FitchRatings

Banks
Wholesale Commercial Banks
Germany

Aareal Bank AG

Ratings

Foreign Currency	
Long-Term IDR	BBB+
Short-Term IDR	F2
Derivative Counterparty Rating	A-(dcr)
Viability Rating	bbb+
Government Support Rating	ns

Sovereign Risk (Germany)	
Long-Term Foreign-Currency IDR	AAA
Long-Term Local-Currency IDR	AAA
Country Ceiling	AAA

Outlooks	
Long-Term Foreign-Currency IDR	Negative
Sovereign Long-Term Foreign-Currency IDR	Stable
Sovereign Long-Term Local-Currency IDR	Stable

Key Rating Drivers

CRE Sector Risk: Aareal Bank AG's ratings reflect its focus on lending to the cyclical commercial real-estate (CRE) sector, which is mitigated by the bank's good geographical diversification relative to peers, sound capitalisation, adequate funding and liquidity and resilient profitability. The latter benefits from rising net interest margins, which have so far offset higher loan impairment charges (LICs) in the bank's US office portfolio.

The Negative Outlook reflects risks resulting from higher-for-longer interest rates and structural changes in the office segment, which could lead to a further decline in the market values and debt service capacity of these properties, and, consequently, to greater-than-anticipated pressure on asset quality and profitability.

Diversified CRE Presence: Aareal has a diverse presence in international markets and across different market sectors. It is underpinned by the bank's flexible approach to respond to changing market conditions and transaction volumes and leverage on higher margin international lending compared to domestic focused peers.

Downside to Asset Quality: Aareal's post-pandemic impaired loans reduction was reversed by new inflows in 9M23, mainly from its US office portfolio, and we expect the impaired loan ratio (end-3Q23: 4.1%) to remain above domestic peers' in the next two years.

The negative outlook on the asset quality score reflects our view that higher-for-longer interest rates, along with a potential increase in vacancy rates in the bank's office and retail portfolios, would pressure debt yields and increase refinancing risk for these properties more than we currently expect and lead to an increase in the impaired loan ratio to a level no more commensurate with a 'bbb' asset quality score.

LICs Weigh on Profits: Fitch Ratings expects Aareal's operating profit/risk-weighted assets (RWAs) ratio to average above 1.5% over the next two years. Aareal's pre-impairment operating profit will increase in 2023, reflecting higher margins in new business, stronger commission income, and slow repricing of its institutional housing deposits. However, a high portion of it will be absorbed by higher LICs, which we expect to remain elevated over the next two years.

Sound Capitalisation: Aareal is well capitalised and its capital ratios comfortably exceed regulatory requirements. Its leverage ratio (end-3Q23: 6.3%) is well above that of peers. We believe that the owners' commitment to retain an adequate portion of profits will balance the expected impact from regulatory and credit risk-driven RWA inflation and the bank's envisaged growth strategy. Our assessment of capitalisation also factors in Aareal's high single-borrower and sector concentrations.

Diversified Funding, Good Liquidity: Aareal's funding profile has a sound deposits base from the institutional housing sector and the bank's gathering of retail deposits through online platforms. In combination with the bank's covered bond franchise, this lowers its reliance on unsecured debt market funding.

When assessing the bank's funding and liquidity, we use our alternative core metric 'gross loans/customer deposits + covered bonds' as Aareal is a regular covered bond issuer, which, in our opinion, structurally strengthens its funding. The bank's liquidity profile is underpinned by a large pool of highly-rated, unencumbered, and ECB-eligible assets.

Applicable Criteria

Bank Rating Criteria (September 2023)

Related Research

Fitch Affirms Aareal at 'BBB+'; Outlook Negative (October 2023)

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Rating Sensitivities

Factors that Could, Individually or Collectively, Lead to Negative Rating Action/Downgrade

We could downgrade the ratings if the impaired loans ratio exceeds 5% for an extended period with no credible reduction plan. Asset quality would constitute a weakest link, and would no longer be commensurate with a 'bbb+' VR. In this scenario we would also expect that the operating profit/RWAs ratio could drop below 1.5%.

This could result from an acceleration of current stress in the US office property market or this stress spilling over to European property markets, or materialising in specific sectors that are sensitive to higher rates and inflation. Significantly higher than expected LICs could also impair Aareal's profitability. Aareal's Short-Term IDR would be downgraded if both its Long-Term IDR and funding and liquidity score were downgraded.

Factors that Could, Individually or Collectively, Lead to Positive Rating Action/Upgrade

The Outlook on the Long-Term IDR could be revised to Stable if the bank limits the deterioration of its asset quality without causing a negative impact on its profitability while maintaining stable capitalisation, despite the economic recession, inflation and geopolitical risks.

An upgrade of the ratings is unlikely in the near term, given the unclear impact of the global environment for CRE markets. In the longer term, an upgrade would require successful execution of Aareal's strategic plan, leading to stronger profitability, higher revenue diversification, as well as strengthened asset quality. An operating profit/RWAs ratio sustainably above 2%, combined with an impaired loans ratio sustainably below 3%, could result in an upgrade.

Other Debt and Issuer Ratings

Rating level	Rating
Deposits: long-term/short-term	A-/F2
Senior non-preferred	BBB+
Senior preferred: long-term/short-term	A-/F2
Subordinated (AT1)	BB
Subordinated (Tier 2)	BBB-

Source: Fitch Ratings

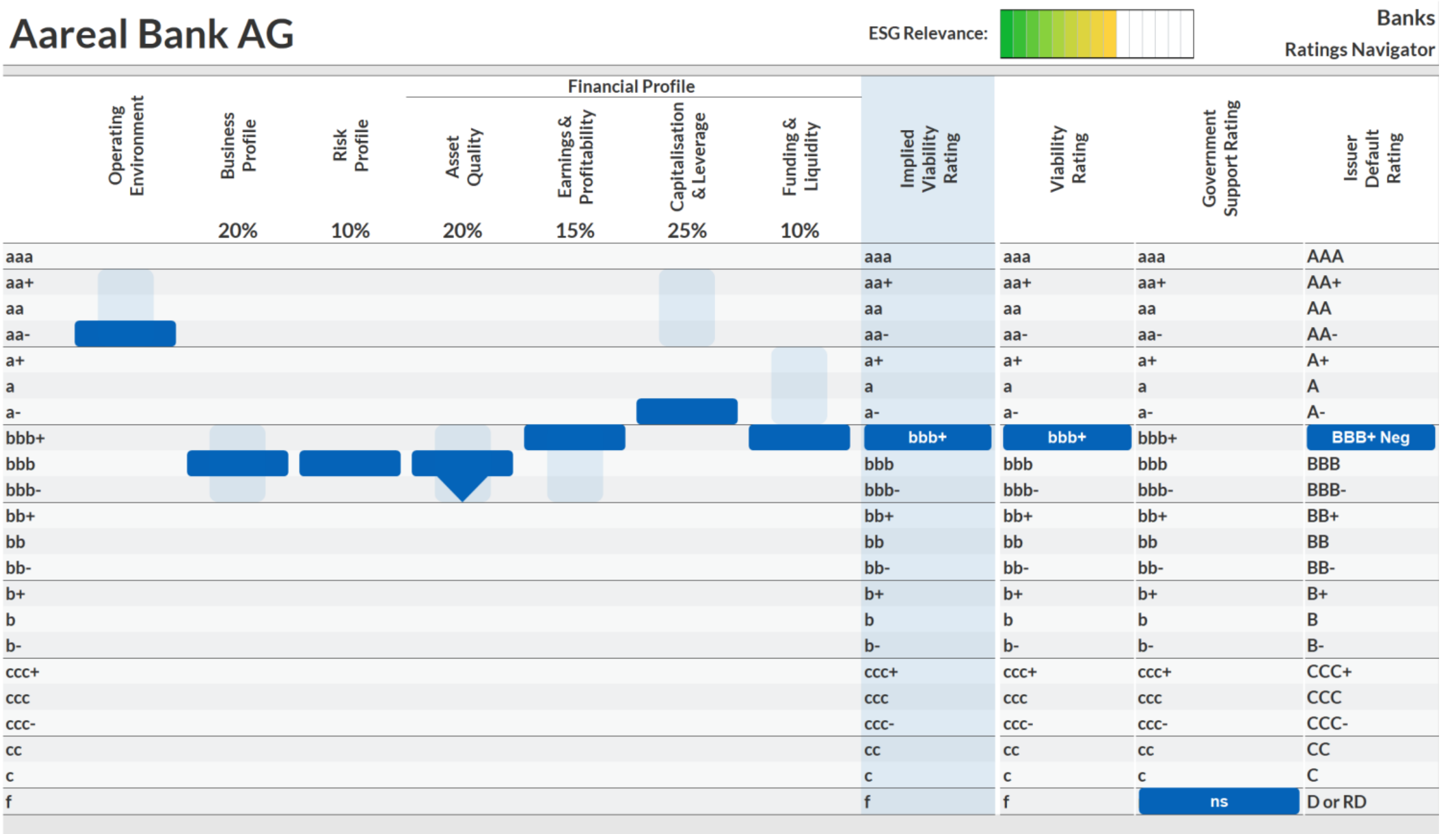
DCR, Deposit and Senior Debt Ratings

Aareal's Derivative Counterparty Rating (DCR) and its long-term deposit and senior preferred debt ratings are one notch above its Long-Term IDR, and its long-term senior non-preferred debt rating is aligned with the Long-Term IDR. This reflects the large and sustainable layer of non-preferred debt that provides preferred creditors and counterparties with additional protection in a resolution. The short-term senior-preferred debt and deposit ratings are the baseline options mapping to the 'A-' long-term ratings, because the bank's funding & liquidity score does not warrant higher short-term ratings.

Subordinated Debt

The Tier 2 subordinated notes are rated two notches below the VR to reflect their higher loss severity relative to senior creditors in a resolution. The additional Tier 1 notes are rated four notches below the VR (two notches for loss severity and two notches for non-performance risk) to reflect our expectation that Aareal will maintain large capital buffers above the notes' mandatory coupon omission triggers.

Ratings Navigator



The Key Rating Driver (KRD) weightings used to determine the implied VR are shown as percentages at the top. In cases where the implied VR is adjusted upwards or downwards to arrive at the VR, the KRD associated with the adjustment reason is highlighted in red. The shaded areas indicate the benchmark-implied scores for each KRD.

VR - Adjustments to Key Rating Drivers

The capitalisation & leverage score of 'a-' has been assigned below the 'aa' implied category score due to the following adjustment reason(s): risk profile and business model (negative).

The funding & liquidity score of 'bbb+' has been assigned below the 'a' implied category score due to the following adjustment reason(s): non-deposit funding (negative).

Company Summary and Key Qualitative Factors

Business Profile

International CRE Lender

Aareal operates in three core segments: Structured Property Finance (SPF), Banking and Digital Solutions (BDS), and software company Aareon. SPF provides CRE lending (end-3Q23: EUR32.4 billion) in around 20 countries in Europe, Asia and North America. Target clients include property companies, institutional investors and, to a lesser extent, owners of residential property portfolios.

Aareal's above-average geographic diversification and adequate underwriting standards mitigate vulnerability to the CRE markets' cyclicality. Its international focus (with a share of less than 10% exposure in Germany) allows Aareal to capture higher business margins than Germany-focused peers', who are facing very strong competition in their home market. However, this comes at the expense of higher non-performing loan ratios at Aareal through the cycle reflecting higher risks in foreign markets. The bank's expertise in structuring cross-border loans backed by multi-assets is a competitive strength that support its lending margins.

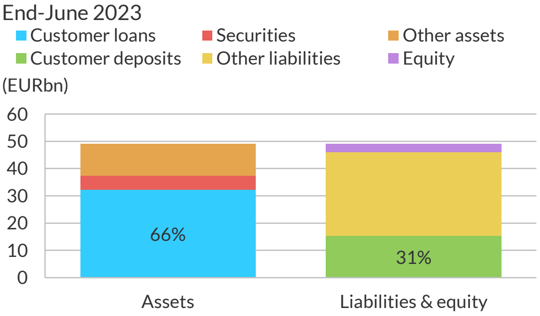
Provider of Residential Property-Related Services

Aareal's BDS segment supplies software solutions and banking services to the institutional housing sector, for which Aareal also manages stable deposits of EUR12.9 billion at end-3Q23 (about a third of the bank's total funding). These deposits are a funding strength relative to peers because they lower Aareal's reliance on wholesale funding and strengthen its net stable funding ratio. Aareal is aiming for BDS's profit contribution to grow including through acquisitions.

Aareon is a software company and the German market leader in integrated Enterprise Resource Planning (ERP) systems for the housing sector, managing more than 8,000 industry clients with over 14 million Europe-wide rental units. It is Aareal's main source of commission income, and a key pillar of its growth strategy. Aareal intends to diversify its revenues away from net interest income in CRE lending by significantly investing in Aareon's growth, where it earmarked investments of about EUR80 million for the whole of 2023. Investments include an expansion of its scalable digital business offerings, new products for ERP systems, process optimisation and an extension of Aareon's scope in servicing utilities.

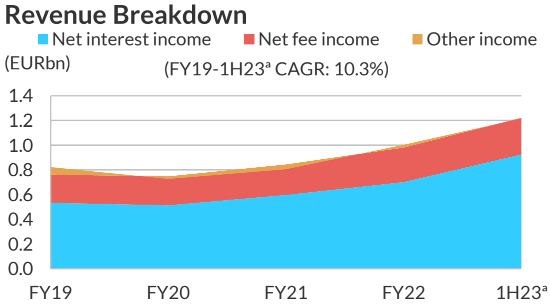
Aareon's profit contribution is not yet material, but we expect its low-risk, stable, capital-light model to increasingly support the bank's return on equity and operating profit/RWAs ratio, which we consider in Aareal's profitability assessment. We expect a potential sale of Aareon will not materialise in the next year or so, depending on market conditions.

Balance Sheet
End-June 2023



Source: Fitch Ratings, Fitch Solutions, Aareal

Revenue Breakdown



CAGR: compound annual growth rate
[a] Annualised
Source: Fitch Ratings, Fitch Solutions, Aareal

Risk Profile

Aareal's risk profile is characterised by high sector and single-name concentration. The CRE exposure from hotel (end-3Q23: 37%), office (28%), and retail (15%) property creates vulnerabilities to unexpected global property market sector stress. The bank uses interest rate and cross-currency swaps to hedge its loans and securities investments minimising market risks.

Aareal mainly finances income-producing high-grade properties in prime locations. Its credit standards at underwriting and the collateralisation of its loan book are broadly in line with market practice (average LTV of 56% at end-3Q23). Aareal has no risk appetite for CRE developments, and retains only a small legacy development portfolio (less than 1% of total loans).

Financial Profile

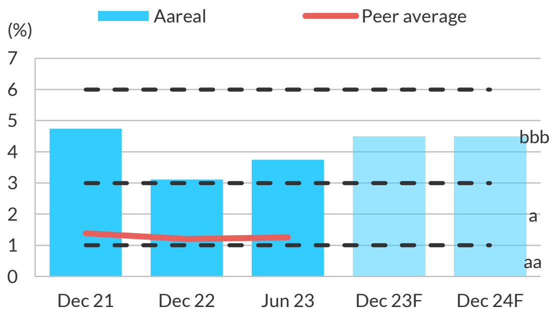
Asset Quality

Aareal's asset quality through the cycle is a rating weakness compared to domestic peers. Its impaired loans/total loans ratio typically ranges from 3% to 6%, the higher figures materialising during the pandemic. The sources of asset quality risks have notably shifted in 9M23, and its impaired loans portfolio grew again, by more than EUR200 million in 9M23, to EUR1.3 billion.

This shift is due to a significant deterioration in its US office portfolio, which comprises almost half of its total US exposure. Remote working increased vacancy rates, while sharply increasing interest rates have lowered investors' debt-servicing capacity. Consequently, the share of offices in Aareal's impaired loans has increased to more than 50%, wiping out the progress in the resolution of legacy impaired loans, including the exit from the EUR217 million Russian exposure. Aareal's hotel portfolio, which came under pressure during the pandemic, has, meanwhile, fully recovered. Improvements in the retail property segment, which still comprises about 34% of the impaired loan portfolio, are mixed. Aareal's Stage 2 loans amounted to about 18% of the bank's CRE loan exposure at end-1H23, which is high relative to peers.

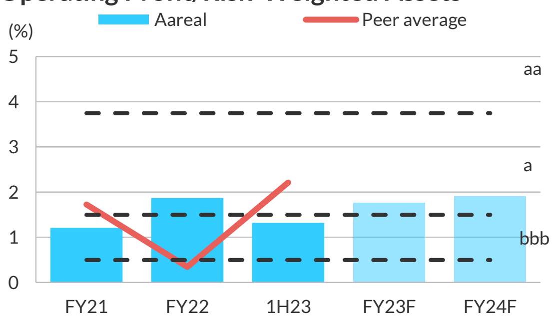
Aareal's reported NPL ratio of its SPF business has increased to 4.1% at end-3Q23 (end-2022: 3.6%), although this is well below the 5.9% of the height of the pandemic. Since this peak, Aareal has had a good record in asset restructuring and work-out, as demonstrated by the reasonably quick full resolution of its impaired hotel segment. The hotel segment has also benefitted from a strong rebound in travel activity over the past two years. However, we expect the recovery process in its office segment to be lengthier and more complex as market liquidity, valuations and occupancy rates are unlikely to recover as quickly.

Impaired Loans/Gross Loans



Source: Fitch Ratings, Fitch Solutions, banks

Operating Profit/Risk-Weighted Assets



Source: Fitch Ratings, Fitch Solutions, banks

Earnings and Profitability

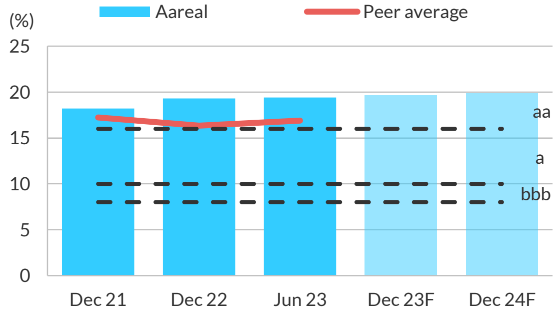
Aareal's profitability has recovered from the pandemic-induced loss incurred in 2020. The ECB's successive interest rate hikes have led to a strong rise (38% yoy) in Aareal's net interest income in 9M23. Alongside the positive impact from higher margins in SPF, the rise in net interest income was even more pronounced in its BDS segment, where Aareal holds substantial housing industry deposits. As Fitch had expected, Aareon, the bank's IT subsidiary, also generated rising commission income in 9M23 (15% yoy).

We believe that the changing profit contribution from its other activities makes Aareal less reliant on its SPF business in the long term, and strengthens its operating resilience. This underpins our expectation that Aareal can achieve an operating profit/RWAs ratio sustainably above 1.5% through the cycle. However, Aareal's SPF portfolio has recorded rising LICs of EUR262 million in 9M23 (up 54 % yoy; around 85bp of gross loans) due to deteriorating asset quality, primarily in its US office property segment. We expect pressure to have intensified in 2H23, which weighs on the bank's earlier profit expectation for year-end. Cost increases (15% yoy) in 9M23 largely reflect one-off investments in Aareon, as Aareal otherwise has a competitive and lean cost base. Consequently, we expect some cost moderation in 2024 despite inflation-induced pressure on administrative expenses.

Capital and Leverage

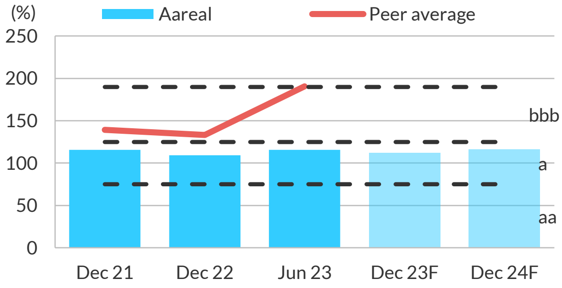
Aareal's CET1 (end-3Q23: 19.4%) and total capital (23.6%) ratios were high compared with peers'. The bank's capitalisation is supported by the retention of profits for the current year. The rise in RWAs has been moderate, reflecting overall subdued 9M23 growth in the CRE portfolio.

CET1 Ratio



Source: Fitch Ratings, Fitch Solutions, banks

Gross Loans/Customer Deposits + Covered Bonds



Source: Fitch Ratings, Fitch Solutions, banks

Funding and Liquidity

Aareal has largely executed its 2023 funding plan, having raised EUR2.4 billion debt in the markets by end-3Q23, mainly from benchmark-covered bonds that are core to its funding. Deposits from the institutional housing sector, which have proved resilient through the pandemic and are not very price-sensitive, remained a reliable funding source at EUR12.9 billion at end-3Q23. A higher share of these deposits transitioning from demand to term deposits increases funding costs. Aareal is seeking to expand its deposit franchise beyond BDS through retail deposit platforms. It had gathered EUR2.1 billion by end-3Q23 (up by EUR1.5 billion from end-2022), thus lowering its long-term wholesale funding needs.

Aareal has a robust liquidity profile, with a stable liquidity coverage ratio of 206% at end-3Q23 (end-2022: 210%). The overcollateralisation in its mortgage covered bond pool of about 20%, on a present value basis, at end-3Q23 provides an additional means of liquidity in case of need.

Additional Notes on Charts

The forecasts in the charts in this section reflect Fitch's forward view on the bank's core financial metrics per Fitch's Bank Rating Criteria. They are based on a combination of Fitch's economic forecasts, sector outlook and company-specific considerations. As a result, Fitch's forecasts may materially differ from the guidance provided by the rated entity to the market.

To the extent Fitch is aware of material non-public information with respect to future events, such as planned recapitalisations or merger and acquisition activity, Fitch will not reflect these non-public future events in its published forecasts. However, where relevant, such information is considered by Fitch as part of the rating process.

The dashed lines represent indicative ranges and implied scores for Fitch's core financial metrics for banks operating in environments scored in the 'aa' category. The light-blue bars represent Fitch's forecasts. The peer averages include Berlin Hyp AG (VR: bbb+), Landesbank Saar (bbb-), IKB Deutsche Industriebank AG (bbb), de Volksbank N.V. (a-) and NIBC Bank N.V. (bbb).

Financials

Financial Statements

	30 Jun 23		31 Dec 22	31 Dec 21	31 Dec 20
	6 months - interim (USDm)	6 months - interim (EURm)	Year end (EURm)	Year end (EURm)	Year end (EURm)
Summary income statement					
Net interest and dividend income	502	462	702	597	512
Net fees and commissions	162	149	277	245	234
Other operating income	-3	-3	23	-38	-19
Total operating income	661	608	1.002	804	727
Operating costs	392	361	571	516	458
Pre-impairment operating profit	268	247	431	288	269
Loan and other impairment charges	174	160	192	133	344
Operating profit	95	87	239	155	-75
Tax	32	29	86	87	-6
Net income	63	58	153	68	-69
Other comprehensive income	-14	-13	53	56	-48
Fitch comprehensive income	49	45	206	124	-117
Summary balance sheet					
Assets					
Gross loans	35.332	32.516	31.720	31.723	29.847
- Of which impaired	1.323	1.218	985	1.505	1.549
Loan loss allowances	393	362	487	489	588
Net loans	34.939	32.154	31.233	31.234	29.259
Interbank	1.983	1.825	1.914	1.264	1.029
Derivatives	2.024	1.863	1.825	1.132	2.218
Other securities and earning assets	5.677	5.225	5.329	6.705	6.919
Total earning assets	44.623	41.067	40.301	40.335	39.425
Cash and due from banks	6.789	6.248	5.424	6.942	4.744
Other assets	1.862	1.714	1.606	1.451	1.309
Total assets	53.275	49.029	47.331	48.728	45.478
Liabilities					
Customer deposits	16.691	15.361	16.895	15.109	13.680
Interbank and other short-term funding	6.584	6.059	1.981	6.109	5.629
Other long-term funding	22.354	20.572	21.050	21.705	20.428
Trading liabilities and derivatives	3.492	3.214	3.514	1.882	1.906
Total funding and derivatives	49.121	45.206	43.440	44.805	41.643
Other liabilities	581	535	633	862	868
Preference shares and hybrid capital	326	300	300	300	300
Total equity	3.247	2.988	2.958	2.761	2.667
Total liabilities and equity	53.275	49.029	47.331	48.728,0	45.478
Exchange rate		USD1 = EUR0,920302	USD1 = EUR0,937559	USD1 = EUR0,884173	USD1 = EUR0,821963

Source: Fitch Ratings, Fitch Solutions, Aareal

Key Ratios

	30 Jun 23	31 Dec 22	31 Dec 21	31 Dec 20
Ratios (%; annualised as appropriate)				
Profitability				
Operating profit/risk-weighted assets	1.3	1.9	1.2	-0.6
Net interest income/average earning assets	2.3	1.7	1.5	1.3
Non-interest expense/gross revenue	59.4	56.9	64.0	63.1
Net income/average equity	3.9	5.3	2.5	-2.7
Asset quality				
Impaired loans ratio	3.8	3.1	4.7	5.2
Growth in gross loans	2.5	0.0	6.3	4.2
Loan loss allowances/impaired loans	29.7	49.4	32.5	38.0
Loan impairment charges/average gross loans	1.0	0.6	0.4	1.2
Capitalisation				
Common equity Tier 1 ratio	19.4	19.3	18.2	18.8
Tangible common equity/tangible assets	4.6	4.9	4.9	5.4
Basel leverage ratio	6.2	5.5	5.5	5.9
Net impaired loans/common equity Tier 1	33.1	20.2	43.7	42.0
Funding and liquidity				
Gross loans/customer deposits	211.7	187.8	210.0	218.2
Gross loans/customer deposits + covered bonds	115.8	109.3	115.5	117.5
Liquidity coverage ratio	225.5	207.4	255.4	264.9
Customer deposits/total non-equity funding	36.3	42.0	35.0	34.2

Source: Fitch Ratings, Fitch Solutions, Aareal

Support Assessment

Commercial Banks: Government Support	
Typical D-SIB GSR for sovereign's rating level (assuming high propensity)	A+ to A-
Actual jurisdiction D-SIB GSR	ns
Government Support Rating	ns
Government ability to support D-SIBs	
Sovereign Rating	AAA/ Stable
Size of banking system	Negative
Structure of banking system	Neutral
Sovereign financial flexibility (for rating level)	Positive
Government propensity to support D-SIBs	
Resolution legislation	Negative
Support stance	Negative
Government propensity to support bank	
Systemic importance	Negative
Liability structure	Neutral
Ownership	Neutral

The colours indicate the weighting of each KRD in the assessment.

Higher influence Moderate influence Lower influence

Aareal's GSR of 'no support' reflects Fitch's view that senior creditors can no longer rely on full extraordinary state support. This is driven by the EU's Bank Recovery and Resolution Directive and the Single Resolution Mechanism, which provide a resolution framework that is likely to require senior creditors participating in losses, if necessary, instead, or ahead, of a bank receiving government support.

Environmental, Social and Governance Considerations

FitchRatings **Aareal Bank AG**

Banks
Ratings Navigator

Credit-Relevant ESG Derivation

Aareal Bank AG has 5 ESG potential rating drivers

- Aareal Bank AG has exposure to compliance risks including fair lending practices, mis-selling, repossession/foreclosure practices, consumer data protection (data security) but this has very low impact on the rating.
- Governance is minimally relevant to the rating and is not currently a driver.

			Overall ESG Scale
key driver	0	issues	5
driver	0	issues	4
potential driver	5	issues	3
not a rating driver	4	issues	2
not a rating driver	5	issues	1

Environmental (E)

General Issues	E Score	Sector-Specific Issues	Reference	E Scale
GHG Emissions & Air Quality	1	n.a.	n.a.	5
Energy Management	1	n.a.	n.a.	4
Water & Wastewater Management	1	n.a.	n.a.	3
Waste & Hazardous Materials Management; Ecological Impacts	1	n.a.	n.a.	2
Exposure to Environmental Impacts	2	Impact of extreme weather events on assets and/or operations and corresponding risk appetite & management; catastrophe risk; credit concentrations	Business Profile (incl. Management & governance); Risk Profile; Asset Quality	1

How to Read This Page
ESG scores range from 1 to 5 based on a 15-level color gradation. Red (5) is most relevant and green (1) is least relevant.

The Environmental (E), Social (S) and Governance (G) tables break out the individual components of the scale. The right-hand box shows the aggregate E, S, or G score. General Issues are relevant across all markets with Sector-Specific Issues unique to a particular industry group. Scores are assigned to each sector-specific issue. These scores signify the credit-relevance of the sector-specific issues to the issuing entity's overall credit rating. The Reference box highlights the factor(s) within which the corresponding ESG issues are captured in Fitch's credit analysis.

The Credit-Relevant ESG Derivation table shows the overall ESG score. This score signifies the credit relevance of combined E, S and G issues to the entity's credit rating. The three columns to the left of the overall ESG score summarize the issuing entity's sub-component ESG scores. The box on the far left identifies some of the main ESG issues that are drivers or potential drivers of the issuing entity's credit rating (corresponding with scores of 3, 4 or 5) and provides a brief explanation for the score.

Classification of ESG issues has been developed from Fitch's sector ratings criteria. The General Issues and Sector-Specific Issues draw on the classification standards published by the United Nations Principles for Responsible Investing (PRI) and the Sustainability Accounting Standards Board (SASB).

Sector references in the scale definitions below refer to Sector as displayed in the Sector Details box on page 1 of the navigator.

Social (S)

General Issues	S Score	Sector-Specific Issues	Reference	S Scale
Human Rights, Community Relations, Access & Affordability	2	Services for underbanked and underserved communities: SME and community development programs; financial literacy programs	Business Profile (incl. Management & governance); Risk Profile	5
Customer Welfare - Fair Messaging, Privacy & Data Security	3	Compliance risks including fair lending practices, mis-selling, repossession/foreclosure practices, consumer data protection (data security)	Operating Environment; Business Profile (incl. Management & governance); Risk Profile	4
Labor Relations & Practices	2	Impact of labor negotiations, including board/employee compensation and composition	Business Profile (incl. Management & governance)	3
Employee Wellbeing	1	n.a.	n.a.	2
Exposure to Social Impacts	2	Shift in social or consumer preferences as a result of an institution's social positions, or social and/or political disapproval of core banking practices	Business Profile (incl. Management & governance); Financial Profile	1

Governance (G)

General Issues	G Score	Sector-Specific Issues	Reference	G Scale
Management Strategy	3	Operational implementation of strategy	Business Profile (incl. Management & governance)	5
Governance Structure	3	Board independence and effectiveness; ownership concentration; protection of creditor/stakeholder rights; legal /compliance risks; business continuity; key person risk; related party transactions	Business Profile (incl. Management & governance); Earnings & Profitability; Capitalisation & Leverage	4
Group Structure	3	Organizational structure; appropriateness relative to business model; opacity; intra-group dynamics; ownership	Business Profile (incl. Management & governance)	3
Financial Transparency	3	Quality and frequency of financial reporting and auditing processes	Business Profile (incl. Management & governance)	2
				1

CREDIT-RELEVANT ESG SCALE

How relevant are E, S and G issues to the overall credit rating?

5	Highly relevant, a key rating driver that has a significant impact on the rating on an individual basis. Equivalent to "higher" relative importance within Navigator.
4	Relevant to rating, not a key rating driver but has an impact on the rating in combination with other factors. Equivalent to "moderate" relative importance within Navigator.
3	Minimally relevant to rating, either very low impact or actively managed in a way that results in no impact on the entity rating. Equivalent to "lower" relative importance within Navigator.
2	Irrelevant to the entity rating but relevant to the sector.
1	Irrelevant to the entity rating and irrelevant to the sector.

The highest level of ESG credit relevance is a score of '3', unless otherwise disclosed in this section. A score of '3' means ESG issues are credit-neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. Fitch's ESG Relevance Scores are not inputs in the rating process; they are an observation on the relevance and materiality of ESG factors in the rating decision. For more information on Fitch's ESG Relevance Scores, visit https://www.fitchratings.com/topics/esg/products#esg-relevance-scores.

SOLICITATION & PARTICIPATION STATUS

For information on the solicitation status of the ratings included within this report, please refer to the solicitation status shown in the relevant entity's summary page of the Fitch Ratings website.

For information on the participation status in the rating process of an issuer listed in this report, please refer to the most recent rating action commentary for the relevant issuer, available on the Fitch Ratings website.

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