

CREDIT OPINION

20 September 2023

Update



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RATINGS

Aareal Bank AG

Domicile	Wiesbaden, Germany
Long Term CRR	A3
Туре	LT Counterparty Risk Rating - Fgn Curr
Outlook	Not Assigned
Long Term Debt	A3
Туре	Senior Unsecured - Dom Curr
Outlook	Negative
Long Term Deposit	A3
Туре	LT Bank Deposits - Fgn Curr
Outlook	Negative

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.

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Aareal Bank AG

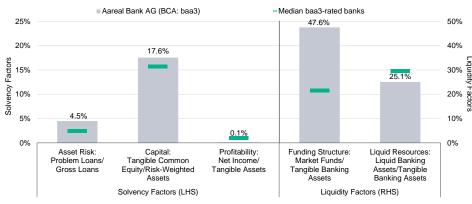
Update to credit analysis

Summary

<u>Aareal Bank AG</u>'s (Aareal) A3 deposits and senior unsecured debt ratings reflect the bank's baa3 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 three notches of rating uplift. Aareal's ratings do not benefit from government support uplift because of its small size in the context of the German banking sector.

Aareal's baa3 BCA reflects the bank's resilient credit profile, despite the sharp increase in interest rates which challenge property market values and makes refinancing more difficult, eroding asset quality. The bank's BCA is constrained by its focused business model as a commercial real estate (CRE) lender, exposing it to considerable concentration risks. Absent meaningful earnings diversification from non-lending activities, we consider Aareal to operate a monoline business model.

Exhibit 1
Rating Scorecard - Key financial ratios



Source: Company reports, Moody's Investors Service

Credit strengths

- » Strong risk-weighted capital ratios with ample buffers over regulatory requirements
- » Sound and stable liquidity following repayment of majority of central bank funding
- » Large and sticky deposits from the professional housing and commercial property industry which mitigates Aareal's wholesale funding dependence

Credit challenges

- » Concentration risk to commercial real estate and limited earnings diversification from non-lending activities constrain Aareal's credit profile
- » Moderate asset quality which will further weaken as higher interest rates and structural changes challenge commercial property sectors globally, in particular office and retail
- » Moderate profitability reflecting the balance of solid operating performance, proactive steps to address weakening asset quality, as well as continued strategic investments to diversify Aareal's business and earnings mix

Outlook

» The negative rating outlook captures potential downward pressure on Aareal's BCA, reflecting a weakened profitability level over the past years, which provides limited buffer against downside risks

Factors that could lead to an upgrade

- » An upgrade of Aareal's ratings could be triggered by an upgrade of the bank's BCA, which requires a better diversified business model, that benefits from sustainable and meaningful earnings to balance its current very high focus on CRE lending.
- » Additional rating uplift from our Advanced LGF analysis could occur for junior senior unsecured debt if Aareal significantly increases the volume of instruments designed to absorb losses in resolution relative to its tangible banking assets. With three notches of rating uplift above Aareal's Adjusted BCA, the bank's deposit and senior unsecured debt ratings already benefit from the highest possible LGF result.

Factors that could lead to a downgrade

- » Aareal's ratings could be downgraded as result of a downgrade of the bank's BCA or if loss-absorbing liabilities decline significantly and beyond our expectations, thereby resulting in fewer notches of rating uplift from our LGF analysis.
- » Aareal's BCA could be downgraded, if its intrinsic strength weakens, for example if the bank fails to sustainably restore profitability to levels before the pandemic, or in case of a deterioration in asset quality, or a reduction in its capitalisation. Downward pressure could also result from higher market funding dependence, or lower liquid reserves.

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

Aareal Bank AG (Consolidated Financials) [1]

	06-23 ²	12-22 ²	12-21 ²	12-20 ²	12-19 ²	CAGR/Avg.3
Total Assets (EUR Billion)	45.9	43.9	46.7	44.4	40.1	4.04
Total Assets (USD Billion)	50.1	46.9	52.9	54.3	45.0	3.1 ⁴
Tangible Common Equity (EUR Billion)	2.3	2.3	2.3	2.4	2.7	(3.9)4
Tangible Common Equity (USD Billion)	2.6	2.5	2.6	2.9	3.0	(4.7)4
Problem Loans / Gross Loans (%)	3.9	3.3	5.1	5.7	3.6	4.35
Tangible Common Equity / Risk Weighted Assets (%)	17.6	18.4	18.0	19.8	24.1	19.6 ⁶
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	45.1	34.7	53.8	51.8	30.4	43.2 ⁵
Net Interest Margin (%)	2.0	1.5	1.3	1.2	1.3	1.5 ⁵
PPI / Average RWA (%)	3.7	3.3	2.3	2.2	2.8	2.9 ⁶
Net Income / Tangible Assets (%)	0.2	0.3	0.1	-0.2	0.4	0.25
Cost / Income Ratio (%)	60.7	59.8	66.9	68.1	60.6	63.2 ⁵
Market Funds / Tangible Banking Assets (%)	51.1	47.6	53.0	52.5	47.4	50.3 ⁵
Liquid Banking Assets / Tangible Banking Assets (%)	25.7	25.1	25.8	21.4	15.7	22.7 ⁵
Gross Loans / Due to Customers (%)	251.2	228.3	251.2	257.5	264.6	250.6 ⁵

^[-] Further to the publication of our revised methodology in July 2021, only ratios from annual 2020 onwards included in this report reflect the change in analytical treatment of the "high-trigger" Additional Tier 1 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

Aareal Bank AG is one of Germany's (Aaa stable) largest CRE lending specialist, domiciled in Wiesbaden, with total reported assets of €49 billion at the end of June 2023, of which €31 billion or 63% relate to loans. Aareal caters to corporate real estate clients, with no direct retail business in its lending activities. The bank also offers consultancy, IT/digital services and transaction banking to professional clients in the housing and commercial property industries.

Following a voluntary public takeover, started in November 2021, Aareal is now majority owned by Atlantic BidCo GmbH, with a stake of around 90% in the bank's share capital and voting rights as of 9 June 2023. This entity is indirectly held by the private equity firms Advent International and Centerbridge Partners, with individual stakes of around 39% each.

Weighted Macro Profile of Strong

Aareal's Strong Macro Profile reflects of its global lending activities which include exposures to countries with a Strong+ Macro Profile, like the <u>United States of America</u> (Aaa stable, around 27% of the total as of year-end 2022), <u>United Kingdom</u> (Aa3 negative, 16%), <u>France</u> (Aa2 stable, 11%), and <u>Germany</u> (Aaa stable, 8%). Because of the bank's exposures to jurisdictions with lower macro profiles, including <u>Spain</u> (Baa1 stable), <u>Poland</u> (A2 stable), and <u>Italy</u> (Baa3 negative), Aareal's overall macro profile is one notch below that of Germany.

Detailed credit considerations

Higher interest rates and structural challenges weaken asset quality

Aareal's ba2 Asset Risk score is three notches below its baa2 initial score. Our sizeable negative adjustment reflects the bank's cyclical CRE lending with single-name and single-location concentrations. We expect that US office exposure is most at risk, for example because of declining tenant demand, while retail shopping centers and hotels are also challenged by rising prices and operating costs.

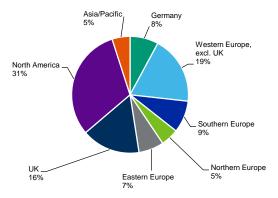
The sharp increase in interest rates creates challenges CRE property market values globally and makes refinancing more difficult. In <u>our base case for European CRE valuations</u>, we expect a decline of 5-15% from their 2022 levels in the next 12-18 months, with varying ranges, depending on location and property type. Aareal does not provide lending to real estate companies or development/project financing, which are financially most affected in the current environment. The bank's CRE lending activities focus on existing properties, mostly in prime locations, and exhibit a rising portion that comply with green finance standards, at €7.7 billion or 24% of Aareal's total lending at the end of June 2023 (2022: 21%, 2021: 17%).

At the end of June 2023, Aareal's total CRE exposure had grown by around 23% to €31.7 billion, compared with €25.9 billion in 2019. The bank's portfolio is strongly geared to North America (Exhibit 3), consisting of the United States (US, around €8.6 billion or 27% of total) and Canada (4%). It includes sizeable exposure to high-risk subsectors, like hotels (35%), offices (27%, of which around half is in the US), and retail properties (17%), while the bank's share to more stable logistics and residential lending was 14% and 6% at the end of June 2023 (Exhibit 4).

Exhibit 3

Aareal's CRE exposure by region

Data as of June 2023

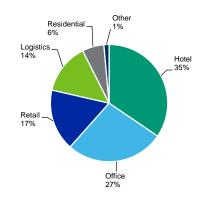


Source: Company reports, Moody's Investors Service

Exhibit 4

Aareal's CRE exposure by segment

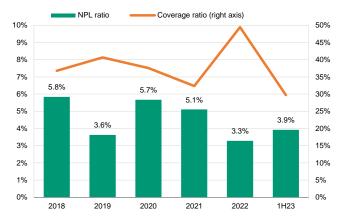
Data as of June 2023



Source: Company reports, Moody's Investors Service

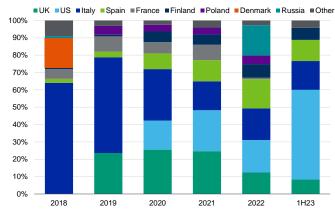
Despite the pandemic and energy crisis, Aareal's non-performing loan (NPL) ratio improved to 3.3% in 2022, compared with 3.6% in 2019, reflecting broadly stable problem loans and rising gross loans (Exhibit 5). At the end of June 2023, the ratio increased to 3.9%, driven by mounting stress in the US, where the bank's problematic exposures more than tripled to €683 million, compared with €188 million at the end of 2022. The increase was offset by the full disposal of its €217 million Russian exposure, which was previously classified non-performing (Exhibit 6).

Exhibit 5
Following a recovery in 2021-22, Aareal's problem loan ratio weakened during 1H23, driven by US office exposures
Data in percent



Source: Company reports, Moody's Investors Service

Exhibit 6
For each country, Aareal's problem loans arise from a small number of cases
Data in percent



Source: Company reports, Moody's Investors Service

During the first six month of 2023, Aareal's CRE exposures outside the US office market showed broadly stable performance, as demonstrated by an average loan-to-value ratio of 55%, unchanged from year-end 2022, and down from 58% in 2021 and 60% in 2020. Over the same period, the bank's income-producing properties benefited from higher yield-on-debt², which increased to 9.5% at the end of June from 8.5% in 2022, demonstrating CRE sponsor's improving ability to manage rising financing costs.

Aareal's €4.2 billion US office exposure arises from around 50 properties in prime markets with yield-on-debt of 7.3% and aggregate lease expiries of around 19% in the years 2023-24. Around 30% of these loans will mature over that period, with peak maturities of around one third in 2025.

Strong risk-weighted capital ratios with ample buffers over regulatory requirements

We assign a Capital score of a2 to Aareal, which is two notches below the aa3 initial score. Our negative adjustment reflects the expected decline in the bank's regulatory capital ratio and our Tangible Common Equity (TCE) ratio because of the upcoming revisions to the Basel framework for measuring credit risks (the so-called constrained internal ratings-based approach).

Aareal's TCE ratio of 17.6% as of June 2023 strongly underpins its baa3 financial profile. The moderate decline from 18.4% in 2022 reflects stable TCE of €2.3 billion and higher risk-weighted assets (RWA), which increased by around 4.3% to €13.3 billion³ from €12.8 billion over the same period. We consider Aareal's 5.2% TCE leverage ratio satisfactory in the context of its risk profile. Our ratio is somewhat lower than the regulatory Tier 1 leverage ratio of 6.2%, because we exclude Additional Tier 1 (AT1) capital in the numerator of the ratio.

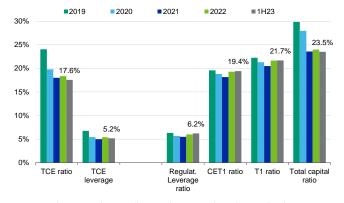
We expect Aareal to maintain a TCE ratio of around 14% despite the expected deterioration in asset quality, as a result of weakening economic growth and tightening funding conditions, and the expected increase in regulatory RWA. Our assessment also takes into account that Aareal's new owners support the bank's growth ambitions by strengthening capital, as demonstrated by the waived dividend for 2022.

During the first six month of 2023, Aareal's Common Equity Tier 1 (CET1) ratio remained broadly unchanged at 19.4% (2022: 19.3%), reflecting the balance of retained earnings that offset the increase in RWA. The introduction in Germany of a countercyclical capital buffer (CCyB) requirement of 0.75% for domestic RWA and an additional 2.0% buffer specific to RWAs from domestic loans backed by residential properties, effective 1 February 2023, did not weaken Aareal's financial flexibility. This is demonstrated by the bank's unchanged sizeable buffers of 10 or more percentage points above minimum regulatory capital requirements as of June 2023 (Exhibit 8), which also reflects the increase in its total Pillar 2 Requirement (P2R) to 3.0% since 2023, compared with 2.75% until last year.

Exhibit 7

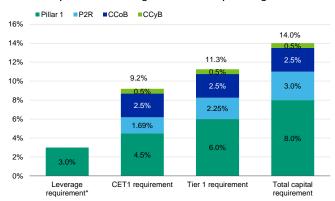
Aareal reports high capital ratios ...

Data in percent of risk-weighted assets, except leverage ratios



Note: Ratios for 2019 and 2020 reflect Basel 3 regime, thereafter Basel 4 phase-in; TCE = Tangible Common Equity (Moody's calculation; excludes high-trigger Additional Tier 1 instruments for all periods); CET1 = Common Equity Tier 1 capital; T1 ratio = Tier 1 Ratio. Source: Company reports, Moody's Investors Service

Exhibit 8 ... which exceed regulatory requirements by large margins 1H23 data in percent of risk-weighted assets, except leverage ratio*



Note: P2R = Pillar 2 Requirement; CCoB = Capital conservation buffer; CCyB = Countercyclical Buffer; *The leverage ratio compares Tier 1 capital to exposure at default. Source: Company reports, Moody's Investors Service

Robust operating performance mitigates rising credit costs

We assign a ba3 Profitability score to Aareal, three notches above the initial score of b3. We expect that Aareal's earnings will somewhat recover from the subdued levels in 2020 and 2021, but will not return to pre-pandemic levels as the sharp increase in interest rates creates challenges to CRE market values and renders refinancing more difficult.

As a dedicated CRE lender, Aareal's profitability is driven by the level of credit costs. Between 2016-19, the bank benefited from stable credit costs, on average around 30 basis points (bps) of gross loans per year, and exhibited an average annual return-on-assets (ROA)

of around 45 bps for this period. Weakening global economic activities following the outbreak of the pandemic triggered much higher provisions in 2020 and resulted in a net loss for this year. In 2021 and 2022, Aareal returned to a net profit, but because of rising credit costs, the bank's ROA remained below pre-pandemic years, i.e. at 13 bps and 32 bps, respectively.

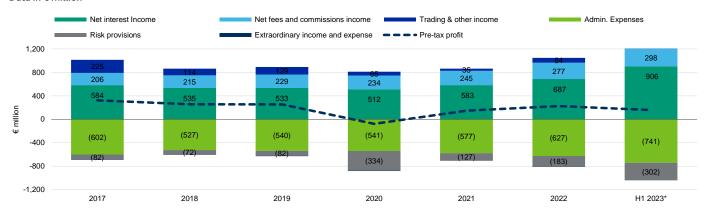
For the period January to June, Aareal reported strong operating performance, as demonstrated by the 40% year-on-year (yoy) increase in net interest income to €462 million and around 13% yoy increase in net fee income to €149 million. This helped to offset higher credit provisions of €160 million (1H22: €107 million), or 52 bps of gross loans, and higher operating expenses of €342 million (1H22: €295 million) due to higher investments at Aareon. The bank's annualized net income for the first half indicates an ROA of 24 bps, which is consistent with our assigned profitability score.

Aareal has ambitious medium-term targets which will face many challenges to achieve. However, the bank has taken proactive steps to manage weakening asset quality by disposing legacy problematic exposure. During 1H23, Aareal sold its non-performing Russian exposure and has taken steps for further NPLs wind-downs during the second half to mitigate weakening asset quality, in particular in the US office space. Further, Aareal is implementing measures to improve the operating efficiency at Aareon, which is materially weaker than its banking activities which exhibit a cost-to-income ratio of below 40%. In aggregate, these measures impaired the bank's 1H23 interims results by around €120 million.

Exhibit 9

Aareal's strong operating performance year-to-date mitigates rising loan loss provisions (LLP) and provides financial flexibility to proactively address weakening asset quality and implement strategic investments

Data in € million



Note: LLP = Loan Loss Provisions, H1 2023 data annualized for comparability. Source: Company reports, Moody's Investors Service

In 2022, Aareal reported net income of €153 million, up from €68 million in 2021. The improvement was driven by higher net interest income, which increased to €702 million from €597 million in 2021, supported by loan growth and higher deposit margins, and better net fee income, which was largely generated by Aareon and increased to €277 million (2021: €245 million). These positives helped to offset higher reported credit provisions of €192 million (2021: €133 million). The increase of Aareal's operating expenses to €571 million from €528 million the year before mainly reflect business expansion at Aareon.

Aareal's wholesale funding dependence is mitigated by large deposits from the housing industry

We assign a Funding Structure score of ba1, which is three notches above the b1 initial score. Our upward adjustment captures Aareal's favorable term structure with long-duration liabilities, which reduces refinancing and interest rate risks. We also take into account that the bank's market funds are somewhat inflated because of around €1 billion remaining participation in the ECB's long-term refinancing programs (TLTRO), down from the peak of €5.3 billion in 2021.

Compared with other wholesale-funded CRE lenders, Aareal's funding mix benefits from the IT, payment and cash management services, as reported under its Banking & Digital Solutions segment. These activities provide sizeable, granular and sticky deposits to the Wiesbaden-based bank and have grown by 5.5% to €12.4 billion at end-June 2023, from €11.7 billion in 2021. They arise from the professional housing and commercial property industry, mainly in Germany. Most of these deposits reflect tenant security deposits

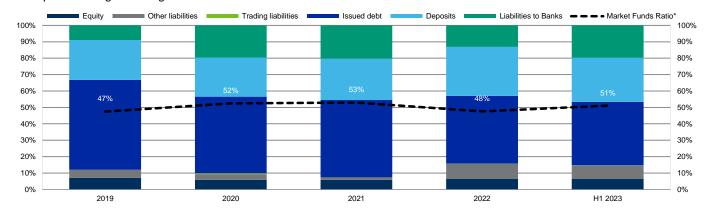
or operating deposits, constituting an attractive source of funding for Aareal, in particular as interest rates normalize. More recently, deposits also include a rising share of retail term deposits, which Aareal collects via internet platforms. At around €1.7 billion as of 30 June (2022: €0.6 billion), we consider these less sticky and volatile because the deposits are very sensitive to the interest rate offered.

We expect that Aareal's Market Funds ratio will remain stable at around 50% of tangible banking assets, as it has been since 2019 (Exhibit 10). At the end of June 2023, our ratio reflects €12.7 billion covered bonds, €4.3 billion senior unsecured debt, €3.1 billion junior senior debt, and around €0.4 billion subordinated debt, excluding AT1 instruments. Aareal's senior unsecured debt and covered bond investor base is diversified and granular, and the bank benefits from the established access to institutional private placement market, including the ability to issue promissory notes, which provides further funding stability.

Exhibit 10

Aareal's high market funding dependence mainly arises from issued covered bonds and benefits from the established access to a broad and diversified investor base

Data in percent of tangible banking assets



*Market funding ratio = Market funds/tangible banking assets. Source: Company reports, Moody's Investors Service

Stable liquidity following repayment of very high share of central bank funding

Aareal's assigned Liquid Resources score is baa2, one notch below the baa1 initial score. The negative adjustment takes into account the remaining, but strongly reduced, benefit from attractively priced central bank liquidity (TLTRO), as well as our assessment of significant assets encumbrance, including as a result of Aareal's repo activities.

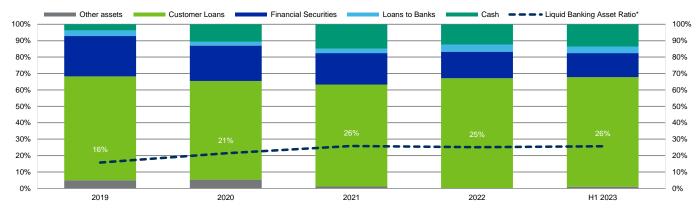
Aareal exhibits solid liquidity, even after the repayment of around 80% of its participation in the ECB's TLTRO program in the fourth quarter of 2022, which peaked at €5.3 billion in 2021. The stable trend is reflected in our Liquid Resources ratio, which remains broadly unchanged at around 26% since the end of 2021. As of end-June 2023, the ratio considers Aareal's €6.2 billion cash, €1.8 billion loans to banks, as well as its €6.4 billion high-quality treasury portfolio, which mainly consists of public-sector debtors and covered bonds.

Aareal's solid liquidity is also reflects in its regulatory Liquidity Coverage Ratios of 225% at the end of June, moderately up from 210% in 2022.

Exhibit 11

Aareal's liquidity remains stable even after the repayment of most attractively priced central bank liquidity (TLTRO)

Data in percent of tangible banking assets



^{*}Liquid banking assets ratio = Liquid assets/tangible banking assets. Source: Company reports, Moody's Investors Service

We believe that Aareal can generate additional liquidity through the issuance of covered bonds, if needed. This is because of the high level of over-collateralization, at 21.9% as of June 2023, based on outstanding issuances of €13.1 billion. Because the minimum over-collateralization level, consistent with a Aaa covered bond rating, was 17.5% at that time, Aareal has some leeway for using its existing mortgage cover pool to generate additional liquidity.

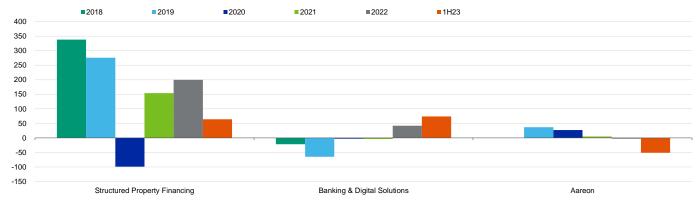
Qualitative adjustment captures limited business diversification

We reduce the weighted average outcome of Aareal's assigned Financial Profile factor score by one notch. This adjustment reflects Aareal's low earnings and thus negligible diversification outside its CRE lending activities. Exhibit 12 shows Aareal's pretax profit by segment since 2018, demonstrating the moderate contributions from its Banking & Digital Solution and Aareon segment.

Exhibit 12

Breakdown of Aareal's pretax profit by segment

Data in € million



Source: Company reports, Moody's Investors Service

Business diversification is an important gauge of a bank's sensitivity to stress in a single business line. It is related to earnings stability in the sense that earnings diversification across distinct and relatively uncorrelated lines of business increases the reliability of a bank's earnings streams and its potential to absorb shocks affecting a business line.

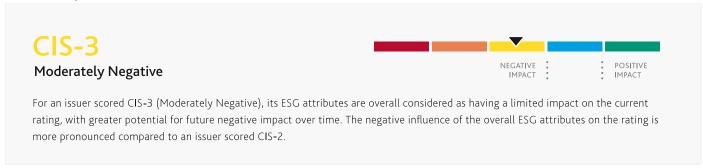
As a dedicated CRE lending specialist, Aareal is exposed to a rather volatile banking business through the cycle. We consider CRE lending highly cyclical and, therefore, a higher-risk sector exposure. The bank's position as a specialist lender benefits its sector-specific risk management know-how, but at the same time, it naturally limits the potential for (earnings) diversification.

Because CRE exposures can cause high losses in times of financial market stress, Aareal's high earnings dependence from these assets exposes the bank to unexpected shocks that are likely to hurt its income statement and solvency in an adverse scenario. To date, we consider that Aareal's activities from banking and digital solutions, as well as its Aareon segment provide only limited diversification, though we expect the benefit to increase over time. As a result, we classify Aareal as a monoline bank according to our approach for business diversification.

ESG considerations

Aareal Bank AG's ESG Credit Impact Score is CIS-3

Exhibit 13
ESG Credit Impact Score



Source: Moody's Investors Service

Aareal's **CIS-3** indicates limited impact of ESG considerations on the ratings to date, with potential for greater negative impact over time, mainly due to moderate governance considerations related to a moderate track record to improve profitability and diversification. Environmental and social risks have a limited credit impact on the rating to date.

Exhibit 14
ESG Issuer Profile Scores



Source: Moody's Investors Service

Environmental

Aareal faces moderate exposure to environmental risks primarily because of its portfolio exposure to carbon transition risk as a large commercial real estate lender. In line with its peers, Aareal is facing mounting business risks and stakeholder pressure to meet broader carbon transition goals. In response, Aareal is engaging in transforming its lending book towards less carbon-intensive assets and has developed a comprehensive risk management and climate risk reporting frameworks.

Social

Aareal faces moderate social risks related to regulatory and litigation risks, requiring the bank to meet high compliance standards. Customer relations risks related to mis-selling and mis-representation are lower than industry average, supported by its client mix being geared towards professional clients. Data security and customer privacy risks are also mitigated by technology solutions and organizational measures to prevent data breaches. The bank is also adapting to changing customer preferences such as digitalisation.

Governance

Aareal's governance risks are moderate, reflecting higher risk appetite and concentration risks inherent in its business model as a commercial real estate lending specialist. Aareal needs to establish a management track record of improving profitability and diversification as it executes its strategic plans. The bank's track record with regards to the management of Aareal's highly cyclical exposures is reflected in above average non-performing loans, with risk costs only recovering more slowly from the pandemic related impact and remaining at a more elevated level than peers. Aareal's ownership by a small group of private equity firms results in governance risks related to concentrated ownership and potential outsized influence on the bank's management and board, partly mitigated by the presence of a large number of independent board members and Germany's developed institutional framework.

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 here to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

Support and structural considerations

Loss Given Failure (LGF) analysis

Aareal is subject to the EU Bank Recovery and Resolution Directive, which we consider an operational resolution regime. We, therefore, 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 resolution.

In line with our standard assumptions, we assume that equity and asset losses are 3% and 8%, respectively, of tangible banking assets in a failure scenario. We also assume a 25% runoff in junior wholesale deposits and a 5% runoff in preferred deposits. Moreover, we assign a 25% probability to junior deposits being preferred to senior unsecured debt. We apply a standard assumption for European banks that 26% of deposits are junior.

- » For Aareal's A3 deposit, senior unsecured and issuer ratings, our LGF analysis indicates an extremely low loss given failure, leading to a three-notch uplift from the bank's baa3 Adjusted BCA.
- » For Aareal's (P)Baa2 junior senior unsecured program rating, our LGF analysis indicates a low loss given failure, leading to one notch of rating uplift from the bank's baa3 Adjusted BCA.

Government support considerations

We do not assign any rating uplift for Aareal from government support, reflecting our unchanged assumption of a low probability of systemic support in the event of a stress scenario, given the bank's marginal importance to the domestic deposit-taking market and local payment systems.

Counterparty Risk Ratings (CRRs)

Aareal's CRRs are A3/P-2

The bank's CRRs are three notches above the baa3 Adjusted BCA, reflecting the extremely low loss given failure from the high volume of instruments that are subordinated to CRR liabilities.

Counterparty Risk (CR) Assessment

Aareal's CR Assessment is A3(cr)/P-2(cr)

Aareal's CR Assessment is three notches above the bank's baa3 Adjusted BCA, based on the substantial buffer against default provided to the senior counterparty obligations by more junior instruments, such as senior unsecured debt and dated subordinated debt. Because the CR Assessment captures the probability of default on certain senior operational obligations, rather than expected loss, we focus purely on subordination and take no account of the volume of the instrument class.

Methodology and scorecard

Methodology

The principal rating methodology we used in rating Aareal was the Banks Methodology, published in July 2021.

About Moody's Bank Scorecard

Our scorecard is designed to capture, express and explain in summary form our Rating Committee's judgement. When read in conjunction with our research, a fulsome presentation of our judgement 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.

20 September 2023 Aareal Bank AG: Update to credit analysis

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Rating methodology and scorecard factors

Exhibit 15

Aareal Bank AG

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	4.5%	baa2	\leftrightarrow	ba2	Sector concentration	Single name concentration
Capital						
Tangible Common Equity / Risk Weighted Assets (Basel III - transitional phase-in)	17.6%	aa3	\leftrightarrow	a2	Risk-weighted capitalisation	Expected trend
Profitability						
Net Income / Tangible Assets	0.1%	b3	\leftrightarrow	ba3	Return on assets	Expected trend
Combined Solvency Score		baa2		baa3		
Liquidity						
Funding Structure						
Market Funds / Tangible Banking Assets	47.6%	Ь1	\leftrightarrow	ba1	Term structure	Expected trend
Liquid Resources						
Liquid Banking Assets / Tangible Banking Assets	25.1%	baa1	\leftrightarrow	baa2	Stock of liquid assets	Asset encumbrance
Combined Liquidity Score		ba1		baa3		
Financial Profile				baa3		
Qualitative Adjustments				Adjustment		
Business Diversification				-1		
Opacity and Complexity				0		
Corporate Behavior				0		
Total Qualitative Adjustments				-1		
Sovereign or Affiliate constraint				Aaa		
BCA Scorecard-indicated Outcome - Range				baa3 - ba2		
Assigned BCA				baa3	<u> </u>	
Affiliate Support notching				0		
Adjusted BCA				baa3		

Balance Sheet	in-scope	% in-scope	at-failure	% at-failure	
	(EUR Million)	-	(EUR Million)		
Other liabilities	22,859	50.4%	24,120	53.2%	
Deposits	12,361	27.3%	11,100	24.5%	
Preferred deposits	9,147	20.2%	8,690	19.2%	
Junior deposits	3,214	7.1%	2,410	5.3%	
Senior unsecured bank debt	4,928	10.9%	4,928	10.9%	
Junior senior unsecured bank debt	3,136	6.9%	3,136	6.9%	
Dated subordinated bank debt	382	0.8%	382	0.8%	
Preference shares (bank)	300	0.7%	300	0.7%	
Equity	1,360	3.0%	1,360	3.0%	
Total Tangible Banking Assets	45.326	100.0%	45.326	100.0%	

Debt Class	De Jure v	waterfal	l De Facto	De Facto waterfall		Notching		Assigned	Additional Preliminary	
	Instrument volume + subordinatio	ordinati	Instrument on volume + o subordinatio	ordination	•	De Facto	Notching Guidance vs. Adjusted BCA		Notching	Rating Assessment
Counterparty Risk Rating	27.6%	27.6%	27.6%	27.6%	3	3	3	3	0	a3
Counterparty Risk Assessment	27.6%	27.6%	27.6%	27.6%	3	3	3	3	0	a3 (cr)
Deposits	27.6%	11.4%	27.6%	22.3%	3	3	3	3	0	a3
Senior unsecured bank debt	27.6%	11.4%	22.3%	11.4%	3	3	3	3	0	a3
lunior senior unsecured bank debt	11.4%	4.5%	11.4%	4.5%	1	1	1	1	0	baa2

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	a3	0	A3	A3
Counterparty Risk Assessment	3	0	a3 (cr)	0	A3(cr)	
Deposits	3	0	a3	0	A3	A3
Senior unsecured bank debt	3	0	a3	0	A3	(P)A3
Junior senior unsecured bank debt	1	0	baa2	0	(P)Baa2	(P)Baa2

^[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 16

Category	Moody's Rating
AAREAL BANK AG	
Outlook	Negative
Counterparty Risk Rating	A3/P-2
Bank Deposits	A3/P-2
Baseline Credit Assessment	baa3
Adjusted Baseline Credit Assessment	baa3
Counterparty Risk Assessment	A3(cr)/P-2(cr)
Issuer Rating	A3
Senior Unsecured -Dom Curr	A3
Junior Senior Unsecured MTN	(P)Baa2
Commercial Paper -Dom Curr	P-2

Source: Moody's Investors Service

Endnotes

- 1 The remaining 10 percent share is allocated to free float.
- 2 This ratio compares the cash flow, i.e. mostly from rental income, to the outstanding debt financing provided. Because the ratio excludes debt financing costs, it is a measure to assess the ability to digest rising interest costs.

<u>3</u> Aareal's RWA are calculated in accordance with Basel IV phase-in requirements.

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