

Realkredit Danmark A/S

Danish Covered Bonds – Performance Update on
Capital Centre S and Capital Centre T



The AAA/Stable ratings on the Danish mortgage-covered bonds (særligt dækkede realkreditobligationer, or SDROs) issued out of capital centres S and T by Realkredit Danmark A/S (Realkredit) are based on the issuer's rating enhanced by the governance-related credit support.

Cut-off date	CC ¹	Cover pool	Cover asset type	Covered bonds ²	Rating/Outlook
31 Mar 2022	S	DKK 337.3bn	Residential and commercial mortgage loans	DKK 319.2bn	AAA/Stable
31 Mar 2022	T	DKK 447.6bn		DKK 419.2bn	AAA/Stable

¹Capital centre (CC) S & T; ²særligt dækkede realkreditobligationer – Danish mortgage-covered bonds issued under the strict balance principle of the Danish Mortgage Act.

Governance support is the primary rating driver for both capital centres, providing six notches of uplift above the issuer rating. Only four notches are needed to raise the covered bond ratings to the highest achievable level.

We classified the interplay between complexity and transparency with a cover pool complexity (CPC) category of 'low', allowing the maximum additional uplift from cover pool support of three notches on top of the governance support uplift. Together, the programme benefits from a five-notch buffer against an issuer downgrade. The cover pool rating buffer also benefits from the strong credit characteristics of both capital centres and the balance principle under which market risk is almost eliminated, particularly asset-liability mismatches.

GOVERNANCE SUPPORT	COVER POOL SUPPORT	MAXIMUM RATING DISTANCE	RATING UPLIFT
	Cover pool support +3	D9	(unused)
	Cover pool support +2	D8	(unused)
	Cover pool support +1	D7	(unused)
Resolution regime +4	Covered bonds rating floor	D6	(unused)
Resolution regime +3		D5	(unused)
Resolution regime +2		D4	AAA
Resolution regime +1		D3	AA+
Legal framework +2		Governance support	D2
Legal framework +1	D1		AA-
Issuer rating	D0		A+

Stable Outlook

The Stable Outlook on the covered bonds reflects the rating buffer provided by our governance and cover pool support analyses, which shield the covered bond ratings from a multi-notch issuer rating deterioration.

Changes since the last performance update

Since our last analysis one year ago, we see first signs of the property price rally in Denmark cooling off. Loan-to-value (LTV) levels are driven by debt reductions from the rebuying or refinancing of fixed debt below par (a feature specific to the Danish market) and supported by the rising house prices since early 2021. These developments may also have led to the much larger share of interest-only loans. Both loan refinancing (mostly floating rate) and the increasing bullet exposure may become challenging if rates rise above expectations.

Still, Realkredit's SDROs benefit from strong credit enhancement supported by low LTVs and healthy credit metrics thanks to the predominant exposure to local commercial and residential mortgage borrowers.

Ratings & Outlook

Issuer rating	A+
Outlook	Negative
Last rating action	Affirmation
Last rating action	10 Aug 2021
Covered bond	AAA
Outlook	Stable
Rating action	Affirmation
Last rating action	3 Aug 2021

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Related Research

Scope affirms at AAA/Stable the covered bonds issued out of Realkredit's capital centres S and T June 2022

Scope affirms Realkredit Danmark's issuer rating at A+ with a Negative Outlook August 2021

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Bloomberg: RESP SCOP

Realkredit, a core subsidiary of the Danske banking group

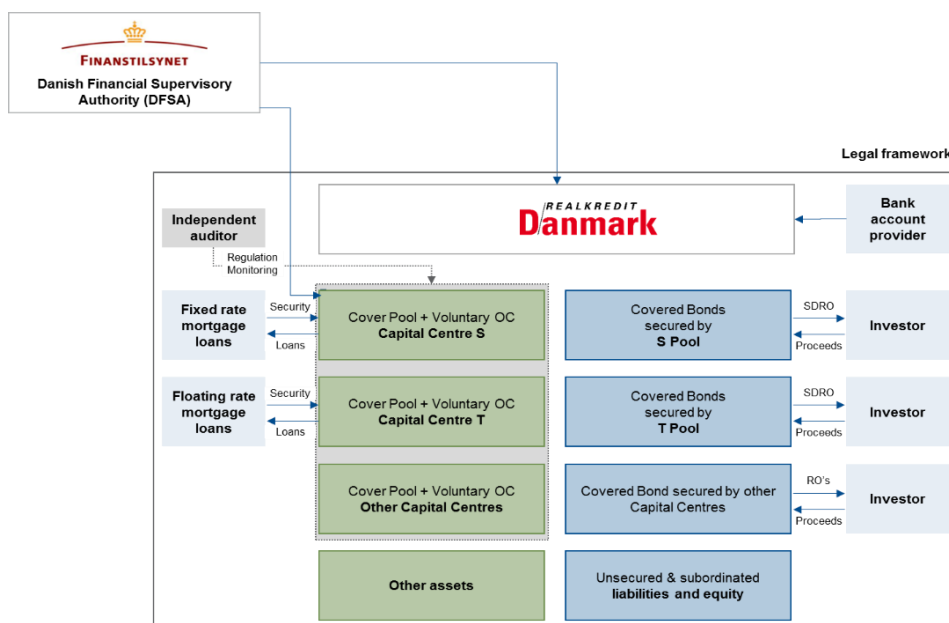
The issuer

We have assigned a A+/Negative rating on Realkredit, the issuer of the SDROs.

As a core subsidiary of Danske Bank A/S, Realkredit is closely integrated into the Danske group, sharing its strategy and risk management principles. Realkredit’s stand-alone financial profile is supported by strong asset quality, high capitalisation and its position as a major covered bond issuer in Denmark. The Negative Outlook reflects concerns triggered by the alleged money laundering by clients of Danske Bank’s Estonian operations. Realkredit has no direct exposure to these events, though it is indirectly affected by the reputational fall-out that has contributed to a fall in market share in Denmark. For further details on the bank’s credit analysis see www.scooperatings.com.

Covered bond structure

Figure 1: On-balance sheet issuance structure



Source: Scope, Realkredit Danmark

Realkredit is a specialised mortgage bank. It originates the majority of its domestic mortgage loans within Danske Group. The loans are refinanced using SDROs, with issuances governed by the Danish Mortgage Act and supervised by Denmark’s financial supervisor, Finanstilsynet.

Governance support analysis

Ratings for the SDROs issued out of capital centres S and T are primarily supported by the legal and resolution framework for Danish covered bonds, which enhances the rating to the highest achievable level (AAA). Cover pool support is therefore not needed.

Two notches of credit differentiation result from our legal framework analysis. This is driven by the benefits afforded by Denmark’s covered bond framework, which we consider one of Europe’s strongest, particularly due to the strict ‘balance principle’ applicable to SDROs. Changes to the Danish framework to apply the European covered bond directive are credit neutral to the SDROs issued. Our resolution regime analysis provides an additional four-notch uplift. It reflects the programmes’ preferential status and exemption from bail-in, our view on the resolvability and likely maintenance of Realkredit in the hypothetical scenario of regulatory intervention in the bank, and the very high importance of covered bonds in Denmark, where a strong stakeholder group maintains confidence in the bonds’ high credit quality. For more information see our [related research](#).

Pool characteristics

Capital centre	S	T
Balance (DKK bn)	337.3	447.6
Residential (%)	76.8	65.0
Commercial (%)	17.8	28.6
Substitute (%)	5.4	6.3

General information

Capital centre	S	T
No. of exposures	173.579	197.032
Avg expos. ('000s)	1,839	2,129
Top 10 (%)	0.9	2.0
Remaining life (y)	23	21
LTV (%)	48.4	48.1

Interest rate type (%)

Capital centre	S	T
Floating	0.6	100.0
Fixed	99.4	0.0

Repayment type (%)

Capital Centre	S	T
Bullet	36.3	67.7
Amortising	63.7	32.3

Cover pool analysis

The programmes' governance credit support of up to six notches already provides for the highest possible rating. It is the key rating driver and, as such, cover pool support is not needed. We also determine whether cover pool support could further stabilise the ratings, in part by examining the interplay between complexity and transparency. This analysis translates into a CPC category of 'low', which allows for a maximum three-notch cover pool-related uplift on top of the governance-related uplift.

Our cover pool analysis stabilises the rating at AAA, even if the bank was downgraded to BBB-, provided at least the current overcollateralisation is maintained.

Cover pool composition

Both capital centres are predominantly secured by Danish commercial and residential mortgage loans denominated in Danish kroner. As of March 2022, only 0.3bp of mortgage loans in capital centre S are denominated in euros. For capital centre T, 2.7% are denominated in Swedish kroner, 0.8% in euros, and 1.2% in Norwegian krone.

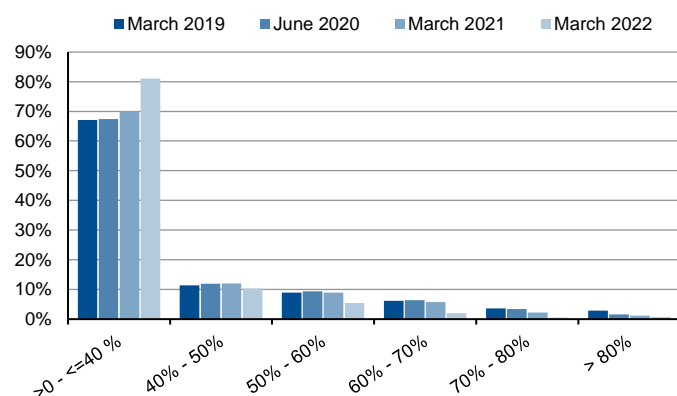
Both pools are highly granular with 173.579 mortgage loans for capital centre S and 197.032 for capital centre T as of March 2022. The top 10 exposures account for 0.9% in capital centre S and 2.0% in capital centre T.

The main and most important difference between the two capital centres concerns their interest rates: 99.0% of the mortgage loans in capital centre S have fixed rates for life; all of the loans in capital centre T are floating-rate and reset loans (adjustable-rate mortgages), most of which have reset periods of under five years.

The split between residential and commercial loans remained relatively stable in both capital centres. By total assets, residential mortgage loans account for 76.8% for capital centre S and 65.0% for T. Residential includes housing cooperatives and rental multifamily assets, accounting for 33% and 45% respectively.

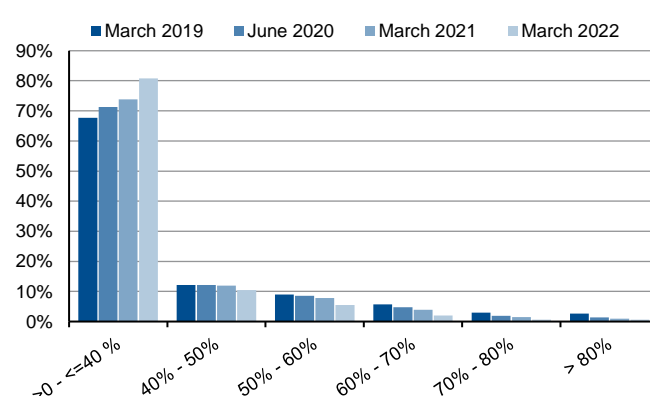
Since our last analysis as of 30 March 2022, assets in capital centre S have increased by around 4.6% (+8% earlier), while capital centre T's increased by 1.3% (-5% earlier). More importantly, some key metrics on the mortgage loans have changed dramatically since our last review: overall LTV dropped by around 9pp to 48.4% for capital centre S and by 7pp to 48.1% for capital centre T.

Figure 2: LTV distribution (capital centre S)



Source: Scope Ratings, Realkredit Danmark

Figure 3: LTV distribution (capital centre T)



Source: Scope Ratings, Realkredit Danmark

This material drop in LTVs is driven by three aspects: i) value increases of around 8% for flats and houses in Denmark during 2021; ii) loan amortisation from 63.7% of loans for capital centre S and 32.3% for capital centre T; and iii) the ability in Denmark to buy into mortgages below par under current interest rate conditions, particularly among borrowers locked into a low-rate fixed loan. Refinancing such loans at current conditions enables a

significant reduction in the debt balance. This effect is relatively dominant given that LTV is calculated using the fair value of debt and expected to increase if interest rates rise further.

On the flip side, a loan refinancing into floating rate increases the exposure to rate increases and may put pressure on affordability. In addition, we observe a strong reallocation of the mortgage loans towards bullet payment profiles. This increase accounts for 9pp for capital centre S and an even higher 18pp for capital centre T. This trend correlates with the LTV as, in general, only loans with LTVs of below a 60% qualify for interest-only.

Asset risk analysis

The credit quality of the two granular capital centres is strong. We have kept our lifetime mean default rate stable at 2.3% for capital centre S and 2.4% for capital centre T, supported by the strong performance, even during the pandemic. The decrease in recovery rates, in particular for capital centre T, is driven by our higher value decline assumptions based on the unsustainable house price growth in recent years.

Our projection of default on mortgage loans uses an inverse Gaussian distribution, based on available credit performance data provided by the bank (in particular, 'over 90 days past due' vintage data) and benchmarking.

We continue to assume a volatility of default (weighted average coefficient of variation) of 48% for capital centre S and 75% for capital centre T. Assumptions for capital centre T incorporate a potential increase in borrower defaults if margins increase by up to 500bp due to a failure of covered bonds to be refinanced. Capital centre S is not exposed to refinancing risk because the loans have a fixed rate for life.

We estimated an increased weighted average recovery rate for capital centre S, ranging from 96.5% (from 92.2%) for the base case to 74.3% (from 73.2%) for the most stressful scenario; for capital centre T, the respective figures are 95.1% (from 91.0%) and 79.6% (from 76.2%). Such levels were mainly supported by lower LTV levels.

Cash flow risk analysis

The overcollateralisation supporting the AAA ratings is 0% for both pools and is based on governance support. Consequently, cover pool support is not a rating driver.

To test the stability of the ratings we established the overcollateralisation levels needed to support the current rating uplift if the programme had to rely on cover pool support. We performed a full analysis supported by detailed data provided by Realkredit. Our analysis showed that cover pool support can maintain the current AAA ratings up to a five-notch issuer downgrade.

Credit risk is the most pronounced for the cover pools, but remains low, reflecting their strong credit quality.

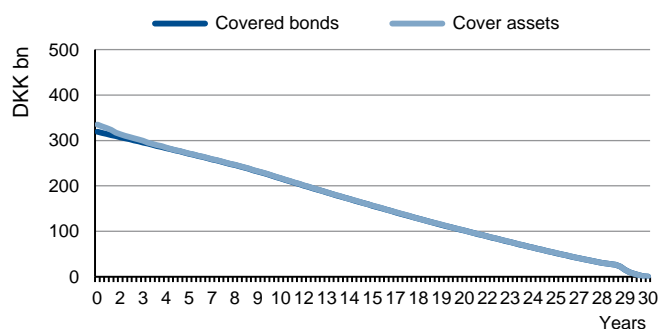
Aided by the balance principle, market risks mainly result from minimum, regulatory and voluntary overcollateralisation, but are negligible in terms of the total balance and remaining term.

Asset sales due to asset-liability mismatches from remaining hard-bullet bonds in capital centre T are immaterial and therefore do not pose a risk. Around 0.8% of bonds in capital centre T are grandfathered hard-bullet bonds as they were issued before the March 2014 legal amendment introducing soft bullets.

Strong credit quality reflected in low default expectation...

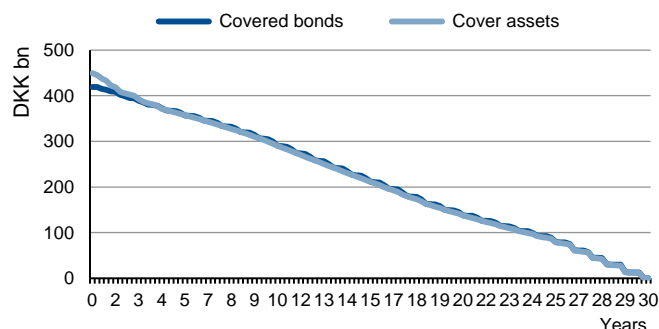
...and moderate recoveries, even under stressed scenarios

Figure 4: Amortisation profile (capital centre S)



Source: Scope Ratings, Realkredit Danmark

Figure 5: Amortisation profile (capital centre T)

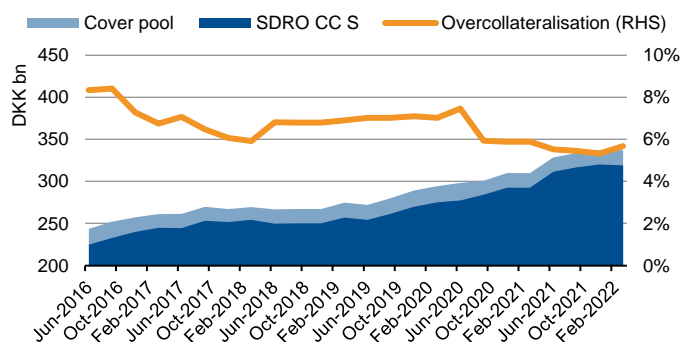


Source: Scope Ratings, Realkredit Danmark

Availability of overcollateralisation

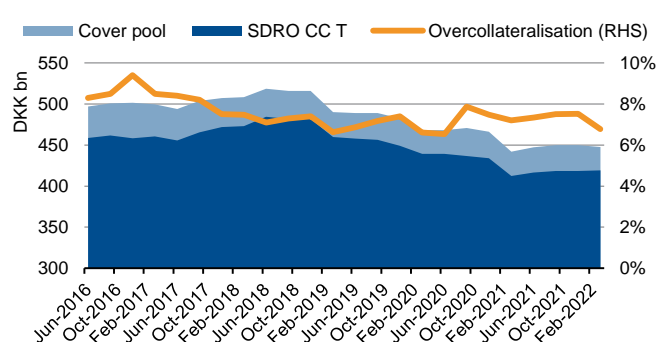
Realkredit's covered bond ratings are wholly supported by governance factors and therefore do not rely on the issuer's ability and willingness to provide overcollateralisation above the legal minimum. However, the current ratings allow us to fully account for the provided overcollateralisation.

Figure 6: Overcollateralisation (capital centre S)



Source: Scope Ratings, Realkredit Danmark

Figure 7: Overcollateralisation (capital centre T)



Source: Scope Ratings, Realkredit Danmark

Other risk considerations

Main counterparty exposure relates to Realkredit

The rated covered bonds have counterparty exposures to the issuer, as well as to the issuer's parent as loan originator, servicer, bank account provider and paying agent. No documented replacement mechanisms would automatically shield the covered bonds from a credit deterioration of counterparties providing bank accounts. However, we believe that the strong alignment of interests between the bank and covered bond holders would prevent a negative impact from such risks before regulatory intervention became necessary. The bank's risk management process regularly monitors accounts to ensure that remedial action can be taken early on.

Country risk does not affect the ratings

Sovereign risk does not limit the ratings of Realkredit's SDROs. We believe the risks of an institutional framework meltdown, legal insecurity and currency-convertibility problems are currently remote.

No direct impact from ESG

The ratings do not directly include ESG aspects because there is insufficient information on the collateral's energy efficiency or differences in recovery proceeds.

Challenging environment for benchmark ESG covered bonds

However, we acknowledge that the bank's green bond framework opens up the investor base and improves the appeal and liquidity of covered bonds issued by Realkredit.

On the other hand, the Danish match funding principle complicates an effective selection of eligible assets. This is because Danish mortgage banks have to ensure that covered bonds match the loans' maturity and interest profile, limiting the supply of eligible cover loans. This will make issuances of benchmark ESG covered bonds less frequent unless a solution is found.



Realkredit Danmark A/S

Danish Covered Bonds – Performance Update on Capital Centre S and Capital Centre T

Appendix: Summary of covered bond characteristics

Reporting date	30 March 2022	30 March 2021	30 March 2022	30 March 2021
Issuer name	Realkredit Danmark A/S			
Capital centre	S		T	
Country	Denmark			
Covered bond name	særligt dækkede realkreditobligationer (SDROs) Danish mortgage covered bonds issued under the Danish mortgage act (Specific balance principle)			
Covered bond legal framework	Danish legal covered bond framework			
Cover pool type	Mortgage loans			
Composition	Residential = 76.8%	Residential = 76.7%	Residential = 65.0%	Residential = 64.6%
	Commercial = 17.8%	Commercial = 18.0%	Commercial = 28.7%	Commercial = 28.6%
	Substitute = 5.4%	Substitute = 5.6%	Substitute = 6.3%	Substitute = 6.7%
Issuer rating ¹	A+	A+	A+	A+
Current covered bond rating	AAA/Stable	AAA/Stable	AAA/Stable	AAA/Stable
Covered bond maturity type	Hard bullets	Hard bullets	Hard bullets	Hard bullets
Cover pool currencies	DKK (100%)	DKK (100%)	DKK (95.2%)	DKK (94.4%)
	EUR (0.0%)	EUR (0.0%)	EUR (0.8%)	EUR (1.1%)
			SEK (2.7%)	SEK (3.1%)
			NOK (1.2%)	NOK (1.4%)
Covered bond currencies	DKK (100%)	DKK (100%)	DKK (95.0%)	DKK (93.7%)
	EUR (0.0%)	EUR (0.0%)	EUR (0.8%)	EUR (1.0%)
			SEK (2.9%)	SEK (3.6%)
			NOK (1.3%)	NOK (1.7%)
Governance cover pool support	6	6	6	6
Maximum additional uplift from CPC category	3	3	3	3
Maximum achievable covered bond uplift	9	9	9	9
Potential covered bond rating buffer	5	5	5	5
Cover pool (DKK m)	337,266	322,346	447,564	441,998
Thereof substitute assets (DKK m)	18,109	17,224	28,399	29,674
Covered bonds (DKK m)	319,157	305,122	419,165	412,324
Current overcollateralisation/ legal minimum overcollateralisation ³	5.7% / 8%	5.6% / 8%	6.8% / 8%	7.2% / 8%
Overcollateralisation to support current rating	not applicable	not applicable	not applicable	not applicable
Overcollateralisation upon a one-notch issuer downgrade	not applicable	not applicable	not applicable	not applicable
Cover pool supporting overcollateralisation to support current rating	0.00%	0.00%	0.00%	0.00%
Cover pool overcollateralisation upon a one-notch issuer downgrade	0.00%	0.00%	0.00%	0.00%
Weighted average life of assets	25 years	25 years	22 years	22 years
Weighted average life of liabilities ⁵	27 years	27 years	3 years	2 years
Number of loans	173,579	172,225	197,032	211,653
Average loan size (in DKK '000s)	1,839	1,772	2,127	1,948
Top 10 residential	0.8%	0.8%	1.5%	1.5%
Top 10 commercial	4.3%	4.2%	6.7%	5.9%
Interest rate type – assets	Floating 0.5%	Floating 0.9%	Floating 100.0%	Floating 100.0%
	Fixed 99.5%	Fixed 99.1%	Fixed 0.0%	Fixed 0.0%
Interest rate type – liabilities (fixed/floating)	Floating 0.3%	Floating 0.1%	Floating 22.8%	Floating 32.9%
	Fixed 99.5%	Fixed 99.2%	Fixed 77.2%	Fixed 67.1%
	Other 0.2%	Other 0.7%		
Weighted average LTV (indexed)	48.4%	57.0%	48.1%	55.0%
Geographic split (top 3)	Denmark 100%	Denmark 100%	Denmark 95.9%	Denmark 95.4%
			Norway 1.2%	Norway 1.4%
			Sweden 2.9%	Sweden 3.2%
Domestic region split (top 3)	Hovedstaden 47.7%	Hovedstaden 46.9%	Hovedstaden 50.1%	Hovedstaden 47.7%
	Midtjylland 16.9%	Midtjylland 17.2%	Midtjylland 16.5%	Midtjylland 16.7%
	Syddanmark 16.1%	Syddanmark 16.3%	Syddanmark 16.1%	Syddanmark 17.5%
Default measure	Inverse Gaussian/ non-parametric			
Weighted average default rate (mortgage)	2.3%	2.3%	2.4%	2.4%
Weighted average coefficient of variation (mortgage)	48%	48%	75%	75%
Weighted average recovery assumption (D0/D9) ⁴	96.5% / 74.3%	92.2% / 73.2%	95.1% / 79.6%	91.0% / 77.9%
Share of loans > three months in arrears (NPL)	0.05%	0.08%	0.18%	0.18%
Interest rate stresses (max./min.; currency-dependent)	-1 to 10%	-1 to 10%	-1 to 10%	-1 to 10%
FX stresses (max./min.; currency-dependent)	25% / -20%	25% / -20%	35% / -30%	35% / -30%
D9 ¹ liquidity premium	150bp/ 300bp	150bp/ 300bp	150bp/ 300bp	150bp/ 300bp
Servicing fee (mortgage)	27bp	27bp	31bp	32bp

¹ The issuer's rating Outlook is Negative.

² Covered bonds issued after 2014 can be extended if refinancing fails.

³ 8% of legal overcollateralisation is calculated based on risk-weighted assets and effectively results in a lower overcollateralisation as long as the risk-weighted assets are below 100% of the assets' nominal outstanding balance; Realkredit applies an internal rating-based risk weighting.

⁴ D0 or D9 denote the stresses commensurate with the rating distance between the issuer rating and the covered bond ratings.

⁵ Fixed-rate bonds in capital centre T are refinanced regularly, reflecting the reset cycles of the mortgage loans.



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