

Sparkassen-Finanzgruppe Hessen-Thueringen

Key Rating Drivers

Regional Retail and Commercial Banking Group Sparkassen-Finanzgruppe Hessen-Thueringen's (SFG-HT) Issuer Default Ratings (IDRs) are underpinned by the strong local retail franchises of the savings banks members of the group, which are complemented by the wholesale activities of Landesbank Hessen-Thueringen Girozentrale (Helaba; A+/Stable), the group's central institution. The ratings also reflect the close integration of SFG-HT's members, and the group's sound asset quality, strong capitalisation and moderate recurring profitability.

Strong Mutual Support: SFG-HT is not a legal entity but a network that comprises 49 savings banks in Hessen and Thuringia as well as Helaba and that forms a common economic unit whose cohesion is supported by a mutual support scheme. SFG-HT's IDRs apply to each individual member bank (including Helaba) and are aligned with the group's Viability Rating (VR).

Conservative Risk Profile: Through the pandemic and historically, SFG-HT's asset quality has been sound, reflecting prudent underwriting standards, a high share of collateralised lending and a fairly standardised product offering. The savings banks' granularity, long-standing client relationships and their limited complexity also underpin the group's sound risk profile. SFG-HT's large exposure to commercial real estate, mainly through Helaba, leaves it vulnerable to a real estate crisis. However, strong collateralisation based on conservative valuation mitigates risks.

Robust Asset Quality: Given SFG-HT's predominant focus on Germany, we expect no significant short-term direct asset quality impact from the war in Ukraine. However, we expect a modest deterioration in SFG-HT's asset quality in the next two years, due to an expected economic slowdown, rising interest rates and inflationary pressure. We expect SFG-HT's impaired loans ratio will remain below 2% in the medium term.

Profitability under Pressure: The group's stable operating revenue reflects its strong regional market position, but Helaba's low-margin wholesale activities and large size relative to SFG-HT structurally dilute the savings banks' solid earnings contribution. We expect that SFG-HT will continue to generate a moderate operating profit of 0.8%-1% of its risk-weighted assets (RWA) on a sustained basis.

Well Capitalised: SFG-HT's capitalisation is a rating strength. Based on preliminary data, SFG-HT's common equity Tier 1 (CET1) ratio moderately declined at end-2021, owing to a further RWA increase, which was in part driven by loan growth outpacing profit retention. We expect healthy capital generation to strengthen SFG-HT's capital reserves and maintain its CET1 capital ratio above 16% in the medium term.

Strong Funding and Liquidity: The savings banks' large and granular retail deposit base underpins the group's strong funding and liquidity profile. The 'F1+' Short-Term IDR is the higher of two options mapping to the 'A+' Long-Term IDR and reflects the group's 'aa-' score for funding and liquidity. Helaba diversifies the group's funding profile by providing access to the international unsecured and secured funding markets.

Ratings

Foreign Currency	
Long-Term IDR	A+
Short-Term IDR	F1+
Viability Rating	a+
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

Applicable Criteria

Sovereign Long-Term Local-

Currency IDR

Bank Rating Criteria (November 2021)

Related Research

Fitch Affirms Sparkassen-Finanzgruppe Hessen-Thueringen at 'A+'; Outlook Stable (June 2022)

Stable

Global Economic Outlook (June 2022)

Analysts

Markus Glabach +49 69 768076 195 markus.glabach@fitchratings.com

Caroline Lehmann, CFA +49 69 768076 176 caroline.lehmann@fitchratings.com

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Ratings Sensitivities

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

SFG-HT's, the savings banks' and Helaba's ratings are sensitive to changes in the group's VR. We could downgrade the VR if we expect the group's operating profit/RWA ratio to durably fall below 0.5% and its impaired loans ratio to durably exceed 3%. This could result from large single losses in Helaba's concentrated loan portfolio, notably in its large commercial real estate exposure. SFG-HT's Short-Term IDR is sensitive to changes in the Long-Term IDR and to a revision of the funding and liquidity score below 'aa-'.

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

An upgrade of the VR would require materially improved earnings and cost efficiency sustainably lifting the group's operating profit/RWA ratio above 1.5%, while maintaining a low impaired loans ratio and strong capitalisation.

Other Debt and Issuer Ratings

Debt Rating Classes

Rating level	Helaba	Savings banks	
Deposit ratings	AA-F1+	A+/F1+	
SP debt	AA-		
SNP debt	A+		
Guaranteed debt	AAA		
Tier 2 debt	Α-		

Other Debt and Issuer Ratings: Key Rating Drivers

Deposit Ratings and Helaba's Derivative Counterparty Rating (DCR) and Senior Debt Ratings

Helaba's DCR, deposit ratings and preferred debt ratings are one notch above the bank's Long-Term IDR because of the protection provided by Helaba's sustainable resolution buffers to these preferred creditors. Helaba forms a resolution group that does not include SFG-HT's savings banks (except for Frankfurter Sparkasse, of which Helaba owns 100%). Helaba is subject to minimum requirements for own funds and eligible liabilities, and we expect that the bank's junior and senior non-preferred debt buffer will continue to sustainably exceed 10% of its RWA. Helaba's senior unsecured and senior non-preferred debt ratings are aligned with its IDRs for the same reason.

The deposit ratings of SFG-HT's savings banks are in line with their IDRs because each savings bank's junior and senior non-preferred debt buffers, when available, are insufficient to warrant a rating uplift. We do not expect the savings banks to build up significant buffers because SFG-HT is not regulated as a single resolution group. This means that in a highly unlikely scenario where the mutual support mechanism would fail to protect its members' viability, the preferred resolution strategy for each savings bank would be insolvency procedures.

Helaba's State-Guaranteed Senior Unsecured and Subordinated Notes

The 'AAA' on Helaba's guaranteed senior unsecured and subordinated Tier 2 debt are based on Fitch Ratings' view of the State of Hesse and the Free State of Thuringia's extremely high ability and propensity to honour their grandfathered statutory guarantor's liability (Gewaehrtraegerhaftung). Fitch believes that the senior and subordinated instruments are similarly protected because the guarantee does not differentiate between seniorities. In our view, the regulatory and EU state aid frameworks do not constrain support for grandfathered debt.

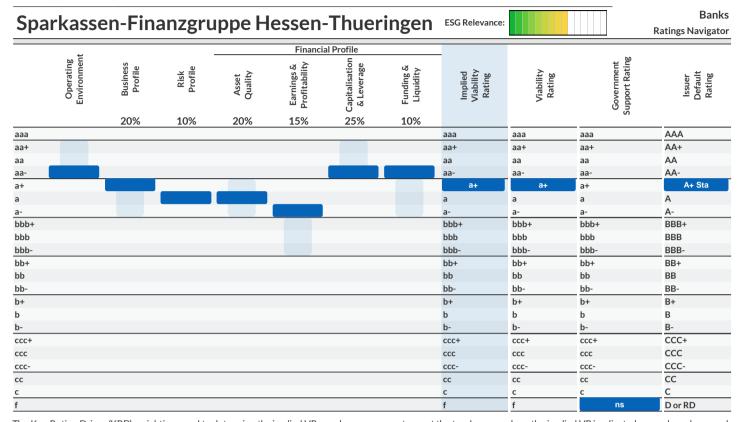
Helaba's Non-Guaranteed Subordinated Debt

Helaba's subordinated Tier 2 notes that do not benefit from the state guarantee are notched down twice from SFG-HT's VR to reflect Fitch's baseline notching for loss-severity and the assumption that extraordinary support from SFG-HT would be forthcoming to support these junior instruments, if needed, even though junior instruments are not formally covered by the group's mutual support scheme.

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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 bench mark-implied scores for each KRD.

VR - Adjustments to Key Rating Drivers

The earnings & profitability score of 'a-' has been assigned above the category implied score of 'bbb' due to the following adjustment reason: risk-weight calculation (positive).

The funding & liquidity score of 'aa-' has been assigned above the category implied score of 'a' due to the following adjustment reason: deposit structure (positive).

Company Summary and Key Qualitative Factors

Operating Environment

War in Ukraineto Dent Germany's Economic Recovery

Fitch expects the German GDP to grow by just 1.6% in 2022 (down from Fitch's March 2022 forecast of 2.5%) and not reach its pre-pandemic level before 1Q23. The downward revision reflects the recent lockdowns in China and the war in Ukraine weighing on Germany's recovery in 2022 through weaker trading conditions, more intense supply-chain disruption and higher inflation. The revised projection remains sensitive to further economic disruptions brought about by the conflict in Ukraine. Weaker manufacturing PMI and production expectations data since March suggest output will remain subdued, particularly as export orders are hit by weaker growth in China and persistent component shortages. Car manufacturers have already had to suspend their production, partly due to a lack of parts from Ukraine.

With Russian gas accounting for 19% of Germany's primary energy consumption, Fitch's GDP forecast is strongly exposed to the gas price surge and potential gas supply disruptions linked to the conflict. Fitch now expects headline inflation of 5.6% at end-2022 (up by 1.6pp from the previous forecast, driven by higher energy and food prices) to weaken household spending in 2022. The ability of the fiscal programmes announced by the German government, including large defence and energy spending, to cushion the economic shock and support investor confidence, remains uncertain.



Business Profile

Strong Regional Banking Group

SFG-HT is a group of regional German savings banks with a large branch network interlinked with Helaba as their central institution. It comprises 33 savings banks in Hesse and 16 in Thuringia (EUR154 billion total assets at end-2021) and Helaba (EUR184 billion, including a building society) as well as an insurer.

The savings banks are owned and controlled by their respective municipalities and operate within a local area delimited by law. This ensures the performance-enhancing knowledge of their local environment and high client loyalty within their local communities, where the banks are socially engaged. Helaba (SFG-HT's largest member by a wide margin) is the central institution and prime cooperation partner for the savings banks in Hesse and Thuringia, as well as those in North Rhine-Westphalia and Brandenburg, although the latter are not members of SFG-HT.

Business Model Aimed at Cooperation

SFG-HT's members are part of the German savings banks' (Sparkassen-Finanzgruppe; SFG) nationwide network of interlinked regional mutual support schemes, which is designed as an institutional protection scheme and recognised as such by the regulators. In addition, SFG-HT has its own regional reserve fund to emphasise its members' solidarity. The fund's volume was EUR514 million at end-2020 with a target to reach 0.5% of the affiliated institutions' total risk exposure (about EUR673 million at end-2021). Any shortfall against this target is guaranteed by the regional savings bank association. We believe that the fund's rather moderate size would not necessarily be sufficient to address a severe idiosyncratic crisis, most likely triggered by large losses at Helaba. However, in our view, the fund, alongside SFG-HT's common business and risk strategy and monitoring and its publication of consolidated accounts, shows a higher cohesion than at SFG.

Risk Profile

Conservative Approach to Credit Risk

The savings banks' focus on granular and highly collateralised lending and their prudent underwriting standards underpin SFG-HT's conservative risk profile. SFG-HT operates a group-wide risk monitoring system, including intervention rights of the group's risk committee in case of non-compliance, supplementing the risk management process at the local level in each savings bank.

Asset-Liability Duration Mismatch Drives Significant Structural Interest-Rate Risk

More than two thirds of the savings banks' deposits are sight deposits, while a large proportion of their loan books is long-term and extended at fixed interest rates (especially mortgage loans with initial fixed-rate generally resettable after more than 10 years). The resulting high duration mismatch exposes the savings banks to rising interest rates. In the current inflationary environment, the savings banks are particularly vulnerable to central banks opting for large, rapid rate increases. Helaba's largely match-funded long-term assets mitigate this risk only to some extent.

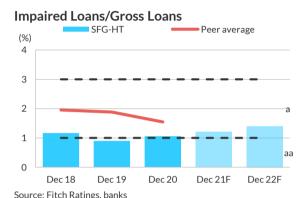


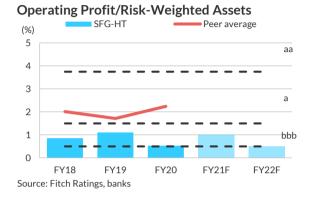
Financial Profile

Asset Quality

Moderate Increase in NPLs in the Medium Term

We believe SFG-HT's asset quality is largely insulated from direct effects from the Ukrainian crisis, thanks to its immaterial direct exposure to Russia, Ukraine and Belarus, its focus on German retail customers, municipalities and real-estate lending and Helaba's smaller corporate loan book than other Landesbanken. Indirect effects from slowing economic growth and inflation are likely to weaken its loan quality over the next two years. However, we expect little pressure on mortgage loans, given their robust collateralisation and borrowers' good repayment behaviour.





Earnings and Profitability

Resilient Performance in 2021 Unlikely to Be Maintained in 2022

SFG-HT's operating profit/RWAs rebounded to 1.0% in 2021 (0.5% in 2020), which we consider sound when taking the group's overstated RWAs density that results from the savings banks' use of the standardised approach to assess their credit risks into consideration.

SFG-HT's stable regional business model ensured the group's resilient operating performance, thanks to the savings banks' robust loan growth across all segments. Helaba reported a net profit of EUR501 million in 2021 (2020: EUR177 million), helped by fair-value gains driven by recovering financial markets and lower loan impairment charges (LICs). However, the latter remained above pre-pandemic levels and are mainly related to higher provisions for expected Stage 2 credit losses, which include a management adjustment of EUR113 million. Despite the low interest-rate environment, Helaba's net interest margin has remained stable in 2021, partly supported by TLTRO bonus payments.

This performance will be difficult to maintain in 2022 as the economic prospects deteriorate. Uncertainties related to the crisis should weigh on demand for loans and constrain SFG-HT's ability to maintain strong loan growth. We also expect SFG-HT's LICs to remain above their historical average. Furthermore, temporary write-downs in the savings banks' securities portfolios driven by rising interest rates and rising credit spreads are likely to significantly lower SFG-HT's 2022 profit. Additionally, the impact of rising inflation on compensation expenses could impede the group's cost-optimisation efforts.

Net interest income, SFG-HT's dominant source of revenue, should start benefiting from rising rates from 2023, mitigating the pressure on lending margins, driven by strong competition among German banks.

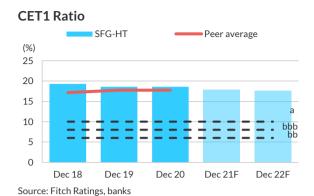
Capital and Leverage

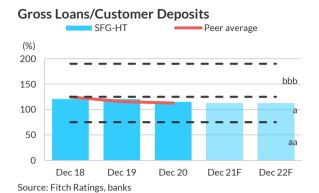
Stable Capitalisation

SFG-HT does not manage capital centrally and is not subject to group regulatory requirements or resolution planning. Each savings bank has its own regulatory requirement, which does not take the mutual support mechanism into account. Capitalisation varies by bank, but the group's risk monitoring function tightly oversees their solvency levels.

SFG-HT's preliminary CET1 ratio of 17.8% at end-2021 remains well above most German and European peers despite the savings banks' conservative RWA calculation. The group's capital predominantly consists of retained earnings, thanks to the savings banks' high profit retention. The group could further materially increase its reported CET1 capital as the savings banks could release, at their own discretion, their undisclosed German GAAP reserves and keep the proceeds as retained earnings. Helaba's CET1 ratio moderately declined to 14.3% at end-2021, due to an increase in its RWAs, in part caused by changes in methodology. This level still provides a comfortable buffer over regulatory requirements, but slightly dilutes SFG-HT's CET1 ratio.







Funding and Liquidity

Diversified Funding and Ample Liquidity

The group's deposits grew by 3% in 2021, despite the low interest-rate environment, driven by German households' still high savings rates and reluctance to invest in marketable securities. We expect SFG-HT to defend its leading and resilient regional deposit market share thanks to its strong brand recognition and client relationships. However, the current high inflation is likely to dent households' savings rates and, consequently, SFG-HT's deposit growth.

Helaba's sizeable unsecured debt and covered bond funding inflates SFG-HT's loans-to-deposits ratio (on average about 120% over the past four years), but also diversifies the group's funding and provides established wholesale market access. Helaba, which strives to fund its new lending with market funding of comparable duration, benefits from an established base of international investors. In addition, privileged access to the savings banks network enables Helaba to place issues with savings banks' retail clients or savings banks for their own security portfolios.

About Fitch Forecasts

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 macro-economic forecasts, outlook at the sector level 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 the environments that Fitch scores in the 'aa' category. Light-blue columns represent Fitch's forecasts.

The peer average includes Sparkassen-Finanzgruppe (Sparkassen) (VR: a+), Genossenschaftliche FinanzGruppe (aa-), Desjardins Group (aa-), Credit Agricole (a+), Groupe BPCE (a+), Credit Mutuel Alliance Federale (a+), Svenska Handelsbanken AB (aa), Skandinaviska Enskilda Banken AB (publ) (aa-) and Cooperatieve Rabobank U.A. (a+).



Financials

Financial Statements

Summary Financials and Key Ratios

	31 Dec 20	31 Dec 19	31 Dec 18	31 Dec 17
	(EURm)	(EURm)	(EURm)	(EURm)
Summary income statement		•	-	
Net interest and dividend income	2,895	2,935	2,954	3,001
Net fees and commissions	1,177	1,114	1,029	1,025
Other operating income	321	782	229	926
Operating costs	3,339	3,302	3,258	3,601
Loan and other impairment charges	400	188	-4	-100
Operating profit	654	1,341	958	1,451
Other non-operating items (net)	70	0	-10	
Net income	555	1,148	652	1,002
Summary balance sheet				
Gross loans	188,434	183,935	162,203	155,474
- Of which impaired	2,000	1,653	1,900	2,200
Loan loss allowances	1,124	824	803	922
Interbank	17,053	15,558	9,929	9,603
Derivatives	23,467	19,417	11,738	12,341
Other securities and earning assets	62,864	66,303	60,670	58,737
Cash and due from banks	37,307	20,051	11,683	13,293
Other assets	4,232	4,525	3,356	3,323
Total assets	332,233	308,965	258,776	251,849
Customer deposits	163,859	152,595	134,405	128,825
Interbank and other short-term funding	63,368	51,052	36,609	32,470
Other long-term funding	48,925	49,914	46,066	48,883
Trading liabilities and derivatives	26,854	26,959	14,956	14,488
Other liabilities	5,016	4,878	4,210	4,292
Preference shares and hybrid capital	630	591	543	916
Total equity	23,581	22,976	21,987	21,975
Total liabilities and equity	332,233	308,965	258,776	251,849



Key Ratios

Summary Financials and Key Ratios

	31 Dec 20	31 Dec 19	31 Dec 18	31 Dec 17
	(EURm)	(EURm)	(EURm)	(EURm)
Ratios (annualised as appropriate)	•	•	•	
Profitability	•	•	-	
Operating profit/risk-weighted assets	0.5	1.1	0.9	1.4
Non-interest expense/gross revenue	76.4	68.9	77.9	74.4
Net income/average equity	2.4	5.1	3.0	4.7
Asset quality		· · · · · · · · · · · · · · · · · · ·	<u> </u>	
Impaired Ioans ratio	1.1	0.9	1.2	1.4
Growth in gross loans	2.5	13.4	4.3	-0.6
Loan loss allowances/impaired loans	56.2	49.9	42.3	41.9
Loan impairment charges/average gross loans	0.2	0.1	0.0	-0.1
Capitalisation				
Common equity Tier 1 ratio	18.6	18.6	19.3	20.6
Total capital ratio	21.4	21.6	22.6	24.1
Tangible common equity/tangible assets	6.9	7.2	8.5	8.7
Funding and liquidity				
Loans/customer deposits	115	121	121	121
Liquidity coverage ratio	194	204	139	n.a.
Customer deposits/funding	58.1	58.2	60.4	59.8
Source: Fitch Ratings, Fitch Solutions, SFG-HT			-	



Support Assessment

Commercial Banks: Government Suppo	ort			
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	Neutral			
Liability structure	Neutral			
Ownership	Neutral			
The colours indicate the weighting of each KRD in h				

The GSR of 'ns' reflects Fitch's view that senior creditors of the bank cannot rely on full extraordinary support from the sovereign if the bank becomes non-viable, due to the EU's Bank Recovery and Resolution Directive.



Environmental, Social and Governance Considerations

FitchRatings

Credit-Relevant ESG Derivation

Sparkassen-Finanzgruppe Hessen-Thueringen

Banks Ratings Navigator

Overall ESG Scale

Sparkassen-Finanzgruppe Hessen-Thueringen has 5 ESG potential rating drivers			key drive	er	0	issues	5			
 Sparkassen-Finanzgruppe Hessen-Thueringen 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. 				-						
			driver		0	issues	4			
				potential dr	river	5	issues	3		
						4	issues	2		
				not a rating of	driver	5	issues	1		
Environmental (E)										
General Issues	E Score	e Sector-Specific Issues	Reference	E Scale						
GHG Emissions & Air Quality	1	n.a.	n.a.	5	E	SG scor	ead This Page es range from 1 to 5 most relevant and gr			
Energy Management	1	n.a.	n.a.	4	br bo	The Environmental (E), Social (S) and Governance (G break out the individual components of the scale. The ri box shows the aggregate E, S, or G score. General Iss relevant across all markets with Sector-Specific Issues un particular industry group. Scores are assigned to each specific issue. These scores signify the credit-relevance sector-specific issues to the issuing entity's overall credit are Reference box highlights the factor(s) within wh corresponding ESG issues are captured in Fitch's credit and The Credit-Relevant ESG Derivation table shows the overacore. This score signifies the credit relevance of combinand G issues to the entity's credit rating. The three columilett of the overall ESG score summarize the issuing entity the issuing entity the issuing entity the size of the content of the conte				
Water & Wastewater Management	1	n.a.	n.a.	3	sp se R					
Waste & Hazardous Materials Management; Ecological Impacts	1	n.a.	n.a.	2	so ar le					
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	th is	component ESG scores. The box on the far left identifi- the main ESG issues that are drivers or potential dri issuing entity's credit rating (corresponding with scores and provides a brief explanation for the score.			otential drivers of t th scores of 3, 4 or	
Social (S)							ation of ESG issue			
General Issues	S Score	Sector-Specific Issues	Reference	S Scale	ls Is	ssues dra	tings criteria. The one on the classification	on standards p	ublished by the Unit	
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	S	Nations Principles for Responsib Sustainability Accounting Standards		dards Board (Sa		
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	di	lisplayed	in the Sector Details	box on page 1	of the navigator.	
Labor Relations & Practices	2	Impact of labor negotiations, including board/employee compensation and composition	Business Profile (incl. Management & governance)	3						
Employee Wellbeing	1	na.	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)							CREDIT-RELE	EVANT ESG S	SCALE	
General Issues	G Scor	e Sector-Specific Issues	Reference	G Scale	e		How relevant are overall	E, S and G iss credit rating?	ues to the	

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. Management Strategy 3 Operational implementation of strategy Business Profile (incl. Management & governance) Board independence and effectiveness; ownership concentration; protection of creditor/stakeholder rights; legal /compliance risks; business continuity; key person risk; related party transactions 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. Business Profile (incl. Management & governance); Earnings & Profitability; Capitalisation & Leverage Governance Structure 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. Organizational structure; appropriateness relative to business model; opacity; intra-group dynamics; ownership Group Structure Business Profile (incl. Management & governance) 3 Irrelevant to the entity rating but relevant to the sector. Quality and frequency of financial reporting and auditing Financial Transparency 3 Business Profile (incl. Management & governance) Irrelevant to the entity rating and irrelevant to the sector.

Unless otherwise disclosed in this section, the highest level of ESG credit relevance is a score of '3'. This 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. For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/esg



The ratings above were solicited and assigned or maintained at the request of the rated entity/issuer or a related third party. Any exceptions follow below. All issuer(s) have participated in rating process.

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