

Realkredit Danmark A/S

Key Rating Drivers

Strong Credit Profile: Realkredit Danmark A/S's ratings reflect its low risk appetite and strong asset quality metrics, which balance its monoline business model and undiversified, though stable earnings. They also consider Realkredit's well-entrenched mortgage lending franchise in Denmark, strong capitalisation and well-managed reliance on wholesale funding. The bank's IDRs are also underpinned by potential parental support from Danske Bank A/S (A/Stable/a).

Capital Fungibility Constraints VR: Realkredit's Viability Rating (VR) is rated in line with that of its parent as Fitch Ratings believes there is a high correlation between the two VRs because of a high level of capital fungibility. Consequently, we are likely to retain Realkredit's VR within one notch of that of its parent, unless the fungibility of capital decreases.

Strong Asset Quality: Realkredit's asset quality is a rating strength underpinned by prudent underwriting standards and robust loan collateralisation, which limits credit losses.

Undiversified but Stable Earnings: Realkredit's profitability is weaker than that of similarly rated peers as its income is reliant on its lending activity, but it has been stable and its cost efficiency is robust.

Strong Capitalisation: Realkredit's capitalisation is underpinned by its low-risk business model and solid capital surplus over regulatory minimums, giving the bank a sufficient cushion to absorb potential credit losses and risk-weighted assets (RWAs) inflation. Realkredit is subject to standalone capital requirements, which underpins our view of its capitalisation.

Solely Wholesale Funded: Realkredit relies extensively on wholesale funding because mortgage lending is by law entirely funded by covered bonds in Denmark. We believe the risk of Realkredit not being able to access the covered bond market is low due to strong demand for these bonds from Danish financial institutions, insurance companies and pension funds. Refinancing risk is also mitigated by the bank's good liquidity buffer and potential ordinary support from Danske if needed.

Rating Sensitivities

Revised Support Assessment: Realkredit's IDR could be upgraded if Danske's IDRs are upgraded, assuming it retains its core role within the group. In addition, a downgrade of its parent's VR by more than one notch could lead to a downgrade of Realkredit's ratings, given the high correlation we believe exist between the two ratings.

Eroded Capitalisation: We would downgrade Realkredit's VR if we expect it will not be able to maintain its common equity Tier (CET1) ratio above 14% or restore it to that level within a short time. This could be due to significantly higher-than-expected loan impairment charges (LICs) driven by a prolonged recession, high unemployment and a material property price correction.

Constrained Funding Access: An adverse change in investor sentiment requiring extraordinary support from the parent, owing to a material weakening Realkredit's ability to access competitively priced covered bond funding, would be negative for the bank's VR. An increased reliance on international debt investors who could prove less stable during financial stress would also put pressure on ratings.

VR Upgrade Unlikely: An upgrade of the bank's VR is constrained in the near term by its monoline business model. In the longer term, an upgrade would be contingent on Realkredit's broadening its product offering, providing it with significantly more diversified revenue.

Ratings

Foreign Currency

Long-Term IDR	A
Short-Term IDR	F1

Viability Rating	a
------------------	---

Support Rating	1
----------------	---

Sovereign Risk

Long-Term Foreign- and Local-Currency IDRs	AAA
Country Ceiling	AAA

Outlooks

Long-Term Foreign-Currency IDR	Stable
Sovereign Long-Term Foreign- and Local-Currency IDRs	Stable

Applicable Criteria

[Bank Rating Criteria \(February 2020\)](#)

Related Research

[Danske Bank A/S \(June 2021\)](#)

[Global Economic Outlook \(June 2021\)](#)

[Fitch Revises Outlook on Danske Bank to Stable; Affirms at 'A' \(June 2021\)](#)

[Fitch Affirms Denmark at 'AAA'; Outlook Stable \(February 2021\)](#)

Analysts

Michal Bryks, FCCA

+48 22 338 6293

michal.bryks@fitchratings.com

Konstantin Yakimovich

+44 20 3530 1789

konstantin.yakimovich@fitchratings.com

Ratings Navigator

Realkredit Danmark A/S



Banks
Ratings Navigator

	Peer Ratings	Operating Environment	Company Profile	Management & Strategy	Risk Appetite	Asset Quality	Earnings & Profitability	Capitalisation & Leverage	Funding & Liquidity	Viability Rating	Institutional Support	Issuer Default Rating
aaa										aaa	AAA	AAA
aa+										aa+	AA+	AA+
aa										aa	AA	AA
aa-										aa-	AA-	AA-
a+										a+	A+	A+
a										a	A	A Stable
a-										a-	A-	A-
bbb+										bbb+	BBB+	BBB+
bbb										bbb	BBB	BBB
bbb-										bbb-	BBB-	BBB-
bb+										bb+	BB+	BB+
bb										bb	BB	BB
bb-										bb-	BB-	BB-
b+										b+	B+	B+
b										b	B	B
b-										b-	B-	B-
ccc+										ccc+	CCC+	CCC+
ccc										ccc	CCC	CCC
ccc-										ccc-	CCC-	CCC-
cc										cc	CC	CC
c										c	C	C
f										f	NF	D or RD

Significant Changes

Recovery in the Operating Environment

We revised the outlook on the Danish operating environment score to stable from negative in June 2021. This reflects the improved outlook for the performance of the economy and limited deterioration in asset quality and resilient profitability in the banking sector. Denmark's lockdown was less restrictive than in most European countries but tighter than in other Nordic countries. Denmark's low dependence on tourism, favourable macro fundamentals, which include its highly flexible labour market, less cyclically sensitive export sector, and strong social safety net, help explain the milder recession. The decline in household incomes in 2020 was relatively limited due to extensive income compensation measures for those who have been made redundant, whether temporarily or permanently.

Preliminary indicators in 2021 point to a moderate decline in activity during the winter lockdown. Together with a major boost from the fast reopening, this has strengthened confidence in a strong economic recovery in 2021. We forecast the Danish economy to expand by 3.1% in 2021 and 3.5% in 2022, with output surpassing pre-pandemic levels already this year.

Resilient Banking Sector

Risks attached to the pandemic remain elevated in the banking sector, but we expect asset quality and profitability to remain broadly resilient. Capital ratios are sound, the banking sector has ample liquidity, and access to wholesale funding has been uninterrupted. We expect a manageable pick-up in defaults once government support measures are wound down.

Stable Property Market

Activity in the housing market has been strong, leading to a rapid increase in prices in late 2020 and 1Q21. In March 2021 the prices for single family homes and flats were about 17% and 13% higher, respectively, year-over-year. The price growth will remain elevated in 2021 but we expect it to start slowing down in 2H21 as households shift towards other expenditure when the economy reopens. A material price correction is unlikely given low housing supply and interest rates levels. The systemic risk council has recently proposed a tightening in underwriting standards for interest-only mortgage loans for highly indebted borrowers. The council also recommended the reactivation of the countercyclical capital buffer at 1% from 30 September 2022, and indicated a potential further increase to 2% (binding from 2023).

Bar Chart Legend	
Vertical bars – VR range of Rating Factor	
Bar Colors – Influence on final VR	
■	Higher influence
■	Moderate influence
■	Lower influence
Bar Arrows – Rating Factor Outlook	
↑	Positive
↓	Negative
↕	Evolving
□	Stable

Institutional Support Assessment

Institutional Support		Value		
Parent IDR		A		
Total Adjustments (notches)		+0		
Institutional Support:		A		
Support Factors (negative)	Equalised	1 Notch	2+ Notches	
Parent ability to support and subsidiary ability to use support				
Parent/group regulation	✓			
Relative size		✓		
Country risks	✓			
Parent Propensity to Support				
Role in group	✓			
Potential for disposal	✓			
Implication of subsidiary default	✓			
Integration	✓			
Size of ownership stake	✓			
Support track record	✓			
Subsidiary performance and prospects	✓			
Branding		✓		
Legal commitments				✓
Cross-default clauses				✓

We believe there is extremely high probability that Realkredit would be supported, if ever required, by its parent. Danske has strong incentives to provide extraordinary support as we consider Realkredit a core and integral part of the group. Danske originates all mortgage loans in Denmark via Realkredit and overall mortgage lending represents the majority of all domestic lending. Any required support for Realkredit would likely be manageable relative to the ability of Danske to provide it.

Realkredit's management and corporate culture are highly integrated into Danske's and Realkredit shares some central functions and distribution channels with its parent bank, which we regard as ordinary support. Realkredit also benefits from shared risk management practices within the group.

Brief Company Summary

Second-Largest Mortgage Bank in Denmark

Realkredit is a wholly-owned mortgage bank subsidiary of Danske (the largest financial institution in Denmark) and the second-largest specialist mortgage bank in Denmark, with a market share of about 25%. Realkredit serves all customer segments in Denmark (where the vast majority of credit exposure resides), while the strategy in Sweden and Norway is to serve large commercial and residential real estate companies.

Realkredit's business model is monoline, but it balances low-risk appetite and stable income. Realkredit has been less vulnerable to negative interest rates than commercial banks because of the mortgage financing pass-through model in Denmark. Mortgage lending is by law financed through covered bonds and Realkredit is a large issuer of these securities internationally.

Mortgage loans for private individuals and SMEs are distributed through Realkredit's own real estate agency chain and Danske's branch network. The largest customers in Denmark, Norway and Sweden are served by a dedicated unit specialised in property mortgage advisory.

Low Risk Appetite

Realkredit observes tight underwriting standards for mortgage loans. These are underpinned by the conservative Danish covered bond legislation and regulatory constraints set by the Danish FSA. Realkredit applies a loan/value (LTV) regulatory cap of 80% for most mortgage loans and 60% for riskier lending, such as financing agricultural, office or retail properties.

At end-March 2021, the average LTV ratio stood at 58% and has been stable. Since 2H12 average LTVs have gradually declined across all customer segments driven partly by conservative underwriting standards and partly by increasing property prices.

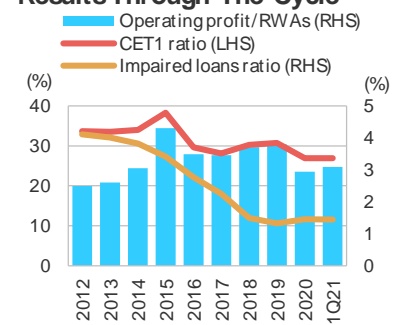
Realkredit's principal segment is residential mortgage loans (owner-occupied housing and holiday homes). The remaining segments are residential and commercial real estate and agriculture. We do not expect the bank's segment mix to change in the foreseeable future.

The share of fixed rate residential mortgage loans increased materially in 2019 and 2020 driven by low rates and high remortgaging activity. During the underwriting of loans with an interest rate fixed for a short period (such as five years), the bank stress tests borrowers' repayment capacities. It assumes there will be a 30-year amortising loan with a materially inflated interest rate (equal to at least 4%).

Realkredit's lending growth recently has been modest and it should be seen in light of the bank's already large market share. We expect annual credit expansion to remain below 2%.

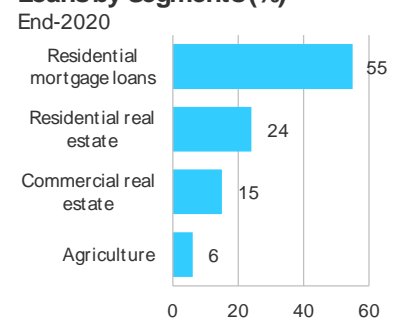
Realkredit's market risk exposure is low. The structural interest rate risk in the banking book is insignificant because there is no interest rate mismatch between mortgage loans and covered bonds, and both are carried at fair value.

Results Through-The-Cycle



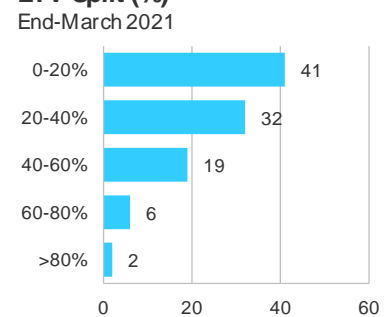
Source: Fitch Ratings, Realkredit

Loans by Segments (%)



Source: Fitch Ratings, Realkredit

LTV Split (%)



Source: Fitch Ratings, Realkredit

Summary Financials and Key Ratios

	31 Mar 21		31 Dec 20	31 Dec 19	31 Dec 18
	3 months - 1st quarter (USDm)	3 months - 1st quarter (DKKm)	Year end (DKKm)	Year end (DKKm)	Year end (DKKm)
	Unaudited	Unaudited	Audited - unqualified	Audited - unqualified	Audited - unqualified
Summary income statement					
Net interest and dividend income	252	1,599	6,496	6,905	7,008
Net fees and commissions	8	53	-611	-528	-617
Other operating income	-6	-38	294	336	58
Total operating income	254	1,614	6,179	6,713	6,449
Operating costs	33	207	864	812	703
Pre-impairment operating profit	222	1,407	5,315	5,901	5,746
Loan and other impairment charges	18	115	335	265	196
Operating profit	204	1,292	4,980	5,636	5,550
Tax	45	284	1,097	1,240	1,213
Net income	159	1,008	3,883	4,396	4,337
Other comprehensive income	0	-1	14	-18	-13
Fitch comprehensive income	159	1,007	3,897	4,378	4,324
Summary balance sheet					
Assets					
Gross loans	127,427	808,280	819,827	805,858	799,386
- Of which impaired	1,834	11,631	11,925	10,732	11,879
Loan loss allowances	451	2,863	2,801	2,736	2,792
Net loans	126,975	805,417	817,026	803,122	796,594
Interbank	4,528	28,720	24,993	53,772	21,285
Derivatives	14	91	39	128	66
Other securities and earning assets	7,187	45,588	47,187	52,363	51,158
Total earning assets	138,704	879,816	889,245	909,385	869,103
Cash and due from banks	198	1,258	52	54	161
Other assets	462	2,928	1,971	3,109	1,953
Total assets	139,364	884,002	891,268	912,548	871,217
Liabilities					
Interbank and other short-term funding	315	2,000	2,000	4,003	778
Other long-term funding	130,925	830,468	835,217	853,479	815,043
Trading liabilities and derivatives	3	17	17	5	68
Total funding	131,243	832,485	837,234	857,487	815,889
Other liabilities	744	4,720	4,444	5,068	5,413
Total equity	7,378	46,797	49,590	49,993	49,915
Total liabilities and equity	139,364	884,002	891,268	912,548	871,217
Exchange rate		USD1 = DKK6.3431	USD1 = DKK6.1138	USD1 = DKK6.6759	USD1 = DKK6.5194

Source: Fitch Ratings, Fitch Solutions, Realkredit Danmark A/S

Summary Financials and Key Ratios

	31 Mar 21	31 Dec 20	31 Dec 19	31 Dec 18
Ratios (annualised as appropriate)				
Profitability				
Operating profit/risk-weighted assets	3.1	2.9	3.8	3.7
Net interest income/average earning assets	0.7	0.7	0.8	0.8
Non-interest expense/gross revenue	12.8	14.0	12.1	10.9
Net income/average equity	8.5	8.0	9.0	8.9
Asset quality				
Impaired loans ratio	1.4	1.5	1.3	1.5
Growth in gross loans	-1.4	1.7	0.8	0.9
Loan loss allowances/impaired loans	24.6	23.5	25.5	23.5
Loan impairment charges/average gross loans	0.1	0.0	0.0	0.0
Capitalisation				
Common equity Tier 1 ratio	26.9	26.9	30.7	30.3
Tangible common equity/tangible assets	5.3	5.6	5.5	5.7
Basel leverage ratio	n.a.	5.0	4.9	5.1
Net impaired loans/common equity Tier 1	19.2	20.0	17.6	20.0

Source: Fitch Ratings, Fitch Solutions, Realkredit Danmark A/S

Key Financial Metrics – Latest Developments

Prudent Underwriting Mitigates Credit Losses

Asset quality has been resilient due to limited direct exposure to industries that are vulnerable to the pandemic and stable property market. We expect the latter to avoid any material price correction in the foreseeable future. The portfolio is well diversified across Denmark and average ticket size is small, resulting in limited obligor concentration.

We expect a modest increase in the bank's impaired loan ratio to about 1.5% at end-2021 and elevated credit losses at about 5bp of gross loans as delinquencies materialise after the winding-down of government support. LICs should materially decrease in 2022 due to the economic recovery.

Realkredit's low coverage of impaired loans by specific loan loss allowances (10% at end-March 2021) is appropriate given generally low LTVs and a long record of low credit losses. LICs in the last ten years peaked at about 20bp of gross loans in 2013. Danish legislative framework enforces creditor rights and incentivises mortgage repayment.

Potential asset quality pressure in Danish mortgage loans in the event of a material increase in covered bond rates (automatically passed on to retail borrowers) is low. This is because only a small share of loans is refinanced annually (13% at end-March 2021).

Stable But Low Profitability

Realkredit's lack of revenue diversification is offset by low credit losses and robust cost efficiency. We expect Realkredit's operating profit/RWAs to remain in line with an 'a' category score, but most likely to remain below 3% due to administrative margin pressure (charged to customers in the Danish pass-through system) and RWAs inflation. The bank's superior cost efficiency reflects low burden from overheads that are centralised at the parent level, which we regard as ordinary support due to Realkredit's important role in the group.

Robust Capitalisation

Realkredit's CET1 ratio of 26.9% at end-March 2021 is boosted by relatively low risk-weights on mortgage loans, but its leverage ratio (of 5% at end-2020) is adequate in a European context. Realkredit's capital ratios should also be seen in light of its high product concentration and potential ordinary capital support from the parent. At end-March 2021, Realkredit's total regulatory capital ratio (almost solely comprising equity) was 12pp above the requirement. This level is sufficient to absorb the expected material inflation in RWAs in the coming years as a result of EBA guidelines and Basel IV.

Danish mortgage banks are exempt from the minimum requirements for own funds and eligible liabilities, but must maintain a bail-in-able debt buffer corresponding to 2% of loans. For now, Realkredit observes this buffer using its capital surplus. The expected RWAs increase will reduce the capital surplus and, as a result, Realkredit will use bail-in-able loans from Danske to meet the buffer in the future.

Low Refinancing Risk

Realkredit issues covered bonds on an ongoing basis and loan origination is not dependent on available liquidity. The bank's refinancing risk is mitigated by the efficiently-functioning Danish covered bond market (including numerous stress periods), distributed quarterly refinancing auctions, and loan pricing promoting loans with less frequent refinancing periods.

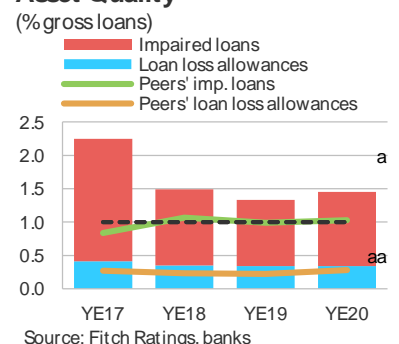
The covered bond law transfers the refinancing risk to the investor (in the event of a failed auction), but this has not been tested yet. Consequently, it is important for Realkredit to maintain a significant liquidity portfolio to maintain investor confidence. This may be particularly important in the case of foreign investors (about 25% of all covered bond investors).

Realkredit's high asset encumbrance is mitigated by robust asset quality of loans, large overcollateralisation and no other outstanding senior obligations to a third-party creditor. At end-March 2021 Realkredit's liquidity buffer was twice the level of the regulatory requirement (corresponding to at least 2.5% of mortgage loans). The requirement is additional to the liquidity coverage ratio, which was comfortably above 100%.

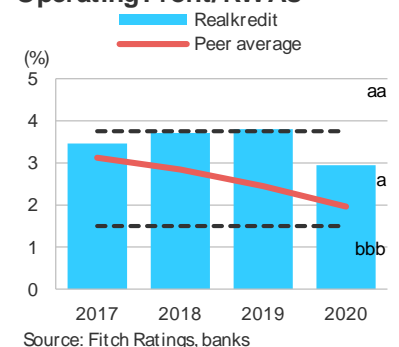
Note on Charts

Black dashed lines represent indicative quantitative ranges and implied scores for Fitch's core financial metrics for banks operating in the environments that Fitch scores in the 'aa' category. Peer average includes Realkredit (VR: a), Nykredit Realkredit A/S (a), Landshypotek Bank AB (a), Coventry Building Society (a-), Principality Building Society (bbb+), Leeds Building Society (a-), Skipton Building Society (a-) and Yorkshire Building Society (a-).

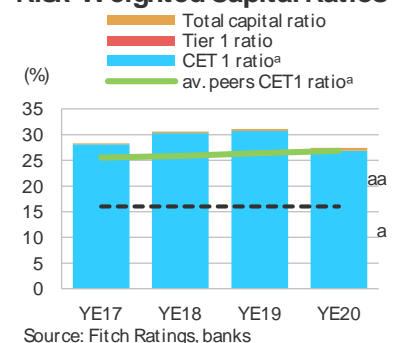
Asset Quality



Operating Profit/RWAs



Risk-Weighted Capital Ratios



Environmental, Social and Governance Considerations

FitchRatings Realkredit Danmark A/S

Banks
Ratings Navigator

Credit-Relevant ESG Derivation

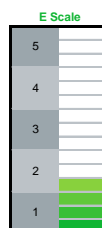
Realkredit Danmark A/S has 5 ESG potential rating drivers

- Realkredit Danmark A/S 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
GHG Emissions & Air Quality	1	n.a.	n.a.
Energy Management	1	n.a.	n.a.
Water & Wastewater Management	1	n.a.	n.a.
Waste & Hazardous Materials Management; Ecological Impacts	1	n.a.	n.a.
Exposure to Environmental Impacts	2	Impact of extreme weather events on assets and/or operations and corresponding risk appetite & management; catastrophe risk; credit concentrations	Company Profile; Management & Strategy; Risk Appetite; Asset Quality



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.

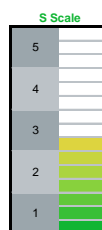
The Credit-Relevant ESG Derivation table shows the overall ESG score. This score signifies the credit relevance of combined E, S and G issues to the entity's credit rating. The three columns to the left of the overall ESG score summarize the issuing entity's sub-component ESG scores. The box on the far 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.

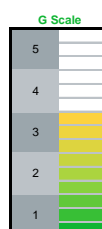
Social (S)

General Issues	S Score	Sector-Specific Issues	Reference
Human Rights, Community Relations, Access & Affordability	2	Services for underbanked and underserved communities; SME and community development programs; financial literacy programs	Company Profile; Management & Strategy; Risk Appetite
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; Company Profile; Management & Strategy; Risk Appetite
Labor Relations & Practices	2	Impact of labor negotiations, including board/employee compensation and composition	Company Profile; Management & Strategy
Employee Wellbeing	1	n.a.	n.a.
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	Company Profile; Financial Profile



Governance (G)

General Issues	G Score	Sector-Specific Issues	Reference
Management Strategy	3	Operational implementation of strategy	Management & Strategy
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	Management & Strategy; Earnings & Profitability; Capitalisation & Leverage
Group Structure	3	Organizational structure; appropriateness relative to business model; opacity; intra-group dynamics; ownership	Company Profile
Financial Transparency	3	Quality and frequency of financial reporting and auditing processes	Management & Strategy



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'. This means ESG issues are credit neutral or have a minimal credit impact on Realkredit, either due to their nature or to the way in which they are being managed by the bank. For more information on our 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 FITCH CREDIT RATINGS ARE SUBJECT TO CERTAIN LIMITATIONS AND DISCLAIMERS. PLEASE READ THESE LIMITATIONS AND DISCLAIMERS BY FOLLOWING THIS LINK: [HTTPS://FITCHRATINGS.COM/UNDERSTANDINGCREDITRATINGS](https://fitchratings.com/understandingcreditratings). IN ADDITION, RATING DEFINITIONS AND THE TERMS OF USE OF SUCH RATINGS ARE AVAILABLE ON THE AGENCY'S PUBLIC WEB SITE AT WWW.FITCHRATINGS.COM. PUBLISHED RATINGS, CRITERIA, AND METHODOLOGIES ARE AVAILABLE FROM THIS SITE AT ALL TIMES. FITCH'S CODE OF CONDUCT, CONFIDENTIALITY, CONFLICTS OF INTEREST, AFFILIATE FIREWALL, COMPLIANCE, AND OTHER RELEVANT POLICIES AND PROCEDURES ARE ALSO AVAILABLE FROM THE CODE OF CONDUCT SECTION OF THIS SITE. FITCH MAY HAVE PROVIDED ANOTHER PERMISSIBLE SERVICE TO THE RATED ENTITY OR ITS RELATED THIRD PARTIES. DETAILS OF THIS SERVICE FOR WHICH THE LEAD ANALYST IS BASED IN AN ESMA- OR FCA-REGISTERED FITCH RATINGS COMPANY (OR BRANCH OF SUCH A COMPANY) CAN BE FOUND ON THE ENTITY SUMMARY PAGE FOR THIS ISSUER ON THE FITCH RATINGS WEBSITE.

Copyright © 2021 by Fitch Ratings, Inc., Fitch Ratings Ltd. and its subsidiaries. 33 Whitehall Street, NY, NY 10004. Telephone: 1-800-753-4824, (212) 908-0500. Fax: (212) 480-4435. Reproduction or retransmission in whole or in part is prohibited except by permission. All rights reserved. In issuing and maintaining its ratings and in making other reports (including forecast information), Fitch relies on factual information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The manner of Fitch's factual investigation and the scope of the third-party verification it obtains will vary depending on the nature of the rated security and its issuer, the requirements and practices in the jurisdiction in which the rated security is offered and sold and/or the issuer is located, the availability and nature of relevant public information, access to the management of the issuer and its advisers, the availability of pre-existing third-party verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering reports, legal opinions and other reports provided by third parties, the availability of independent and competent third-party verification sources with respect to the particular security or in the particular jurisdiction of the issuer, and a variety of other factors. Users of Fitch's ratings and reports should understand that neither an enhanced factual investigation nor any third-party verification can ensure that all of the information Fitch relies on in connection with a rating or a report will be accurate and complete. Ultimately, the issuer and its advisers are responsible for the accuracy of the information they provide to Fitch and to the market in offering documents and other reports. In issuing its ratings and its reports, Fitch must rely on the work of experts, including independent auditors with respect to financial statements and attorneys with respect to legal and tax matters. Further, ratings and forecasts of financial and other information are inherently forward-looking and embody assumptions and predictions about future events that by their nature cannot be verified as facts. As a result, despite any verification of current facts, ratings and forecasts can be affected by future events or conditions that were not anticipated at the time a rating or forecast was issued or affirmed.

The information in this report is provided "as is" without any representation or warranty of any kind, and Fitch does not represent or warrant that the report or any of its contents will meet any of the requirements of a recipient of the report. A Fitch rating is an opinion as to the creditworthiness of a security. This opinion and reports made by Fitch are based on established criteria and methodologies that Fitch is continuously evaluating and updating. Therefore, ratings and reports are the collective work product of Fitch and no individual, or group of individuals, is solely responsible for a rating or a report. The rating does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. Fitch is not engaged in the offer or sale of any security. All Fitch reports have shared authorship. Individuals identified in a Fitch report were involved in, but are not solely responsible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Fitch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. Ratings may be changed or withdrawn at any time for any reason in the sole discretion of Fitch. Fitch does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell, or hold any security. Ratings do not comment on the adequacy of market price, the suitability of any security for a particular investor, or the tax-exempt nature or taxability of payments made in respect to any security. Fitch receives fees from issuers, insurers, guarantors, other obligors, and underwriters for rating securities. Such fees generally vary from US\$1,000 to US\$750,000 (or the applicable currency equivalent) per issue. In certain cases, Fitch will rate all or a number of issues issued by a particular issuer, or insured or guaranteed by a particular insurer or guarantor, for a single annual fee. Such fees are expected to vary from US\$10,000 to US\$1,500,000 (or the applicable currency equivalent). The assignment, publication, or dissemination of a rating by Fitch shall not constitute a consent by Fitch to use its name as an expert in connection with any registration statement filed under the United States securities laws, the Financial Services and Markets Act of 2000 of the United Kingdom, or the securities laws of any particular jurisdiction. Due to the relative efficiency of electronic publishing and distribution, Fitch research may be available to electronic subscribers up to three days earlier than to print subscribers.

For Australia, New Zealand, Taiwan and South Korea only: Fitch Australia Pty Ltd holds an Australian financial services license (AFS license no. 337123) which authorizes it to provide credit ratings to wholesale clients only. Credit ratings information published by Fitch is not intended to be used by persons who are retail clients within the meaning of the Corporations Act 2001.