

## CREDIT OPINION

3 June 2025

Update



Send Your Feedback

### RATINGS

#### Hypo-Bank Burgenland AG

Domicile	Austria
Long Term CRR	A1
Type	LT Counterparty Risk Rating - Fgn Curr
Outlook	Not Assigned
Long Term Debt	Not Assigned
Long Term Deposit	A2
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

Alexander Hendricks, +49.69.70730.779  
CFA  
Associate Managing Director  
alexander.hendricks@moodys.com

Carola Schuler +49.69.70730.766  
MD-Banking  
carola.schuler@moodys.com

### CLIENT SERVICES

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

## Hypo-Bank Burgenland AG

Update following ratings upgrade

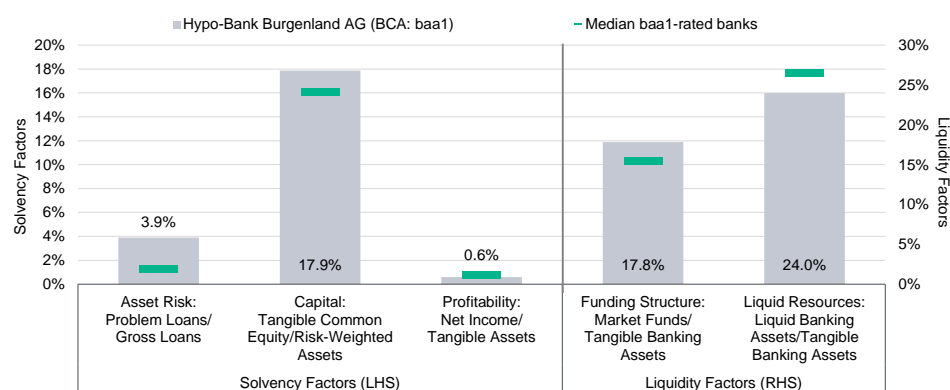
### Summary

[Hypo-Bank Burgenland AG's](#) (Bank Burgenland) A2 deposit and issuer ratings reflect the bank's baa1 Baseline Credit Assessment (BCA) and Adjusted BCA and the application of our Advanced Loss Given Failure (LGF) analysis, which incorporates the relative loss severity of a liability class and results in two notches of ratings uplift. We do not incorporate any rating uplift from government support to Bank Burgenland because of the bank's small size in the context of the Austrian banking system.

Bank Burgenland's baa1 BCA reflects the bank's very strong capitalisation and solid, albeit slightly declining profitability effectively mitigating asset risks stemming from large sector concentrations to highly cyclical commercial real estate as well as high single name concentrations. The high level of capital also helps shield the bank against risks arising from its limited geographical diversification, as well as market and operational risks arising from its private banking business and guarantees provided to its insurance parent, GRAWE Group. The affirmation further reflects the bank's strengthened and primarily deposit-based funding profile and a sound volume of liquid resources, also considering the acquisition of Austrian Anadi Bank AG's (Anadi) retail business.

Exhibit 1

### Rating Scorecard - Key financial ratios Bank Burgenland



Source: Company and Moody's Ratings

## Credit strengths

- » Strong capitalisation
- » Sound profitability
- » Limited market funding reliance

## Credit challenges

- » Concentration risks in highly cyclical CRE
- » Significant market risk
- » Some execution risks around the integration of Anadi

## Outlook

- » The stable outlook on Bank Burgenland's long-term deposit and issuer ratings reflects our expectation of an unchanged financial profile, with profitability levels providing a sufficient cushion to absorb an elevated level of risk costs with no impact on the bank's strong capitalisation. Further, we expect a stable liability structure supporting the assigned rating uplift under our Advanced LGF analysis.

## Factors that could lead to an upgrade

- » Bank Burgenland's BCA could be upgraded if the bank sustainably strengthens its solvency profile, in particular if it meaningfully reduces its problem loans and concentration risks, while maintaining its strong capitalisation and stable funding and liquidity profile.

## Factors that could lead to a downgrade

- » Bank Burgenland's ratings could be downgraded if its BCA gets downgraded. In addition, a downgrade could result from a significant decrease in the volume of senior unsecured liabilities relative to its tangible assets such that it increases the loss severity of the respective instrument classes.
- » Bank Burgenland's BCA could be downgraded in case of a significant weakening of its solvency or liquidity, in particular if it resulted from a meaningful deterioration of its asset risk, significantly straining its capital and profitability metrics.

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.moody's.com> for the most updated credit rating action information and rating history.

## Key Indicators

Exhibit 2

### Hypo-Bank Burgenland AG (Consolidated 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. <sup>3</sup>
Total Assets (EUR Billion)	7.7	6.5	6.8	6.5	6.2	5.5 <sup>4</sup>
Total Assets (USD Billion)	8.0	7.2	7.3	7.4	7.6	1.2 <sup>4</sup>
Tangible Common Equity (EUR Billion)	0.8	0.8	0.8	0.8	0.7	4.3 <sup>4</sup>
Tangible Common Equity (USD Billion)	0.9	0.9	0.8	0.9	0.9	(0.0) <sup>4</sup>
Tangible Common Equity / Risk Weighted Assets (%)	17.9	20.0	17.9	16.0	16.8	17.7 <sup>5</sup>
PPI / Average RWA (%)	3.4	3.3	1.7	1.6	1.6	2.3 <sup>5</sup>
Net Income / Tangible Assets (%)	0.6	0.9	0.5	0.8	0.8	0.7 <sup>5</sup>
Cost / Income Ratio (%)	53.0	50.8	61.8	65.0	65.1	59.1 <sup>5</sup>
Market Funds / Tangible Banking Assets (%)	17.8	19.9	21.2	22.1	20.9	20.4 <sup>5</sup>
Liquid Banking Assets / Tangible Banking Assets (%)	24.0	19.1	20.3	20.1	20.5	20.8 <sup>5</sup>

[1] All figures and ratios are adjusted using Moody's standard adjustments. [2] Basel III - fully loaded or transitional phase-in; LOCAL GAAP. [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 Basel III periods. [6] Simple average of periods for the latest accounting regime.

Sources: Moody's Ratings and company filings

## Profile

Bank Burgenland is a regional bank, headquartered in Eisenstadt (Austria), with select activities in Hungary, Slovakia and Germany. Bank Burgenland is 100% owned by Grazer Wechselseitige Versicherung AG (GRAWE Group<sup>1</sup>), an Austrian insurance group, and consolidates multiple entities operating under their own brand names.

Bank Burgenland is a universal bank with a focus on corporate banking, particularly for small and medium-sized enterprises (SMEs) and the real estate sector, and held total assets of €7.7 billion as of 31 December 2024. Further, Bank Burgenland offers retail banking, private banking and asset management services.

On 21 December 2023, [Bank Burgenland announced plans](#) to take over significant parts of Anadi's activities, including all branches (10 locations) serving around 42,000 retail and 250 SME customers with a total business volume of €1.7 billion. The transaction closed in autumn 2024, after regulatory approvals.

## Macro Profile of Strong+

Bank Burgenland's BCA is supported by its Strong+ Macro Profile, which is derived from the group's weighted average credit exposures, largely towards [Austria](#) (Aa1, stable) with minor holdings in central Europe and other countries. Bank Burgenland's Strong+ Macro Profile, therefore, matches the assigned Austrian Macro Profile.

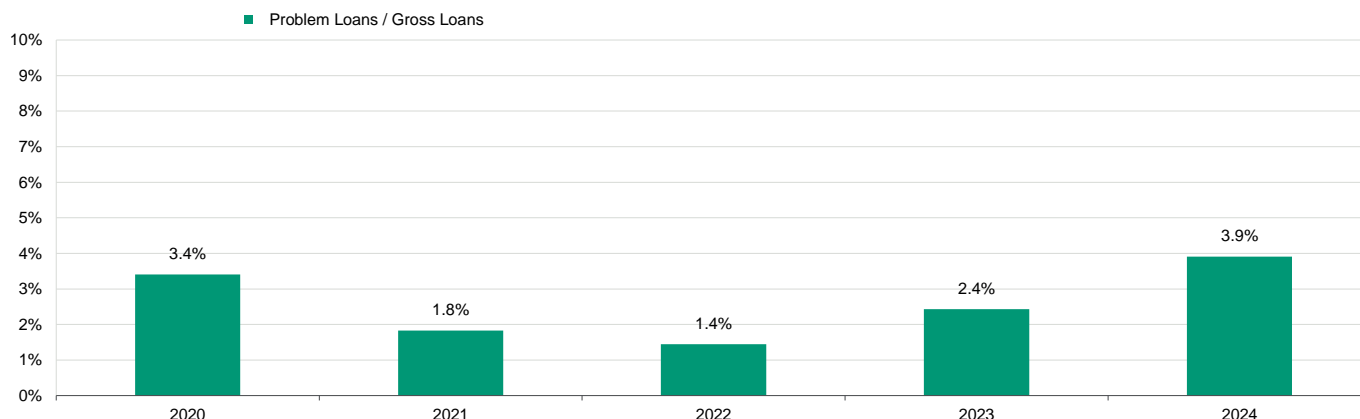
## Detailed credit considerations

### Asset quality has started to deteriorate moderately, concentration and market risks imply tail risks

We assign an asset risk score of ba1 to Bank Burgenland, reflective of the bank's concentration risk in commercial real estate (CRE) and significant lending exposures to SMEs in Burgenland, exposing the bank to a prolonged downturn in the commercial real estate market as well as to the anemic economic development in Austria. The score also captures the bank's exposure to market risk linked to guarantees the bank provides to its ultimate parent GRAWE Group and potential operational challenges from the integration of the Anadi operations.

Bank Burgenland's asset risk is primarily tied to its loan book, which makes up 66% of total assets. We anticipate a moderate deterioration in asset quality in 2025, driven more by corporate lending—especially to SMEs—than by commercial real estate (CRE). This reflects Austria's sluggish economic growth, although lower interest rates should ease debt servicing for both retail and corporate borrowers. SMEs remain particularly vulnerable due to their limited geographic and international reach. The bank's substantial exposure to highly cyclical CRE lending—several times its equity—and the related relatively large lending volumes to single debtors have been the main contributor to past asset quality deterioration and continues to pose meaningful tail risks.

Exhibit 3

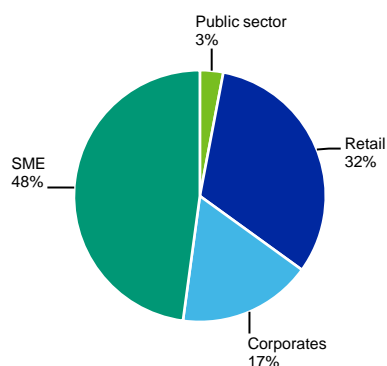
**The bank's sound asset quality continued to deteriorate in 2024**

Sources: Company and Moody's Ratings

In addition, Bank Burgenland's market risk is still higher than that of its peers, reflecting tail risks stemming from guarantees related to insurance products issued by its parent. The market risk arises from the bank providing a guarantee for the invested capital to cover potential shortfalls in case the underlying asset performance or evaluation falls below a certain value. Such a guarantee is rather typical for the insurance sector, yet not for a regional banking franchise, despite the link to its insurance parent.

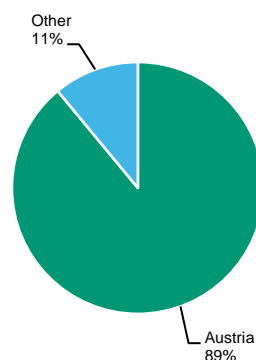
Bank Burgenland's asset management and private banking operations, run through its Schelhammer Capital subsidiary, provide a stabilizing counterbalance. These activities generate recurring fee and commission income, supporting more stable and diversified earnings. We view the associated market, operational, and legal risks as limited, given the relatively small scale of the bank's private banking business.

Exhibit 4

**Bank Burgenland's loan book mainly includes SMEs, whereas its credit exposure to large corporates is limited**  
 As of 31 December 2024


Sources: Company and Moody's Ratings

Exhibit 5

**Bank Burgenland's operations are mainly concentrated in Austria**

Sources: Company and Moody's Ratings

**Sound capital ratios provide strong buffers**

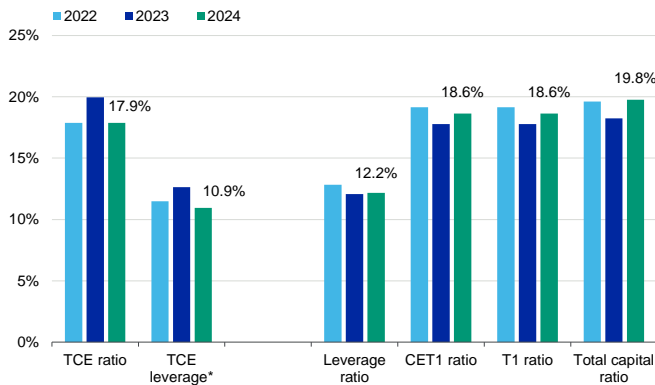
We assign a Capital score of aa3, one notch below the initial score. The assigned score reflects the bank's sound capitalisation, which provides good protection against the aforementioned tail risks. It also incorporates our expectation that risk-weighted assets (RWA) will only rise gradually as asset quality is likely to continue to deteriorate.

Bank Burgenland's capital ratio, measured as tangible common equity (TCE)/RWA stood at 17.9% as of 31 December 2024, down 210 basis points year-over-year (Exhibit 6). The Common Equity Tier 1 (CET1) capital ratio and Tier 1 capital ratio increased to 18.6% as of 31 December 2024 (2023: 17.8%). The bank's sound capital position is underlined by its robust leverage ratio of 12.2% and a very high risk density, with RWA accounting for 61% of total assets as of year-end 2024, according to the standardized approach for measuring risk weights.

Exhibit 6

**Bank Burgenland's capital ratios remain strong**

Capital as a percentage of RWA; leverage ratio as a percentage of tangible assets



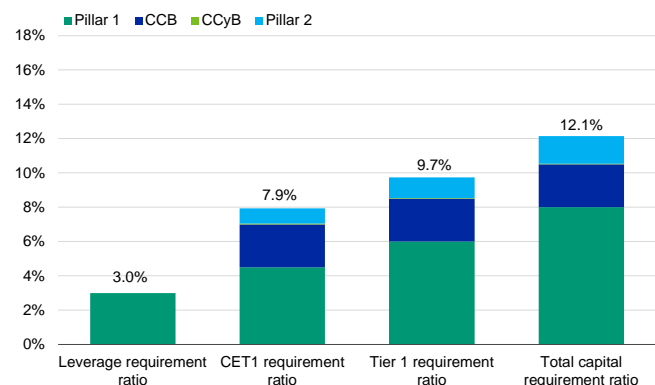
TCE = Tangible Common Equity; CET1 = Common Equity Tier 1; the TCE leverage ratio compares TCE with tangible banking assets.

Sources: Company and Moody's Ratings

Exhibit 7

**Bank Burgenland exceeded its regulatory capital requirement as of year-end 2024**

As a percentage of RWA



CCoB = capital conservation buffer; CCyB = countercyclical capital buffer.

Sources: Company and Moody's Ratings

**Strong profitability is supported by a diversified earnings profile**

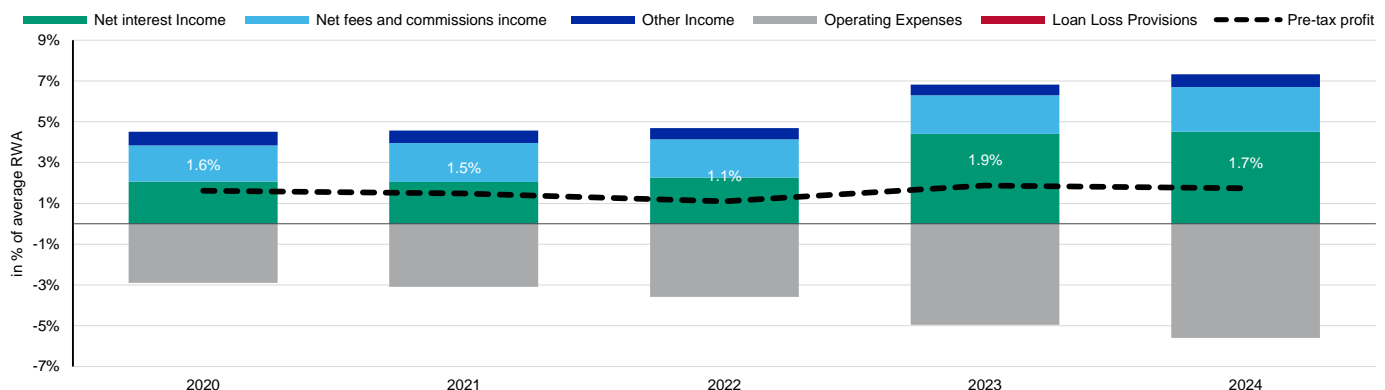
We assign a Profitability score of baa3 to Bank Burgenland, one notch below the initial baa2 score and reflective of the bank's sound capital generation capacity, that will, however, increasingly become strained by declining interest rates going forward.

The group's earnings are more diversified than those of its closest domestic peers, thanks to its relatively larger private banking and asset management activities. Net interest income benefitted from higher rates in 2023 and 2024, though this effect is expected to diminish as interest rates have started to decline. Sustaining profitability will depend on effective cost and risk management, especially amid weak economic growth. Meanwhile, the asset management and private banking segments face potential pressure from market slowdowns and increased volatility.

Exhibit 8

**Bank Burgenland maintains a diversified earnings stream and benefitted from the higher interest-rate environment, offsetting higher expenses**

Data in € million



Operating expenses include personnel expenses, administrative costs, deposit insurance fees and systemic risk charges, and depreciation and amortisation.

Sources: Company and Moody's Ratings

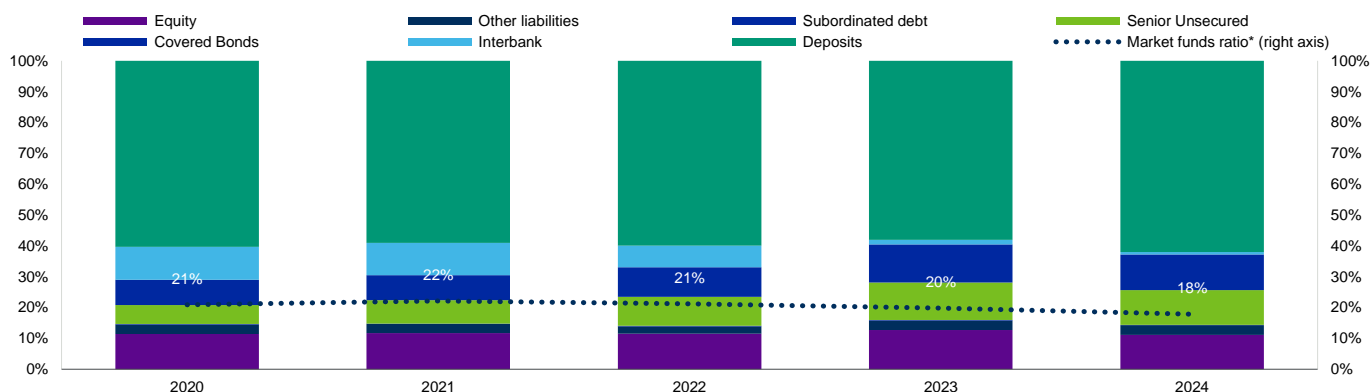
### Strong deposit base is supported by the bank's covered bond franchise

We assign a Funding score of a3 to Bank Burgenland, in line with the initial score, reflecting the bank's focus on deposit funding and resulting limited refinancing risks.

As of year-end 2024, Bank Burgenland's deposits stood at €4.8 billion, representing 62% of total assets. These deposits are well-diversified, with minimal exposure to single clients, reducing the risk of large, sudden outflows. Market funding includes €0.1 billion in interbank liabilities—significantly reduced after TLTRO repayments—alongside €0.9 billion each in covered bonds and senior unsecured debt.

Exhibit 9

#### Bank Burgenland mainly relies on deposit funding As a percentage of tangible banking assets



\*Market funds ratio = Market funding/tangible banking assets.

Sources: Company and Moody's Ratings

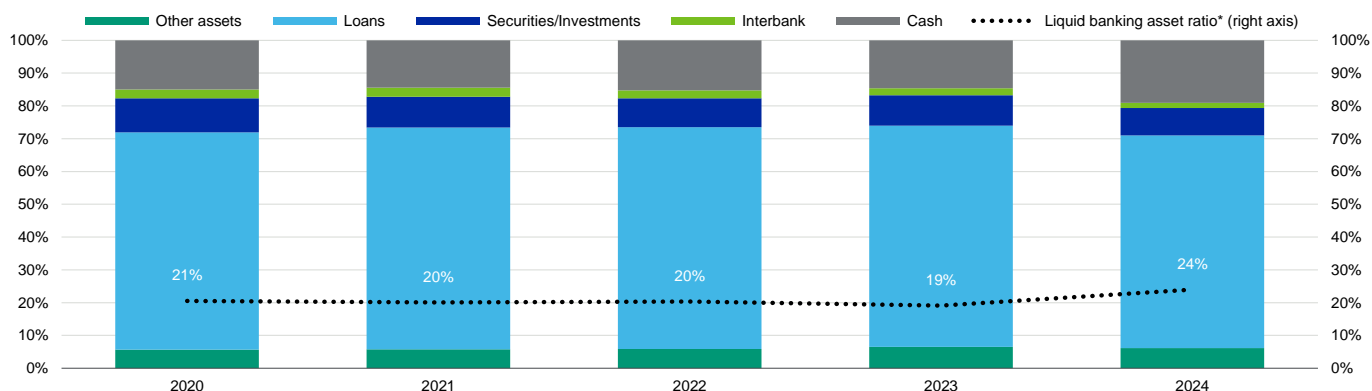
### Liquidity is sound

We assign a Liquid Resources score of baa2, one notch below the initial baa1 score, reflecting the bank's good liquid reserves and some limited asset encumbrance.

Bank Burgenland's liquid resources, mainly held in cash and cash equivalents (€1.5 billion), account for 24% of tangible banking assets. The bank also holds a small repo-eligible securities portfolio of €0.3 billion and interbank assets of €0.1 billion. Bank Burgenland's LCR of 217% and NSFR of 133%, both as of year-end 2024, stood well above the required minima.

Exhibit 10

#### Bank Burgenland maintains sufficient liquidity Asset breakdown as a percentage of tangible assets



\*Liquid banking assets ratio = Liquid assets/tangible banking assets.

Sources: Company and Moody's Ratings

## ESG considerations

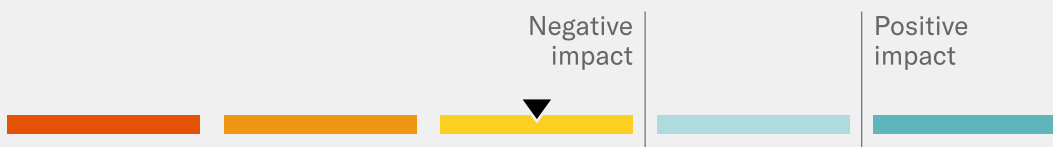
Hypo-Bank Burgenland AG's ESG credit impact score is CIS-3

Exhibit 11

ESG credit impact score

# CIS-3

Score



ESG considerations have a limited impact on the current rating, with potential for greater negative impact over time.

Source: Moody's Ratings

Hypo-Bank Burgenland AG' (Bank Burgenland) **CIS-3** indicates limited impact of ESG considerations on the ratings to date, with potential for greater negative impact over time, mostly related to the management's less proactive risk and capital management in comparison with peers. Environmental and social factors have a limited credit impact on the ratings to date.

Exhibit 12

ESG issuer profile scores



Source: Moody's Ratings

### Environmental

Bank Burgenland faces moderate environmental risks primarily because of its portfolio exposure to carbon transition risk as a regional, diversified bank. In line with its peers, Bank Burgenland is facing mounting business risks and stakeholder pressure to meet broader carbon transition goals. In response, Bank Burgenland is actively engaging in further developing its comprehensive risk management and climate risk reporting frameworks and tries to align its business with the transition to a low-carbon economy.

### Social

Bank Burgenland faces moderate social risks mainly related to customer relations as well as to demographic and societal trends. The bank's developed policies and procedures mitigate conduct risk associated with the distribution of financial products such as regulatory and reputational risks, as well as exposure to litigation. Continued investments in technology and the bank's long track record of handling sensitive customer data, as well as appropriate culture and governance that ensure adherence to regulatory standards, help to manage high cyber and personal data risks. Bank Burgenland operates mostly in Austria, which faces challenges from adverse demographic trends affecting long-term economic growth prospects and impacting the demand for certain banking products. Product diversity as well as an ability to adapt to consumer preferences, regulatory changes and societal trends such as digitization are key to address these risks.

### Governance

Bank Burgenland faces moderate governance risks, reflecting the bank's sound profitability and limited loan losses, despite elevated market and non-lending credit risks that go beyond the typical profile of a regional banking franchise. The bank's risk management, policies and procedures are largely in line with industry practices, and commensurate with its universal banking model, though risk and

capital management are less proactive in comparison with peers. Bank Burgenland is owned by the mutualist insurance group Grazer Wechselseitige Versicherung AG (GRAWE Group, 100%), which is reflected in the composition of its board of directors, that includes representatives of the owner next to employee representatives. A number of independent board members and Austria's developed institutional framework mitigates associated governance risks.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moody's.com. In order to view the latest scores, please click [here](#) to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

## Support and structural considerations

### Government support considerations

The introduction of the BRRD has demonstrated a reduction in the willingness of the EU governments to bail out banks because it severely restricts the conditions under which authorities can use public money to fund a bank recapitalisation. We expect most failing banks to be resolved without governments providing financial support. This approach to support will be broadly consistent throughout the EU because the BRRD provides little room for national discretion.

Therefore, Bank Burgenland's ratings do not benefit from government support uplift, given its small size in the context of the Austrian banking system.

### Loss Given Failure (LGF) analysis

Bank Burgenland is subject to the EU BRRD, which we consider an operational resolution regime. Therefore, we apply our Advanced LGF analysis, where we consider the risks faced by the different debt and deposit classes across the liability structure should the bank enter a resolution. We apply our standard assumptions.

For the bank's deposit and issuer ratings, our LGF analysis indicates a very low loss given failure, leading to a two-notch rating uplift from the bank's baa1 Adjusted BCA.

### Methodology and scorecard

The principal methodology used is the [Banks Methodology](#), published in March 2024.



## Rating methodology and scorecard factors

Exhibit 13

### Rating Factors

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		-	-	-	ba1		Sector concentration		Market risk		
Capital											
Tangible Common Equity / Risk Weighted Assets (Basel III - transitional phase-in)		17.9%	aa2	↑↑	aa3		Risk-weighted capitalisation		Expected trend		
Profitability											
Net Income / Tangible Assets		0.6%	baa2	↔	baa3		Return on assets		Expected trend		
Combined Solvency Score			a2		baa1						
Liquidity											
Funding Structure											
Market Funds / Tangible Banking Assets		17.8%	a3	↔	a3		Extent of market funding reliance		Expected trend		
Liquid Resources											
Liquid Banking Assets / Tangible Banking Assets		24.0%	baa1	↔	baa2		Stock of liquid assets		Expected trend		
Combined Liquidity Score			a3		baa1						
Financial Profile			a2		baa1						
Qualitative Adjustments					Adjustment						
Business Diversification					0						
Opacity and Complexity					0						
Corporate Behavior					0						
Total Qualitative Adjustments					0						
Sovereign or Affiliate constraint					Aa1						
BCA Scorecard-indicated Outcome - Range					a3 - baa2						
Assigned BCA					baa1						
Affiliate Support notching					0						
Adjusted BCA					baa1						
Balance Sheet			in-scope (EUR Million)		% in-scope		at-failure (EUR Million)		% at-failure		
Other liabilities			1,805		23.5%		2,292		29.8%		
Deposits			4,777		62.1%		4,290		55.8%		
Preferred deposits			3,535		46.0%		3,358		43.7%		
Junior deposits			1,242		16.2%		932		12.1%		
Senior unsecured bank debt			867		11.3%		867		11.3%		
Dated subordinated bank debt			10		0.1%		10		0.1%		
Equity			231		3.0%		231		3.0%		
Total Tangible Banking Assets			7,690		100.0%		7,690		100.0%		
Debt Class		De Jure waterfall		De Facto waterfall		Notching		LGF	Assigned	Additional Preliminary	
	Instrument	Sub-volume	Instrument	Sub-volume	De Jure	De Facto	Notching	LGF	Assigned	Additional Preliminary	
	subordination	ordination	subordination	ordination			Guidance vs. Adjusted BCA	notching		Rating Assessment	
Counterparty Risk Rating		26.5%	26.5%	26.5%	26.5%	3	3	3	3	0	a1
Counterparty Risk Assessment		26.5%	26.5%	26.5%	26.5%	3	3	3	3	0	a1 (cr)
Deposits		26.5%	3.1%	26.5%	14.4%	2	3	2	2	0	a2
Senior unsecured bank debt		26.5%	3.1%	14.4%	3.1%	2	1	2	2	0	a2

Instrument Class	Loss Given Failure notching	Additional notching	Preliminary Rating Assessment	Government Support notching	Local Currency Rating	Foreign Currency Rating
Counterparty Risk Rating	3	0	a1	0	A1	A1
Counterparty Risk Assessment	3	0	a1 (cr)	0	A1(cr)	
Deposits	2	0	a2	0	A2	A2
Senior unsecured bank debt	2	0	a2	0	A2	A2

[1] 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 14

Category	Moody's Rating
<b>HYPO-BANK BURGENLAND AG</b>	
Outlook	Stable
Counterparty Risk Rating	A1/P-1
Bank Deposits	A2/P-1
Baseline Credit Assessment	baa1
Adjusted Baseline Credit Assessment	baa1
Counterparty Risk Assessment	A1(cr)/P-1(cr)
Issuer Rating	A2
ST Issuer Rating	P-1

Source: Moody's Ratings

## Endnotes

- The bank was originally founded in 1928. After GRAWE Group acquired Bank Burgenland in 2006, the banking group GRAWE Bankengruppe was established in 2008, with Bank Burgenland as the leading institute.

© 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 certain 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.moody.com](http://ir.moody.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 Clasificadora 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 61 003 399 657 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 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.



Contacts

Gerson Morgenstern           +49.69.70730.796  
Sr Ratings Associate  
gerson.morgenstern@moodys.com

CLIENT SERVICES

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