

MOODY'S

INVESTORS SERVICE

CREDIT OPINION

28 November 2022

Update



Send Your Feedback

RATINGS

Aareal Bank AG

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

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

Swen Metzler, CFA +49.69.70730.762
VP-Sr Credit Officer
swen.metzler@moodys.com

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

» Contacts continued on last page

Aareal Bank AG

Update to credit analysis

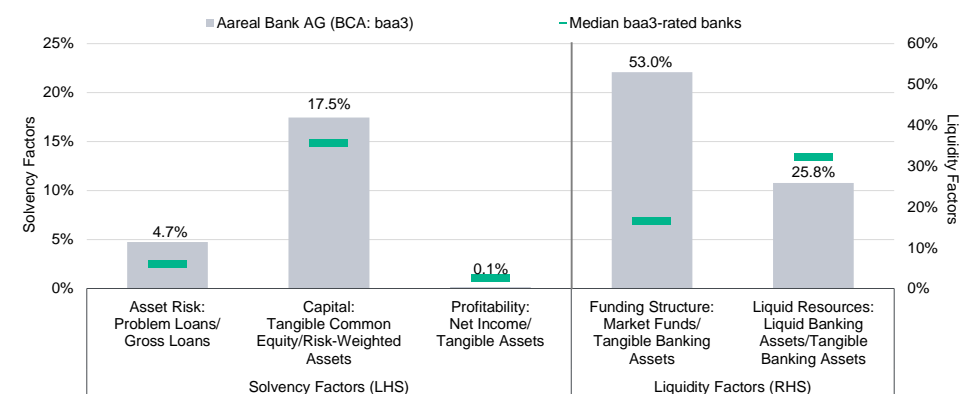
Summary

Aareal's A3 deposit and senior unsecured ratings reflect its baa3 Baseline Credit Assessment (BCA) and Adjusted BCA; and the application of our Advanced Loss Given Failure (LGF) analysis to its liabilities, which indicates an extremely low loss given failure 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.

The bank's baa3 BCA reflects the resilience in the bank's fundamental credit profile, despite the more challenging economic outlook amid geopolitical tensions and considering the bank's results during the pandemic. Being an internationally active commercial real estate (CRE) lending specialist Aareal Bank is exposed to severe concentration risks in highly cyclical CRE lending; absent meaningful earnings diversification Moody's considers 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 liquidity metrics and stable funds from the housing industry
- » Potential to develop real estate software and services business as additional significant profit generating unit

Credit challenges

- » Above-average nonperforming loans (NPLs) from large and concentrated exposures to commercial real estate (CRE) lending
- » Limited earnings diversification from other businesses
- » Subdued profitability levels provide only limited cushion for downside risks

Outlook

The negative outlook captures potential downward pressure on the bank's BCA, reflecting a trend of decreasing profitability over the past years, which provides only a limited buffer against downside risks.

Previously, the negative outlook captured potential downside risks from the coronavirus pandemic, specifically on the bank's solvency.

Factors that could lead to an upgrade

- » As indicated by the negative outlook, upward pressure on the ratings is currently unlikely.
- » An upgrade could follow an upgrade of its BCA, which would require a more diversified business model, such that it provides a sustainable and visible buffer relative to the existing strong concentration risks in CRE lending.

Factors that could lead to a downgrade

- » Aareal's ratings could be downgraded as result of a downgrade of its BCA or if loss-absorbing liabilities decline significantly and beyond our expectations, thereby resulting in fewer notches of rating uplift from the rating agency's LGF analysis.
- » Downward pressure on Aareal's BCA could develop in case the bank fails to sustainably restore the bank's profitability to levels more in line with the performance observed ahead of the pandemic, or a deterioration in its asset quality that negatively affects its current good capitalisation levels. Further, a stronger recourse to market funding, or an overall lower level of liquid reserves, both in relation to its balance sheet could exert downwards rating pressure.

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

Aareal Bank AG (Consolidated Financials) [1]

	06-22 ²	12-21 ²	12-20 ²	12-19 ²	12-18 ²	CAGR/Avg. ³
Total Assets (EUR Billion)	49.2	46.7	44.4	40.1	41.6	4.9 ⁴
Total Assets (USD Billion)	51.4	52.9	54.3	45.0	47.6	2.2 ⁴
Tangible Common Equity (EUR Billion)	2.3	2.3	2.4	2.7	2.7	(5.2) ⁴
Tangible Common Equity (USD Billion)	2.4	2.6	2.9	3.0	3.1	(7.6) ⁴
Problem Loans / Gross Loans (%)	4.5	5.1	5.7	3.6	5.8	5.0 ⁵
Tangible Common Equity / Risk Weighted Assets (%)	17.5	18.0	19.8	24.1	21.0	20.1 ⁶
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	48.5	53.8	51.8	30.4	47.2	46.4 ⁵
Net Interest Margin (%)	1.4	1.3	1.2	1.3	1.3	1.3 ⁵
PPI / Average RWA (%)	3.0	2.3	2.2	2.8	3.0	2.7 ⁶
Net Income / Tangible Assets (%)	0.2	0.1	-0.2	0.4	0.4	0.2 ⁵
Cost / Income Ratio (%)	62.6	66.9	68.1	60.6	61.0	63.8 ⁵
Market Funds / Tangible Banking Assets (%)	54.3	53.0	52.5	47.4	48.9	51.2 ⁵
Liquid Banking Assets / Tangible Banking Assets (%)	28.5	25.8	21.4	15.7	16.2	21.5 ⁵
Gross Loans / Due to Customers (%)	245.8	251.2	257.5	264.6	276.8	259.2 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, headquartered in Wiesbaden, Germany, is a CRE lending specialist, active in Europe, North America and, to a limited degree, in Asia. The bank focuses on corporate real estate clients, with no direct retail business either in its lending or funding activities.

Aareal group also offers consultancy, IT/digital services and transaction banking activities to clients in the housing and commercial property industries. As of September 2022, the group's consolidated assets were €53.3 billion (1H22: €50.7 billion) and it employed around 3,200 people.

On 16 June 2022, Atlantic Bid Co GmbH, which is indirectly managed by Advent International and Centerbridge Partners, announced that it had acquired 83.8% of shares in Aareal at the end of the public tender offer period. Aareal's potential new owner is supportive for the bank's strategic ambitions, termed "Aareal Next Level", including its existing group composition.

Weighted Macro Profile of Strong+

Aareal's assigned Strong+ Weighted Macro Profile reflects of its global lending activities, including exposures in the [United States of America](#) (Aaa stable) which displays a Very Strong- Macro Profile and accounted for around 27% of the total at the end of September 2022, as well as exposures to countries with a Strong+ Macro Profiles, including [France](#) (Aa2 stable, 11%), [Germany](#) (Aaa stable, 9%), and [United Kingdom](#) (Aa3 negative, 16%).

Detailed credit considerations

Large and concentrated CRE exposures challenge asset quality in a weakening economic environment

Aareal's ba2 Asset Risk score is four notches below its baa1 initial score. The downward adjustment reflects the bank's high sector, single-name and single-location concentrations. We believe that significantly higher interest rates will pose [a challenge to the real-estate sector](#), including rising [refinancing risks](#).

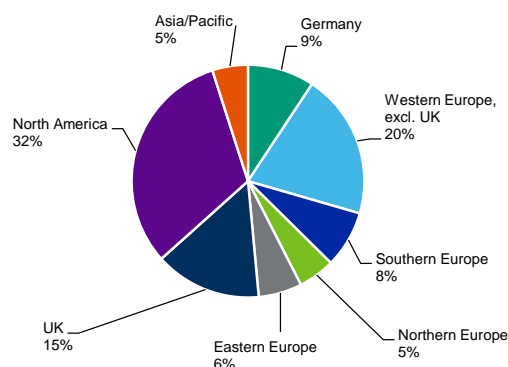
Aareal's international €31.4 billion CRE lending book (Exhibit 3) is particularly exposed to high-risk subsectors, which we consider most vulnerable under weak economic conditions. These include real estate exposure to hotels (34% of total at the end of September 2022), retail properties (20%), and the offices (27%) (Exhibit 4) whereas as a result the share of more stable residential lending is only 5%. Around 21% or €6.4 billion of the bank's real estate loans comply with the bank's Green Finance lending standards, up from 17% in 2021.

2022 started with a recovery of commercial property markets driven by declining concerns associated with the pandemic. Despite rising energy and material prices, which triggered construction delays following the begin of the military conflict in Ukraine, investor demand for new CRE loans was very strong in the January to September. Aareal reported new business volume of €6.9 billion over the period, an increase of 14% when compared with a year earlier, supported by strong demand of green property finances. Around 70% of the new loans were in Europe (North America 22%; Asia/Pacific 8%), with strongest demand from the office and logistic sector, accounting for each 23% of total new business volume.

Exhibit 3

Aareal's CRE exposure by region

Data as of end-September 2022

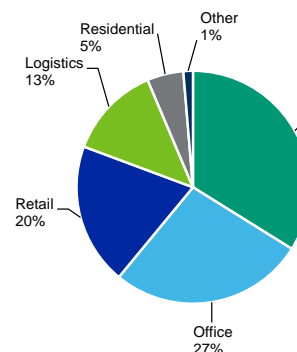


Source: Company reports, Moody's Investors Service

Exhibit 4

Aareal's CRE exposure by segment

Data as of end-September 2022



Source: Company reports, Moody's Investors Service

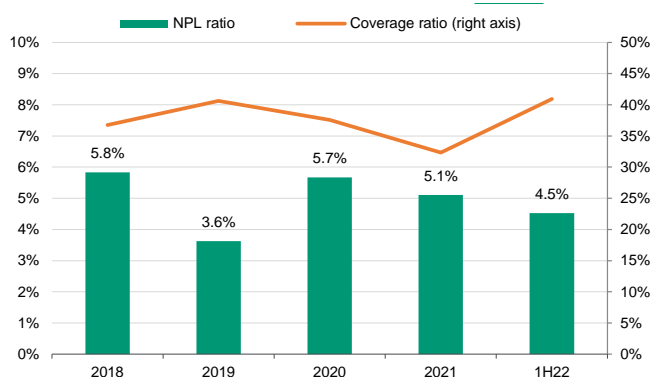
Aareal's problem loan ratio improved to 4.5% at the end of June 2022 from 5.1% in 2021, reflecting recovery effects from the pandemic (Exhibit 5) and remained broadly stable during the third quarter. However, the bank's ratio is still high when compared with other dedicated real estate lender like [Berlin Hyp AG](#) (Aa3 stable/Aa3 stable, ba1), [Muenchener Hypothekbank eG](#) (Aa3 stable/Aa3 stable, ba1), and [DZ Hyp AG](#) (Aa2 stable/Aa2 stable, ba1).¹ During January to September 2022, Aareal reduced its problematic exposures to €1.47 billion from €1.57 billion at the end of 2021, mainly in the US, France, and Italy. This trend was supported by better conditions for hotels, which triggered a further improvement of its problem loans to €1.39 billion in October.

Since 2018, Aareal has executed measures to significantly reduce the lending risks from legacy exposures in Italy (Exhibit 6). At the end of June 2022 (latest available), around 50% of the bank's impaired loans are from the US and UK, with the remainder arising from Italy, Spain and Finland. At the end of September 2022, Aareal had around €210 million direct real estate exposure in Russia, which was covered by around 60% of provisions (1H22: 40%). The two financing deals are offices in Moscow and were originated in 2012.

Exhibit 5

Aareal's problem loan ratio has improved and its coverage ratio remains around 40%

Data in percent

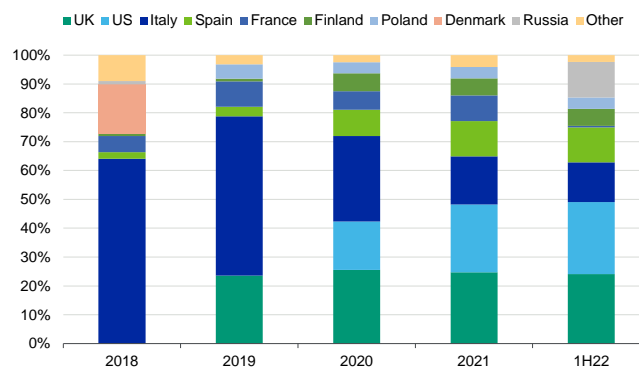


Source: Company reports, Moody's Investors Service

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 three quarter of 2022, Aareal's CRE portfolio continued to recover from the economic challenges associated with the pandemic. This trend is reflected in the bank's average loan-to-value ratio, which improved to 57% from 58% in 2021 and 60% in 2020, driven by better conditions for hotels and retail properties. Around 50% of Aareal's problem loans exhibit a LTV ratio of more than 100% and a simultaneous debt-service coverage ratio of less than 100% (1H22: 22%), indicating that these exposures are most at risk to trigger further credit provisions.

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

We assign a Capital score of a1 to Aareal, reflecting our expectation that the bank will maintain its strong capitalisation metrics, despite the geopolitical uncertainties that weigh on economic growth and the upcoming revisions to the Basel framework for measuring credit risks (the so-called constrained internal ratings-based approach). We have captured the expected decline in the bank's regulatory capital ratio and our tangible common equity (TCE) ratio by positioning its Capital score two notches below the aa2 initial score.

Aareal's TCE ratio of 17.5% at the end of June 2022 strongly underpins its baa3 financial profile. The moderate decline from 18.0% in 2021 reflects broadly unchanged TCE² and higher risk-weighted assets (RWA), which increased by around 1.7% to €13.0 billion from €12.8 billion over the same period, which are calculated in accordance with Basel IV phase-in requirements. We consider Aareal's 4.7% TCE leverage ratio satisfactory in the context of its risk profile. Our ratio is somewhat lower than the bank's regulatory Tier 1 leverage ratio of 5.9%, because we exclude Additional Tier 1 capital in the numerator of the ratio.

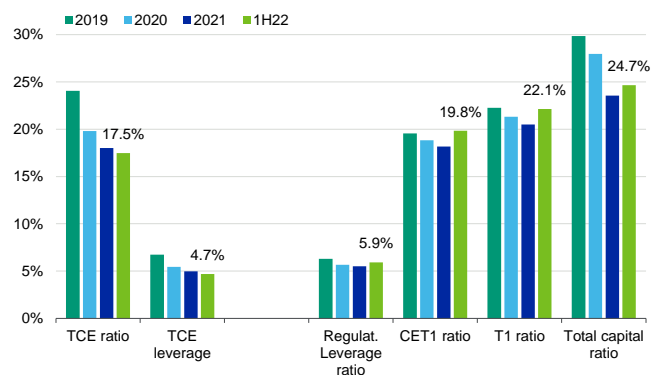
We expect Aareal to maintain a TCE ratio of around 14% despite the expected deterioration in asset quality as a result of weakening economic growth and tightening funding conditions, as well as a larger increase in regulatory RWA. Our assessment also takes into account that a successful takeover may lead to higher profit retention in order to support the group's growth strategy.

As of June 2022, the bank's CET1 ratio increased to 19.8% from 18.2% at year-end 2021 (3Q22: 19.4%), driven by retained earnings and positive capital effects from pension liabilities, offsetting the increase in RWA. We believe that Germany's planned implementation of a countercyclical capital buffer (CCyB) requirement of 0.75% of domestic RWA and an additional 2.0% buffer specific to RWAs from domestic loans backed by residential properties, effective 1 February 2023, will not weaken Aareal's financial flexibility. This is because of the bank's limited exposures to Germany (and residential lending), as well as its sizeable buffers of more than 10 percentage points above minimum regulatory capital requirements at the end of June 2022 (Exhibit 8).

Exhibit 7

Aareal reports high capital ratios ...

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

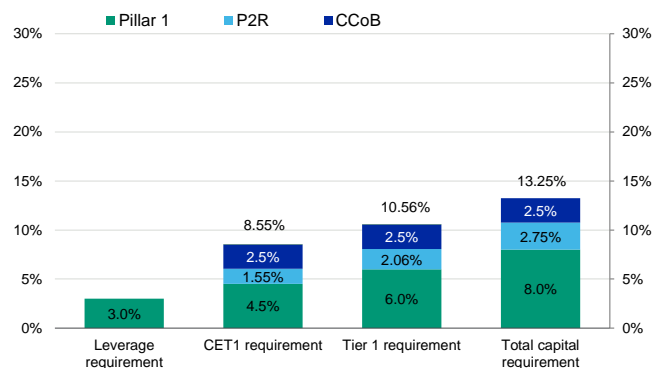


Ratios for 2019 and 2020 reflect Basel 3; 2021 ratios based on Basel 4 phase-in provisions; TCE = Tangible Common Equity (Moody's calculation; excludes high-trigger Additional Tier 1 instruments for all periods); CET1 = Common Equity Tier 1 capital; T1 ratio = Tier 1 Ratio. Source: Company reports, Moody's Investors Service

Exhibit 8

... which exceed regulatory requirements by large margins

Data in percent of risk-weighted assets, except leverage ratio*



P2R = Pillar 2 requirement; CCoB = Capital conservation buffer; * The leverage ratio compares Tier 1 capital to exposure at default.

Source: Company reports, Moody's Investors Service

Aareal's capital ratios face downward pressure. This is because of potentially rising RWA under the upcoming revisions of the Basel 4 capital framework.

Subdued profitability levels provide only limited cushion for downside risks

We assign a ba3 Profitability score to Aareal, one notch above the initial score. 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 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 credit provisions in 2020 and resulted in a net loss for this year. In 2021, Aareal returned to a net profit, but with still elevated credit costs, the bank's ROA of 13 bps remained below pre-pandemic years.

Annualized earnings for the first three quarters of 2022 indicate an ROA of around 20-25 bps, broadly consistent with our assigned profitability score.

Aareal has ambitious medium-term targets which will face many challenges to achieve. We expect higher provisioning needs as a result of geopolitical tensions, rising rates and weak economic growth and high investment needs in order to grow its digital businesses. These factors are already visible, as demonstrated by the bank's reduced profitability expectations for 2022, now set at the lower end of the targeted ranges and largely driven by higher risk costs. While Aareal will benefit from better net interest income, reflecting continued loan growth and improving margins, as well as higher fees from its subsidiary Aareon, we believe that persistently higher credit costs and inflationary-driven upward pressure on operating expenses will largely offset these positive effects in 2022 and 2023.

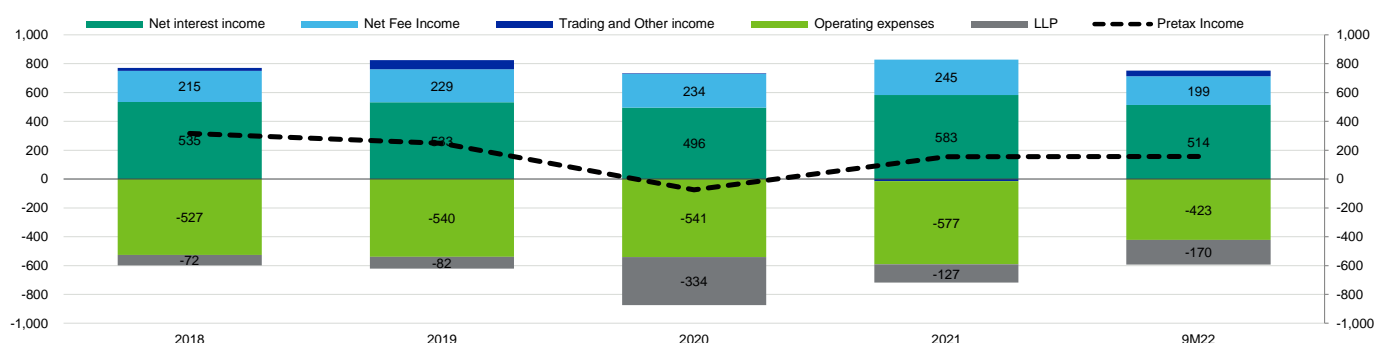
Through various acquisitions, Aareal has increased the share of non-interest income³, representing 26% of revenues as of September 2022 and 30% in 2021, compared with 20% in 2016. The bank's expansion also triggered higher expenses, underpinned by a cost-to-income ratio of 67-68% for 2020 and 2021, compared with around 60% for the years 2016-19.

For the period January to September 2022, Aareal reported higher net income of €89 million, up from €44 million over the previous year's period. The better result was driven by higher net interest income, up around 18% to €514 million from €435 million, mainly because of loan growth and higher fee income of €199 million, compared with €174 million the year before. These positives were offset by higher credit costs of €170 million (9M21: €79 million), of which €126 million related to Aareal's direct exposure in Russia. Over the same period, operating expenses increased by around 8% to €423 million from €393 million, reflecting growth at Aareon and one-off costs in the context of the voluntary public tender offer.

Exhibit 9

Since 2020, Aareal's profitability is burdened by elevated credit costs (LLP)

Data in € million



Note: LLP = Loan Loss Provisions.

Source: Company reports, Moody's Investors Service

In 2021, Aareal reported net income of 68 million, following a net loss of €69 million in 2020. The improvement was largely driven by lower credit costs, which declined to €127 million, compared with €334 million in 2020. The bank's reported net interest income increased to €597 million (2020: €512 million), supported by loan growth, while its net commission income, which is largely generated by its subsidiary Aareon, increased to €245 million (2020: €234 million). The increase of Aareal's operating expenses of €528 million

(2020: €469 million) mainly reflect the business expansion of its subsidiary Aareon, which balanced the benefits from lower risk costs in 2021.

Stable funds from the housing industry mitigates wholesale funding dependence

We assign a ba1 Funding Structure score to Aareal, five notches above its b3 initial score. Our positive adjustment reflects the bank's favorable term structure with long-duration liabilities, which limit its refinancing and interest rate risks. We also take into account that Aareal's market funds are temporarily inflated because of the bank's €5.3 billion participation in the ECB's long-term refinancing programs (TLTRO), which offer attractive funding terms until the end of November 2022.

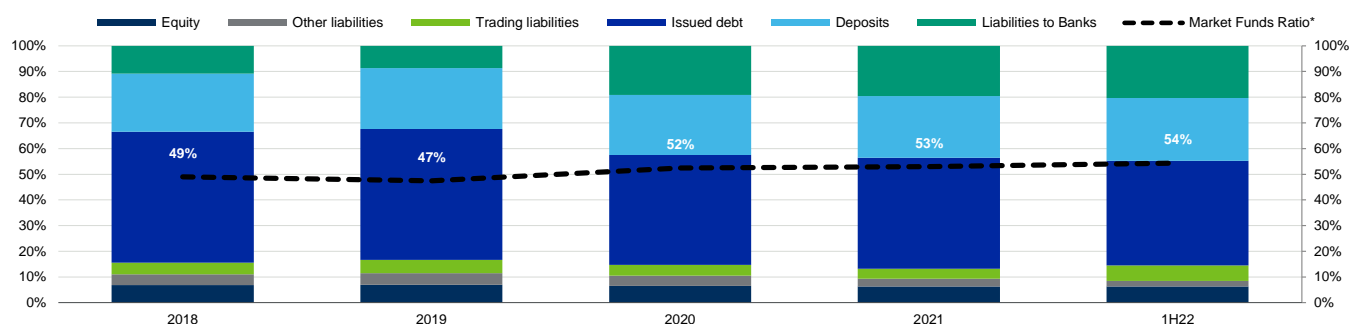
Aareal's funding structure includes less confidence-sensitive covered bonds (Pfandbriefe, €12.7 billion as of June 2022, 3Q22: €12.6 billion), sizeable and granular deposits from the housing industry (€12.4 billion; 3Q22: €12.8 billion), senior unsecured debt of €4.4 billion, junior senior debt of €3.3 billion as well as subordinated debt (€0.8 billion, 3Q22: €0.7 billion). Within the unsecured debt proportion, Aareal is a strong issuer of promissory notes, benefiting from its established access to the institutional private placement market.

The bank's funding composition is further supported by its three-pillar business model, attracting sizeable and rather sticky housing industry deposits (€12.8 billion as of September 2022) because of its IT and banking services, which it provides to the German housing industry. Most of these deposits are either tenant security deposits or operating deposits of the respective housing companies, constituting a reliable and stable source of funding, which is a key credit strength compared with that of the bank's other wholesale-funded CRE lending peers. In addition, Aareal's senior unsecured debt and covered bond investor base is diversified, granular and largely driven by a domestic private placement backbone, providing further funding stability.

Exhibit 10

Aareal's market funding dependence is balanced by access to covered bonds and sizeable, granular deposits

Data in percent of tangible banking assets



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

Source: Company reports, Moody's Investors Service

Sound liquidity which temporarily benefits from access to attractive central bank support

We assign a baa2 Liquid Resources score to Aareal, which is two notches below its a3 initial score. The assigned score reflects that the bank's liquidity temporarily benefits from cash deposits at the ECB, which result from its participation in the central bank's TLTRO programs, as well as our assessment of significant liquid assets encumbrance related to Aareal's strong repo activities.

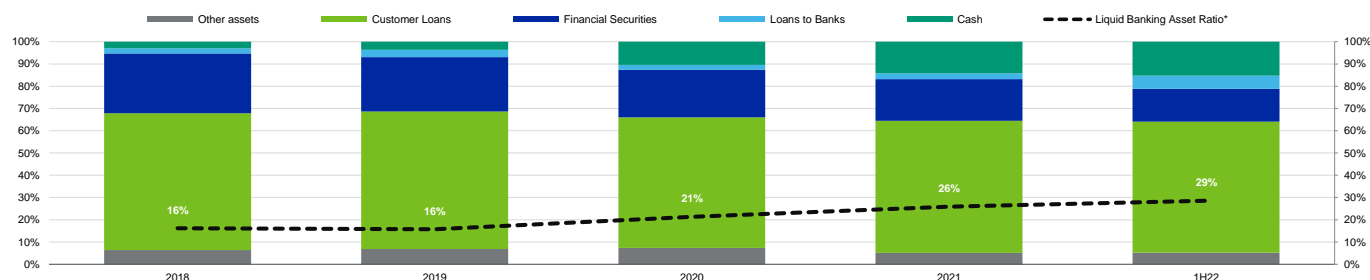
At the end of June 2022, Aareal's liquid resources included €7.7 billion cash (3Q22: €8.3 billion), €3.0 billion loans to banks, as well as its €6.8 billion high-quality treasury portfolio (3Q22: €6.5 billion), which mainly consists of public-sector debtors and covered bonds. We believe that Aareal can generate additional liquidity through the issuance of covered bonds. This is because of the high level of over-collateralization, at 20.3% at the end of March 2022, based on outstanding issuances of €12.0 billion. Because the minimum over-collateralisation level, consistent with a Aaa covered bond rating, was 15.6% at that time, Aareal has some leeway for using its existing mortgage cover pool to generate additional liquidity, in case of need.

Together with the bank's diversified funding mix, its liquidity reserves constitute a very balanced profile, offering the bank significant flexibility in a more adverse market environment.

Exhibit 11

Aareal's improved liquid resources since 2020 mainly reflect the TLTRO benefit

Data in percent of tangible banking assets



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

Source: Company reports, Moody's Investors Service

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 revenue and negligible income diversification outside of its CRE lending activities.

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

In line with our general view on the banking sector, Aareal has a low exposure to environmental risks (for further information, see our [environmental risk heat map⁴](#)).

For social risks, we also place Aareal in line with our general view for the banking sector, which indicates a moderate exposure. However, Aareal has a high share of lending to sectors such as tourism and nonfood retail that are particularly exposed to a weakening global economic outlook creating credit challenges across many sectors, regions and markets (for further information, see our [social risk heat map⁵](#)).

Governance is highly relevant for Aareal, as it is to all participants in the banking industry. Governance risks are largely internal rather than externally driven, and, for Aareal, we do not have any particular governance concern⁶. Nonetheless, corporate governance remains a key credit consideration and requires ongoing monitoring.

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 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.

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, based on the high buffer against default provided by subordinated instruments to the more senior 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.

Rating methodology and scorecard factors

Exhibit 12

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	4.7%	baa1	↔	ba2	Sector concentration	Single name concentration
Capital						
Tangible Common Equity / Risk Weighted Assets (Basel III - transitional phase-in)	17.5%	aa2	↔	a1	Risk-weighted capitalisation	Expected trend
Profitability						
Net Income / Tangible Assets	0.1%	b1	↔	ba3	Return on assets	Expected trend
Combined Solvency Score		a3		baa3		
Liquidity						
Funding Structure						
Market Funds / Tangible Banking Assets	53.0%	b3	↔	ba1	Term structure	Expected trend
Liquid Resources						
Liquid Banking Assets / Tangible Banking Assets	25.8%	a3	↔	baa2	Stock of liquid assets	Asset encumbrance
Combined Liquidity Score		ba2		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		
Affiliate Support notching				0		
Adjusted BCA				baa3		

Balance Sheet	in-scope (EUR Million)	% in-scope	at-failure (EUR Million)	% at-failure
Other liabilities	26,263	54.0%	27,527	56.6%
Deposits	12,394	25.5%	11,130	22.9%
Preferred deposits	9,172	18.8%	8,713	17.9%
Junior deposits	3,222	6.6%	2,417	5.0%
Senior unsecured bank debt	4,440	9.1%	4,440	9.1%
Junior senior unsecured bank debt	3,330	6.8%	3,330	6.8%
Dated subordinated bank debt	470	1.0%	470	1.0%
Preference shares (bank)	300	0.6%	300	0.6%
Equity	1,460	3.0%	1,460	3.0%
Total Tangible Banking Assets	48,656	100.0%	48,656	100.0%

Debt Class	De Jure waterfall		De Facto waterfall		Notching		LGF	Assigned	Additional	Preliminary
	Instrument	Sub-	Instrument	Sub-	De Jure	De Facto	Notching	LGF		
	volume +	ordination	volume +	ordination			Guidance	notching		Rating
	subordination		subordination				vs.			Assessment
							Adjusted			
							BCA			
Counterparty Risk Rating	25.5%	25.5%	25.5%	25.5%	3	3	3	3	0	a3
Counterparty Risk Assessment	25.5%	25.5%	25.5%	25.5%	3	3	3	3	0	a3 (cr)
Deposits	25.5%	11.4%	25.5%	20.6%	3	3	3	3	0	a3
Senior unsecured bank debt	25.5%	11.4%	20.6%	11.4%	3	3	3	3	0	a3

Instrument Class	Loss Given		Additional	Preliminary Rating	Government		Local Currency	Foreign
	Failure	notching			Support	notching	Rating	Currency
				Assessment				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

[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 13

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
Commercial Paper -Dom Curr	P-2

Source: Moody's Investors Service

Endnotes

- [1](#) The ratings shown are the banks' deposit ratings and outlooks, their senior unsecured debt ratings and outlooks, and their BCAs.
- [2](#) This reflects the balance of retained earnings and higher goodwill due to the acquisition of Momentum and CollectAI in 1H22.
- [3](#) This fee income is mainly generated by Aareal's service and IT entity Aareon.
- [4](#) Environmental risks can be defined as environmental hazards encompassing the impacts of air pollution, soil/water pollution, water shortages and natural and human-made hazards (physical risks). Additionally, regulatory or policy risks, like the impact of carbon regulation or other regulatory restrictions, including the related transition risks like policy, legal, technology and market shifts that could impair the evaluation of assets are an important factor. Certain banks could face a higher risk from concentrated lending to individual sectors or operations exposed to the aforementioned risks.
- [5](#) Social risk considerations represent a broad spectrum, including customer relations, human capital, demographic and societal trends, health and safety and responsible production. The most relevant social risks for banks arise from the way they interact with their customers. Social risks are particularly high in the area of data security and customer privacy, which are mitigated by sizeable technology investments and banks' long track record of handling sensitive client data. Fines and reputational damage because of product mis-selling or other types of misconduct are a further social risk. Societal trends are also relevant in a number of areas, such as shifting customer preferences towards digital banking services increasing information technology costs, ageing population concerns in several countries affecting demand for financial services or socially driven policy agendas that may translate into regulations that affect banks' revenue bases.
- [6](#) Corporate governance is a well-established key driver for banks, and related risks are typically included in our evaluation of the banks' financial profile. Corporate governance weaknesses can lead to a deterioration in a company's credit quality, while governance strengths can benefit its credit profile. Further factors like specific corporate behaviour, key person risk, insider and related-party risk, strategy and management risk factors and dividend policy may be captured in individual adjustments to the BCA.

© 2022 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS 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 ITS PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

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

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

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

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

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

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

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

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

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY100,000 to approximately JPY550,000,000.

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

REPORT NUMBER

1345214

Contacts

Christopher McCoy +49.69.70730.785
Associate Analyst
christopher.mccoy@moodys.com