROCESSING SOFTWARE, ALGORITHM, METHODOLOGY AND/OR MODEL.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS 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 credit rating process or in preparing its Materials.

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 Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it. MCO and all MCO entities that issue ratings under the "Moody's Ratings" brand name ("Moody's Ratings"), also maintain policies and procedures to address the independence of Moody's Ratings' credit ratings and credit rating processes. Information regarding crudian affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service, Inc. and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at ir.moodys.com under the heading "Investor Relations — Corporate Governance — Charter and Governance Documents - Director and Shareholder Affiliation Policy."

Moody's SF Japan K.K., Moody's Local AR Agente de Calificación de Riesgo S.A., Moody's Local BR Agência de Classificação de Risco LTDA, Moody's Local MX S.A. de C.V, I.C.V., Moody's Local PE Clasificadora de Riesgo S.A., and Moody's Local PA Calificadora de Riesgo S.A. (collectively, the "Moody's Non-NRSRO CRAs") are all indirectly wholly-owned credit rating agency subsidiaries of MCO. None of the Moody's Non-NRSRO CRAs is a Nationally Recognized Statistical Rating Organization.

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 India only: Moody's credit ratings, Assessments, other opinions and Materials are not intended to be and shall not be relied upon or used by any users located in India in relation to securities listed or proposed to be listed on Indian stock exchanges.

Additional terms with respect to Second Party Opinions and Net Zero Assessments (as defined in Moody's Ratings Rating Symbols and Definitions): Please note that neither a Second Party Opinion ("SPO") nor a Net Zero Assessment ("NZA") is a "credit rating". The issuance of SPOs and NZAs is not a regulated activity in many jurisdictions, including Singapore. JAPAN: In Japan, development and provision of SPOs and NZAs fall under the category of "Ancillary Businesses", not "Credit Rating Business", and are not subject to the regulations applicable to "Credit Rating Business" under the Financial Instruments and Exchange Act of Japan and its relevant regulation. PRC: Any SPO: (1) does not constitute a PRC Green Bond Assessment as defined under any relevant PRC laws or regulations; (2) cannot be included in any registration statement, offering circular, prospectus or any other documents submitted to the PRC regulatory authorities or otherwise used to satisfy any PRC regulatory disclosure requirement; and (3) cannot be used within the PRC for any regulatory purpose or for any other purpose which is not permitted under relevant PRC laws or regulations. For the purposes of this disclaimer, "PRC" refers to the mainland of the People's Republic of China, excluding Hong Kong, Macau and Taiwan.

REPORT NUMBER

1445447

12

### **CLIENT SERVICES**

 Americas
 1-212-553-1653

 Asia Pacific
 852-3551-3077

 Japan
 81-3-5408-4100

 EMEA
 44-20-7772-5454

13