

Aareal Bank AG

Key Rating Drivers

Concentrated CRE Business: Aareal Bank AG's ratings reflect the bank's concentrated core business as a medium-sized international commercial real estate (CRE) lender, which exposes the bank to sector risks despite geographic diversification. The ratings also reflect cyclical asset quality, adequate operating profitability that provides a sufficient buffer to absorb high loan impairment charges (LICs) in the coming quarters, and sound capitalisation, adequate funding and liquidity.

Tested Underwriting Standards: Aareal mainly finances properties in prime locations. The underwriting standards and collateralisation of its loan book are broadly in line with market practice. The bank's risk profile is also underpinned by its centralised, sophisticated risk control framework and good record of impaired loans work-out, which we view as crucial for weathering the current challenging conditions in most real estate markets.

Asset Quality Stabilising: Asset quality has varied, reflecting the bank's strategic sector concentrations. Pressure from the past year has mostly been from the sizeable US office portfolio, which is by far the biggest contributor to the 3.7% impaired loans ratio (Stage 3/gross loans) at end-1H24. However, it showed good capacity to manage its non-performing loan portfolio through workouts and sales. We expect these to continue offsetting further moderate inflows of impaired loans in 2H24 and 2025, which drives the stable asset quality outlook.

Adequate Profitability: Aareal's total income generation will moderately decrease following the sale of Aareon, its former IT subsidiary. However, Aareon's overall profit contribution was limited. In addition, higher net interest income due to solid margins in its structured property portfolio and material interest income in its banking subsector (where Aareal holds housing industry deposits) in 1H24 could well absorb a temporarily higher level of LICs, leading to an operating profit/risk-weighted assets (RWAs) ratio of 2.7%.

Sound Capitalisation: Aareal's common equity Tier 1 (CET1) ratio of 19.3% (including discontinued operations) at end-1H24 comfortably exceeds regulatory requirements. It provides an adequate cushion, considering the bank's property finance business model with high single-borrower and sector concentrations. However, continuing risk on CRE markets drive our negative outlook on the score. The ratio will be temporarily boosted by the expected net gain on the sale of Aareon. Over time, we believe it will be paid out to shareholders.

Diversified Funding: Aareal's funding profile is sound and benefits from its established covered bond franchise, which is its main funding source. It is supplemented by stable deposits from the institutional housing sector, which reduce the bank's reliance on unsecured debt market funding and retail term deposits collected through independent online platforms.

Ratings

Aareal Bank AG

Long-Term IDR	BBB
Short-Term IDR	F2
Derivative Counterparty Rating	BBB+(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	Stable
Sovereign Long-Term Foreign-Currency IDR	Stable
Sovereign Long-Term Local-Currency IDR	Stable

Applicable Criteria

[Bank Rating Criteria \(March 2024\)](#)

Related Research

[Fitch Affirms Aareal at 'BBB'; Outlook Stable \(October 2024\)](#)

[Sale of Aareon Neutral to Aareal's Rating \(June 2024\)](#)

[German Banks' Commercial Real Estate: Credit Losses to Stay High \(February 2024\)](#)

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Rating Sensitivities

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

Aareal's ratings would likely be downgraded if the bank's impaired loans ratio increases above 6% for an extended period with no credible reduction plan, or if heightened LICs weigh on its operating profitability, lowering its operating profit/RWAs ratio to below 0.5% in the longer term. This could result from further severe stress in the US office property market, and a spill-over to European property markets.

Far higher funding costs triggered by a material loss of deposits in the housing sector or signs of challenges to access the wholesale funding market could also impair Aareal's profitability and funding and result in a downgrade.

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

An upgrade of Aareal's ratings would be contingent on a sustainable recovery of US office property markets and a resilient asset quality in the bank's other property segments and regions. An upgrade would also be contingent on the bank further strengthening its profitability, with an operating profit/RWAs ratio sustainably above 2%, combined with an impaired loans ratio of around 3%, while maintaining sound capitalisation.

Other Debt and Issuer Ratings

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

Source: Fitch Ratings

Aareal's Derivative Counterparty Rating (DCR), long-term deposit and senior preferred debt ratings are one notch above the Long-Term IDR, and the long-term senior non-preferred debt rating is aligned with the Long-Term IDR. This reflects the large and sustainable layer of non-preferred and junior debt that provides preferred creditors and counterparties with additional protection in a resolution. The short-term senior preferred and deposit ratings are the lower of the two options mapping to the respective long-term ratings.

The Tier 2 debt rating is two notches below the VR to reflect the poor recovery prospects of these instruments. The AT1 notes are rated four notches below the VR (two notches for loss severity and two 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 and 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 and 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

Aareal is a medium sized private equity owned bank and one of the few independent pure CRE lenders remaining in Germany, as most German CRE specialists operate as part of larger banking groups or are members of large institutional protection schemes. The bank operates in two core segments: structured property finance (SPF) and banking and digital solutions (BDS). SPF provides CRE lending 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.

Aareon, Aareal's software subsidiary and the German market leader in integrated enterprise resource planning systems for the housing sector, is accounted for as a discontinued operation following the owners' decision to sell it.

The bank's above-average geographic diversification, with only 7% of its loan book in Germany, mitigates vulnerability to the CRE market's cyclicity and also allows the bank to capture higher margins in foreign CRE markets compared to domestic-focused peers. Taking advantage of this moderate reliance on single jurisdictions, Aareal also has a sound record of flexible capital allocation in response to local-market developments. The bank's expertise in structuring cross-border loans backed by multi-assets is a competitive strength that support its lending margins.

Aareal's BDS segment supplies software solutions and banking services to the institutional housing sector, for which Aareal also manages stable deposits (end-1H24: EUR13.8 billion; equivalent to about a third of the bank's total funding). In combination with covered bond funding, these deposits are a fundamental pillar of the bank's business model because they lower its reliance on unsecured market funding, which is more expensive compared to that of most CRE peers.

Fitch does not expect that the agreed sale of Aareon will materially affect the bank's business profile. This is because Aareon does not perform a core activity for the commercial real estate lender and its profit contribution has been negligible in the past few years. Aareon and Aareal will continue to cooperate closely through a joint venture, which provides clients with specialist expertise around payment software solutions for the property sector and related industries. We expect a sufficiently high level of stability among Aareal's BDS clients, who are not directly affected by the sale of Aareon, which is important to maintain strength in Aareal's funding profile.

Risk Profile

High sector and single-name concentration characterises the risk profile. The CRE exposure from hotel (end-1H24: 36%), office (28%), and retail (14%) property creates vulnerabilities to global property market sector stress. Aareal mainly finances ring-fenced, income-producing properties in prime locations with short average terms. Its credit standards at underwriting and the collateralisation of its loan book (average LTV of 56% on its performing portfolio at end-1H24) are broadly in line with market practice.

Aareal has no risk appetite for CRE developments, and retains only a small legacy development portfolio, equal to less than 1% of total loans. The bank uses interest rate and cross-currency swaps to hedge its loans and securities investments, minimising market risks.

Financial Profile

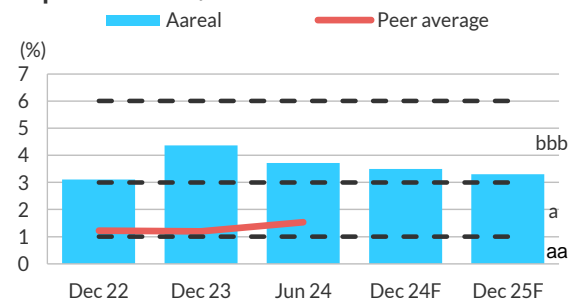
Asset Quality

Our assessment of Aareal's asset quality factors in the cyclical performance of CRE markets and high single-borrower and sector concentration in its CRE loan book. The asset quality metrics have also been historically weaker than those of its domestic focused peers, reflecting a stronger presence in more volatile CRE markets such as southern Europe (9% of CRE loans) and the US (23%). Aareal is not exposed to the property market in China.

The US office portfolio has come under big pressure since late 2022 due to higher interest and vacancy rates, which lowered collateral valuations and borrowers' debt-servicing capacity. Aareal has taken measures including sales and work outs in 2023 and 1H24 to mitigate the rise in its impaired loans ratio. Consequently, impaired loans volumes declined to EUR1.4 billion at end-1H24 (end-2023: EUR1.6 billion) despite further inflows of impaired loans.

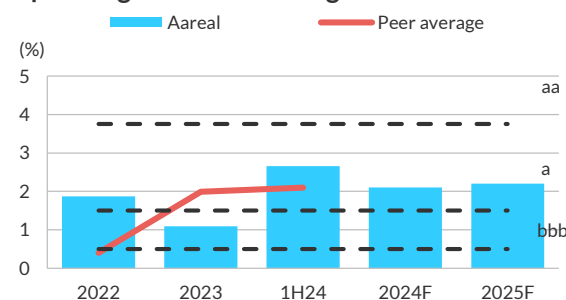
A further EUR300 million of impaired loans are set to be resolved in 2H24, and we expect the bank to continue reducing these loans in 2025, in line with its target of reducing the non-performing exposure ratio to around 3%. This should be supported by declining US dollar interest rates, offsetting new defaults, which we expect to remain sustained in upcoming quarters. Asset quality in the bank's other portfolios have been resilient.

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 operating profit was resilient in 1H24, despite a continued high level of LICs. LICs totalled EUR163 million, equivalent to 1% of gross loans, in 1H24. They were largely driven by new defaults in the US office portfolio, but also included EUR43 million additions to existing management overlays. Aareal aims for an operating profit of EUR250 million-300 million in 2024 (excluding Aareon), above the EUR221 million of 2023. We believe that profitability should improve in the next two years as LICs should moderate from 2025.

Aareal's net interest income (NII), the bank's main revenue source, rose 11% yoy in 1H24, supported by high interest rates on the price-inelastic BDS housing industry deposits, loan growth and improved gross margins. BDS lowers the sensitivity of the bank's profits to cyclical downturns of the CRE markets as its profitability positively correlates with interest rates. BDS's contribution to the operating profit increased to 45% in 1H24 and we believe it will remain an important pillar to Aareal's profits. Aareal has a lean cost base. Its cost/income ratio of below 35% is very competitive, even in an international context.

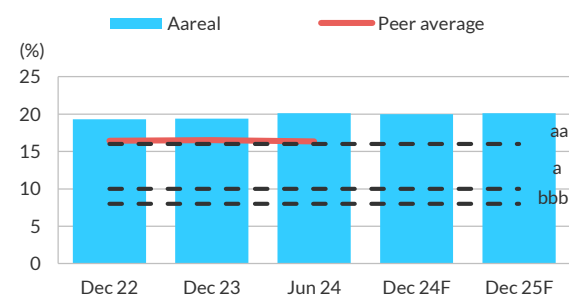
The consolidated net loss of EUR8 million in 1H24 was primarily due to about EUR150 million booked transaction costs related to the Aareon sale. The expected approximate EUR2 billion net gain from the transaction will be booked upon closing and will boost net income in 2024.

Capitalisation and Leverage

Aareal's pro-forma CET1 (end-1H24: 20.1%) and total capital (24.0%; excluding discontinued operations) ratios are a rating strength compared with peers. A high profit retention rate has boosted the bank's capital ratios in recent years, but we expect pay-outs to increase. Aareal's pro-forma leverage ratio of 6.9% is also strong in light of the balance sheet's collateralisation. This offers room to absorb regulatory risk-weighted assets inflation from the phasing in of final Basel III rules. Aareal reported a fully-applied final Basel III CET1 ratio of 15% at end-1H24.

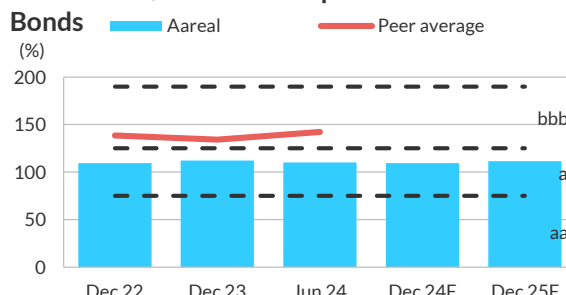
We believe that Aareal will ultimately distribute the net gain of the sale of Aareon to its shareholders subject to the approval of its supervisors. However, until the full-pay out, the additional capital will increase the bank's financial flexibility, strengthening its loss-absorbing capacity while volatile market conditions persist.

CET1 Ratio



Source: Fitch Ratings, Fitch Solutions, banks

Gross Loans/Customer Deposits+Covered Bonds



Source: Fitch Ratings, Fitch Solutions, banks

Funding and Liquidity

Aareal's funding benefits from its established covered bond franchise (EUR12.6 billion outstanding at end-1H24) in addition to deposits, which are primarily granular and stable rental security and operational deposits from the institutional housing sector (end-1H24: EUR13.8 billion). This differentiates Aareal from its peers, and lowers its long-

term unsecured market funding needs (EUR7.5 billion senior preferred and non-preferred bonds outstanding at end-1H24) and overall funding costs. The institutional housing deposits are supplemented by retail deposits raised online, which further grew by EUR900 million to EUR3.5 billion in 1H24. Aareal also holds a smaller portion of wholesale deposits (EUR1.1 billion end-1H24).

The bank's market funding capacity proved solid also in 1H24, when the funding spreads of German CRE lenders widened. Aareal raised EUR1.2 billion on the capital market in 1H24, including a benchmark covered bond and a debut 'green' senior non-preferred benchmark transaction. It also issued EUR400 million Tier 2 debt in September 2024.

Aareal's liquidity profile is robust. The bank holds a EUR7.8 billion bond portfolio with high credit quality – 90% of assets are rated 'AA-' to 'AAA'. Part of the portfolio is pledged as collateral for repo transactions. Aareal's average liquidity coverage ratio in 1Q24 and 2Q24 remained strong in 1Q24 (192%) and 2Q24 (239%). The over-collateralisation in its mortgage covered bond pool of over 20% (on a present value basis) at end-1H24 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. F represents 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+). Unless otherwise stated, financial year (FY) end is 30 June 2024 for all banks in this report. Latest average uses FY23 data for Berlin Hyp AG, Landesbank Saar.

Financials

Financial Statements

	30 June 2024		31 December 2023	31 December 2022	31 December 2021
	1st half (USDm)	1st half (EURm)	12 months (EURm)	12 months (EURm)	12 months (EURm)
Summary income statement					
Net interest and dividend income	569	530	978	702	597
Net fees and commissions	-2	-2	307	277	245
Other operating income	-6	-6	-62	23	-38
Total operating income	561	522	1,223	1,002	804
Operating costs	191	178	633	571	516
Pre-impairment operating profit	370	344	590	431	288
Loan and other impairment charges	175	163	441	192	133
Operating profit	194	181	149	239	155
Other non-operating items (net)	-146	-136	-	-	-
Tax	57	53	101	86	87
Net income	-9	-8	48	153	68
Summary balance sheet					
Assets					
Gross loans	35,620	33,150	33,698	31,720	31,723
- Of which impaired	1,322	1,230	1,470	985	1,505
Loan loss allowances	433	403	424	487	489
Net loans	35,187	32,747	33,274	31,233	31,234
Interbank	1,788	1,664	2,976	1,914	1,264
Derivatives	1,369	1,274	1,538	1,825	1,132
Other securities and earning assets	7,174	6,677	6,084	5,329	6,705
Total earning assets	45,518	42,362	43,872	40,301	40,335
Cash and due from banks	1,782	1,658	977	5,424	6,942
Other assets	2,438	2,269	1,984	1,606	1,451
Total assets	49,738	46,289	46,833	47,331	48,728
Liabilities					
Customer deposits	18,817	17,512	17,169	16,895	15,109
Interbank and other short-term funding	960	893	1,634	1,981	6,109
Other long-term funding	21,924	20,404	20,898	21,050	21,705
Trading liabilities and derivatives	2,883	2,683	2,683	3,514	1,882
Total funding and derivatives	44,583	41,492	42,384	43,440	44,805
Other liabilities	1,629	1,516	1,149	633	862
Preference shares and hybrid capital	322	300	300	300	300
Total equity	3,203	2,981	3,000	2,958	2,761
Total liabilities and equity	49,738	46,289	46,833	47,331	48,728
Exchange rate		USD1 = EUR0.930665	USD1 = EUR0.912742	USD1 = EUR0.937559	USD1 = EUR0.884173

Source: Fitch Ratings, Fitch Solutions, Aareal

Key Ratios

	30 June 2024	31 December 2023	31 December 2022	31 December 2021
Ratios (%; annualised as appropriate)				
Profitability				
Operating profit/risk-weighted assets	2.7	1.1	1.9	1.2
Net interest income/average earning assets	2.5	2.4	1.7	1.5
Non-interest expense/gross revenue	34.1	51.9	56.9	64.0
Net income/average equity	-0.5	1.6	5.3	2.5
Asset quality				
Impaired loans ratio	3.7	4.4	3.1	4.7
Growth in gross loans	-1.6	6.2	0.0	6.3
Loan loss allowances/impaired loans	32.8	28.8	49.4	32.5
Loan impairment charges/average gross loans	1.0	1.4	0.6	0.4
Capitalisation				
Common equity Tier 1 ratio	19.3	19.4	19.3	18.2
Tangible common equity/tangible assets	5.9	4.8	4.9	4.9
Basel leverage ratio	6.7	6.4	6.0	5.5
Net impaired loans/common equity Tier 1	30.1	39.3	20.2	43.7
Funding and liquidity				
Gross loans/customer deposits	189.3	196.3	187.8	210.0
Gross loans/customer deposits + covered bonds	110.0	112.2	109.3	115.5
Liquidity coverage ratio	239.0	203.7	207.4	255.4
Customer deposits/total non-equity funding	44.8	42.9	42.0	35.0
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 cannot rely on full extraordinary state support. This is driven by the EU's resolution framework that is likely to require senior creditors participating in losses, if necessary, instead, or ahead, of a bank receiving government support.

An upgrade of the GSR would require a higher propensity of sovereign support. While not impossible, the EU's resolution regime makes this highly unlikely, in Fitch's view.

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		
	5	issues	1		

Environmental (E)

General Issues	E Score	Sector-Specific Issues	Reference	E Scale
GHG Emissions & Air Quality	1 n.a.	n.a.	n.a.	5
Energy Management	1 n.a.	n.a.	n.a.	4
Water & Wastewater Management	1 n.a.	n.a.	n.a.	3
Waste & Hazardous Materials Management; Ecological Impacts	1 n.a.	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.

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.	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

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.

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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