

# Realkredit Danmark's Capital Centres S & T Covered Bond Programmes – Peer Review

**Six-Notch Downgrade Buffers:** The 'AAA'/Stable ratings of Realkredit Danmark A/S's (A+/Stable/F1) mortgage covered bonds issued out of Capital Centre (CC) S and CC T are based on the Long-Term Issuer Default Rating (LT IDR) of 'A+', 10 notches of uplifts granted to both programmes, and the overcollateralisation (OC) protection for bondholders. The 'AAA' ratings are protected by a six-notch cushion against a potential IDR downgrade.

**Increased Payment Continuity Uplift:** The payment continuity uplift (PCU) for both programmes was increased to eight notches in April 2024 following the update of Fitch Ratings' *Covered Bonds Rating Criteria*. The PCUs was limited to six notches as the protection for the timely payment of interest is provided by liquid assets that may mature after the coupon payment date, thereby making them subject to market value risk. The PCU reflects the pass-through amortisation profile of the bonds, and the liquidity protection provided by substitute assets accounted for at their market value.

**Balance Principle Mitigates Mismatches:** The balance principle in Denmark requires specialised mortgage banks to fund mortgage loans with the issuance of bonds, or a series of bonds, that share identical characteristics. This ensures a close connection between the cash flow received from the assets and the cash flow due to covered bondholders. This minimises interest rate, foreign-exchange (FX) and liquidity risks, as the conditions of the bonds match those of the assets.

**Relied-Upon OC:** Fitch relies on the lowest OC level observed over the past 12 months, which is 6.2% for CC S and 6.5% for CC T. These are higher than Fitch's 'AAA' break-even OC of 3% and 4%, respectively. The break-even OC level has remained stable for CC S since 2022, while, for CC T, it increased to 4% from 3.5%. The increase is driven by a lower administrative margin on the assets, which resulted in lower excess spread and consequently increased the assets/liabilities mismatch (ALM) loss component.

**Credit Loss Drives Break-Even OC:** The credit loss is the main component of Fitch's 'AAA' break-even OC for both capital centres. It is 3.3% for CC S, which is the portfolio loss floor under Fitch's criteria, applied to address the idiosyncratic risks of low-risk portfolios, and 4.7% for CC T. The higher credit loss for CC T is due to the larger share of variable rate and commercial loans.

**Cover Assets' Interest-Rate Characteristics:** A key difference between the capital centres is the interest-rate type distribution of the cover assets. CC S contains predominantly fixed-rate assets for the life of the loan, while variable-rate or interest-reset loans are refinanced through CC T. As interest rates increased since 2022, CC T increased in size while CC S decreased, due to more borrowers opting for variable rates instead of locking higher fixed rates for longer tenors.

## Key Rating Drivers

Programme	Realkredit Danmark A/S – SDRO Capital Centre S (CC S)	Realkredit Danmark A/S – SDRO Capital Centre T (CC T)
LT IDR	A+	A+
Resolution uplift (notches)	0	0
PCU (notches)	8	8
Timely payment rating level	AA+	AA+
Recovery uplift (notches)	2	2
Covered bond (CVB) rating	AAA	AAA
CVB Outlook	Stable	Stable
Buffer against IDR downgrade	6	6
Credit Loss (%)	3.3	4.7
ALM Loss Component (%)	-0.1	-0.7
Break-even OC for rating (%)	3.0	4.0
OC Fitch relies upon (%)	6.2	6.5

Source: Fitch Ratings

## Break-even OC for Covered Bonds Rating



Source: Fitch Ratings



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### Cover Pool – Peer Analysis

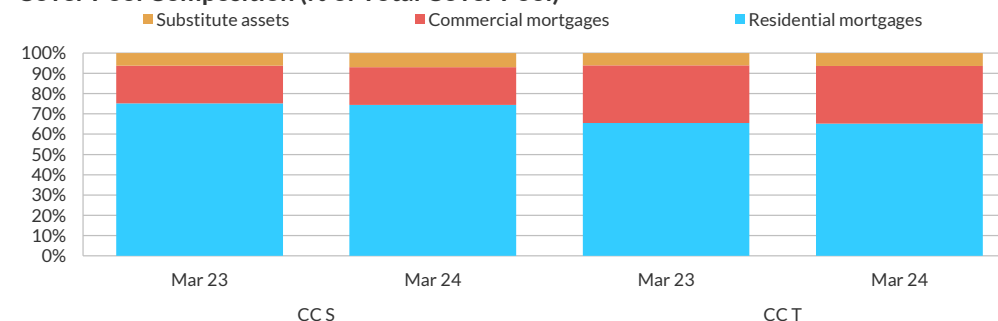
#### Cover Assets Credit Analysis

	CC S	CC T
Covered bonds' rating	AAA	AAA
Rating default rate (RDR) for rating (%)	11.3	17.4
Rating recovery rate (RRR) for rating (%)	64.8	67.6
Rating loss rate (RDR*(1-RRR) for rating (%)	4.0	5.6
'B' case loss rate (%)	0.4	0.3

Source: Fitch Ratings

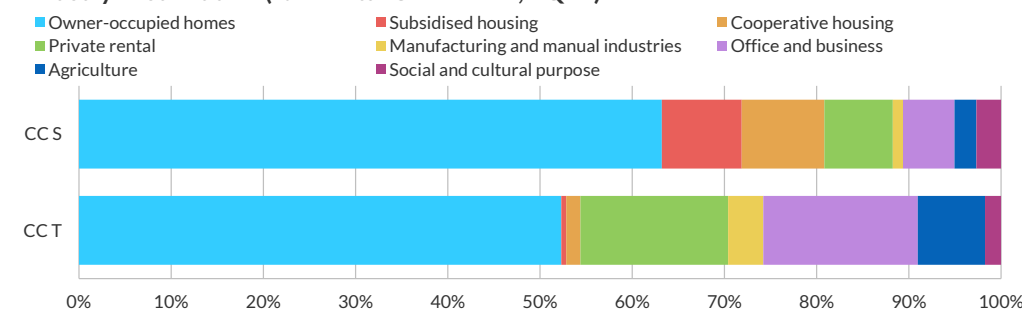
- As of 1Q24, CC S comprises 74.4% of residential assets, 18.7% of commercial assets and 6.9% substitute assets, while the respective exposures for CC T are 65.2%, 28.4% and 6.4%. The commercial loans within the cover pools are SME loans mainly in the retail, real estate and agriculture sectors. The share of residential and commercial assets in the portfolios has remained stable.
- For the residential assets, Fitch has derived foreclosure frequency (FF) assumptions based on the analysis of vintage cumulative default data provided by Realkredit Danmark. The expected FF is 1% for the residential assets in CC S and 1.5% for CC T, to which Fitch has applied the 'High' rating scenario multiples specified in its criteria to derive FF in each rating scenario. This is due to the low cumulative defaults and the mild economic environment in Denmark.
- Fitch differentiates between the social and cooperative housing segments and other commercial segments, given their very good historical performance. The expected annual average default rate for the performing commercial mortgage portfolio was set at 1.0%, whereas that for the social and cooperative housing segment was set at 0.5%.
- As of end-March 2024, the main differentiating factors between the two pools are the loan interest rate type (CC S: 99.6% fixed; CC T: 99.9% floating), the share of interest-only loans (CC S: 33.3%; CC T: 67.5%), as well as the share of commercial properties (CC S: 18.7%; CC T: 28.4%), and of social and cooperative housing (CC S: 19.6%; CC T: 3.7%). This drives the difference in the credit results: the credit loss is lower for CC S, which is made of fixed-rate loans and has a higher proportion of residential as well as amortising loans and social and cooperative housing mortgages.

#### Cover Pool Composition (% of Total Cover Pool)



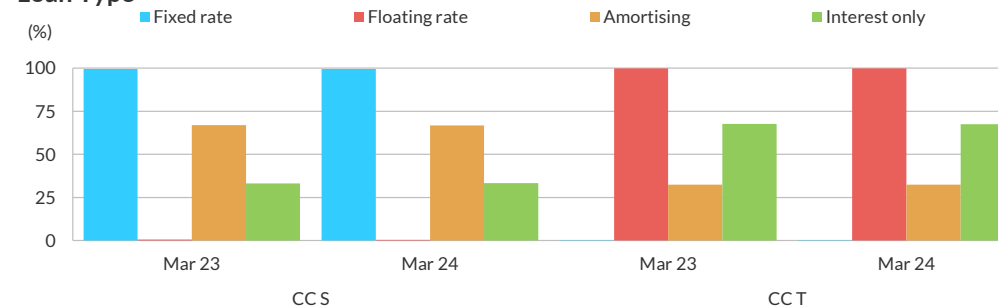
Source: Fitch Ratings, Realkredit Danmark

#### Industry Distribution (% of Total Cover Pool, 1Q24)



Source: Fitch Ratings, Realkredit Danmark

#### Loan Type



Source: Fitch Ratings, Realkredit Danmark

## Break-even Overcollateralisation – Peer Analysis

### AAA Break-even OC Components

Programme	ALM loss (%)	Credit loss (%)
CC S	-0.1	3.3
CCT	-0.7	4.7

Source: Fitch Ratings

### Credit Loss

The credit loss component reflects the stressed credit loss derived by Fitch under its analysis of each cover pool in the 'AA+' timely payment rating level, which is the driving scenario for the 'AAA' break-even OC for both programmes. The floating-rate characteristics of CC T's assets, along with the higher share of commercial assets and lower share of social and cooperative housing, results in a higher credit loss of 4.7% compared with the 3.3% of CC S. The credit loss for CC S reflects the portfolio loss floor under Fitch's criteria, which is applied to address the idiosyncratic risks of low-risk portfolios.

### ALM Loss

The balance principle of Danish mortgage bonds minimises interest-rate, FX and liquidity risks. Notably, bonds issued out of CC T can be extended one year at a time, in case an interest rate or refinancing trigger is hit. Bonds in CC S have maturities that match that of the underlying assets. Fitch does not model a sale of assets in its cash flow analysis, but models the pass-through or maturity extension of bonds with these features in case bond refinancing post insolvency was not achieved. This results in low asset and liability management (ALM) losses for CC S and CC T, at minus 0.1% and minus 0.7% respectively.

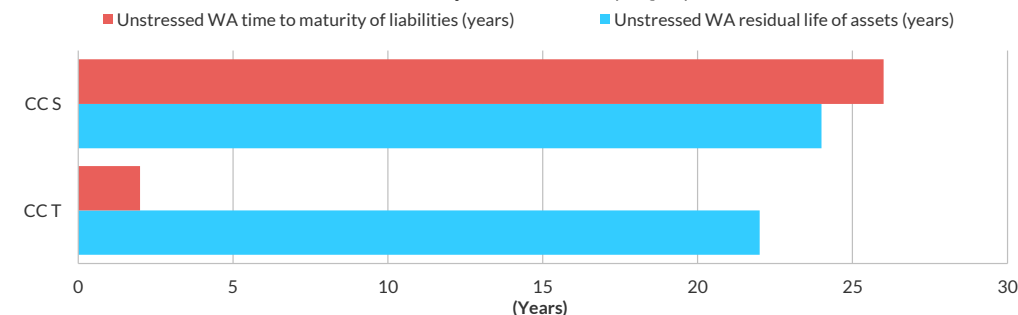
Loans in CC T have variable or interest-reset rates. These loans are funded by the issuance of bonds with shorter maturities than the loan terms, creating a refinancing need when they mature. The Weighted Average (WA) time to maturity of the bonds is, therefore, low in CC T at two years, compared with the WA time to maturity of the assets of 22 years.

### Cash Flow Analysis Driving Scenarios

Programme	Driving prepayment scenario	Driving interest-rate scenario	Driving default timing scenario
CC S	High	Increasing	Quarter 1
CCT	High	Increasing	Quarter 1

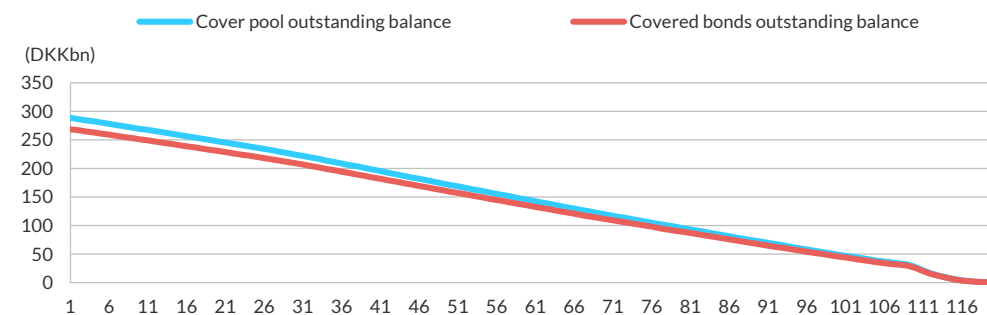
Source: Fitch Ratings

### Unstressed Assets & Liabilities Maturity Mismatches (1Q24)



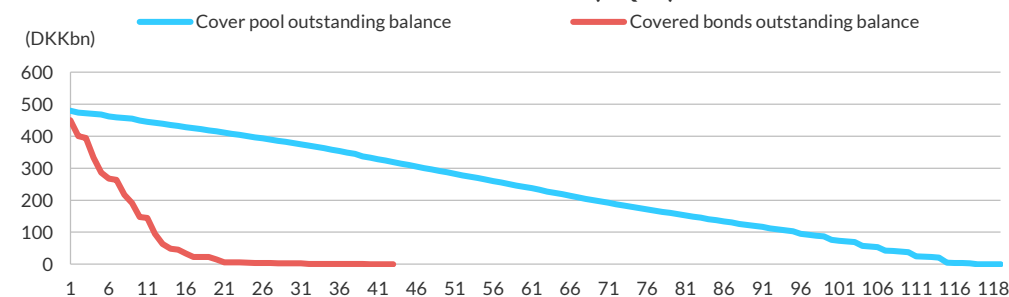
Source: Fitch Ratings, Realkredit Danmark

### CC S - Assets and Liabilities Amortisation Profile (1Q24)



Source: Fitch Ratings

### CC T - Assets and Liabilities Amortisation Profile (1Q24)



Source: Fitch Ratings

## Resolution Uplift, PCU and Recovery Uplift – Peer Analysis

### Continuity Uplift Assessment

Programme	Resolution uplift (notches)	PCU (notches)
CC S	0	8
CC T	0	8

Source: Fitch Ratings

### Resolution Uplift

- Realkredit Danmark's CC S and CC T programmes have been granted zero-notch resolution uplifts. This is because Realkredit Danmark is a specialised mortgage lender not operationally integrated into a parent bank and the bail-in tool is not applicable to specialised mortgage banks in Denmark.
- According to the EU's Bank Recovery and Resolution Directive (BRRD), specialised mortgage institutions that cannot receive deposits are not subject to the minimum requirement for own funds and eligible liabilities (MREL). Covered bonds issued by those institutions will be resolved according to specific winding-down procedures under which they could bear losses. The Danish legislation specifies that the bail-in tool is not applicable to specialised mortgage institutions.
- The resolution uplift applies to programmes issued from jurisdictions with an advanced bank resolution regime that includes a bail-in tool for senior liabilities and from which fully collateralised covered bonds or secured debt are exempt. In addition, resolution must not result in the direct enforcement of the recourse against the cover pool.

### PCU

- The increased eight-notch PCU since April 2024 (from six previously) for both programmes reflects the liquidity protection in place in the form of pass-through amortisation of the bonds and liquid assets held in the pools. Following the change to Fitch's covered bonds rating criteria in 2023, liquid assets accounted for at their market value can now support a PCU of eight notches for pass-through programmes.
- The outstanding bonds in CC S have a pass-through amortisation profile. In CC T, more than 99% of the bonds are soft bullet, whose maturity could be extended by one year at a time if a refinancing cannot be carried out or if the interest rate upon refinancing would increase by more than 5pp. As such, CC T covered bonds have a conditional pass-through amortisation profile. The remaining bonds in CC T are hard bullet and their redemptions are covered by liquid assets.

- The specific balance principle applied to these programmes allows for matching between the interest payments received from the mortgage borrowers and the interests due on the bonds. Another protection is the liquid assets held for OC purposes (including Danish government bonds rated 'AAA'), which may be used to face short-term liquidity shortfalls in times of stress. Government bonds currently cover more than three months of interest due on the bonds for both programmes. For the purpose of the PCU assessment, the liquid assets are accounted for at their market value.

### Recovery Uplift Assessment

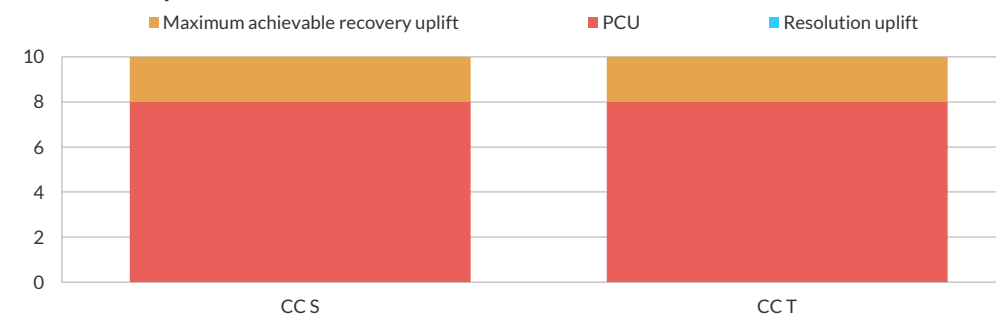
Programme	CVB rating	Credit loss (%) in CVB rating stress scenario	OC (%) Fitch relies upon in its analysis	Maximum achievable recovery uplift (notches)
CC S	AAA	3.3	6.2	2
CC T	AAA	4.7	6.5	2

Source: Fitch Ratings

### Recovery Uplift

- The recovery uplift granted for both programmes is two notches as we expect the covered bonds to benefit from outstanding recoveries in case of default. This is because no material risks to these recovery expectations were identified and the timely payment rating level is in the investment-grade range.
- In addition, both programmes contain standard assets in the form of residential and commercial mortgages, allowing for the maximum recovery uplift under Fitch's criteria.

### Maximum Uplift Above IDR - Number of Notches



Source: Fitch Ratings

## ESG Considerations

### ESG Relevance Scores Recap

	CCS	CCT
Environmental (E)	GHG emissions & air quality	2
	Energy management	2
	Water & wastewater management	1
	Waste & hazardous materials management; ecological impacts	2
	Exposure to environmental impacts	2
Social (S)	Human rights, community relations, access & affordability	2
	Customer welfare – fair messaging, privacy & data security	3
	Labour relations & practices	1
	Employee wellbeing	1
	Exposure to social impacts	3
Governance (G)	Rule of Law, institutional and regulatory quality	3
	Transaction & collateral structure	3
	Transaction parties & operational risk	3
	Data transparency & privacy	3

Source: Fitch Ratings

### Credit-Relevant ESG Scale - Definitions

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

5	Highly relevant; a key transaction or programme rating driver that has a significant impact on an individual basis
4	Relevant to transaction or programme ratings; not a key rating driver but has an impact on the ratings in combination with other factors
3	Minimally relevant to ratings; either very low impact or actively mitigated in a way that results in no impact on the transaction or programme ratings
2	Irrelevant to the transaction or programme ratings; relevant to the sector
1	Irrelevant to the transaction or programme ratings; irrelevant to the sector

Source: Fitch Ratings

### ESG Considerations

The highest level of ESG credit relevance is typically a score of '3' - ESG issues are credit neutral or have only a minimal credit impact on the programme, either due to their nature or the way in which they are being managed by the issuer. For CC S and CC T, Fitch assigned a maximum ESG relevance score of '3'.

Both programmes are partly secured by portfolios with commercial real-estate assets. Therefore, the ESG Relevance Score for Energy management has been changed to '2' from '1', reflecting the increased expectation that the value of the assets will be affected by regulation around energy-efficiency.

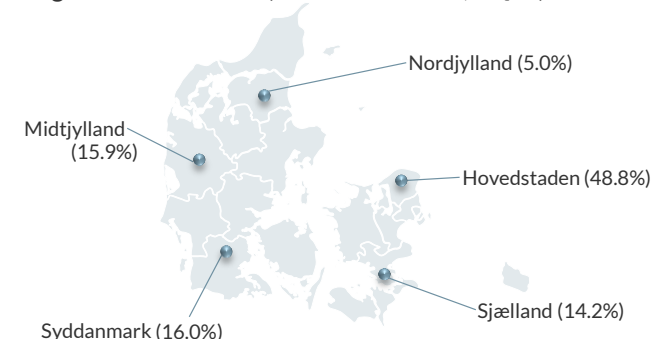
For more information on our ESG Relevance Scores, visit [www.fitchratings.com/esg](http://www.fitchratings.com/esg)

### Appendix 1A – Focus on CC S

#### Programme Structure

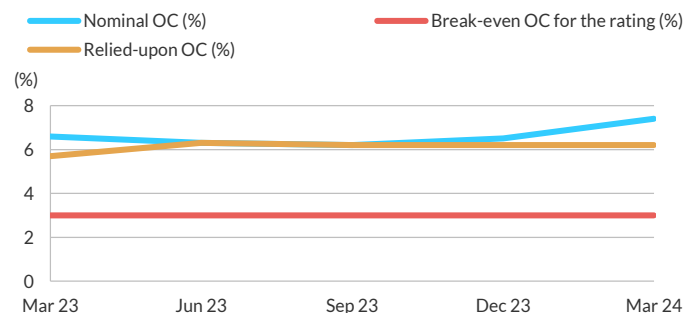
- Key Rating Drivers:** The 'AAA' rating of the covered bonds is based on Realkredit Danmark A/S's IDR of 'A+', a PCU of eight notches, a two-notch recovery uplift and the OC Fitch relies upon of 6.2%, which provides more protection than the 'AAA' break-even OC of 3%. The Stable Outlook on the rating reflects the Outlook on Realkredit Danmark's IDR and the six-notch buffer against an IDR downgrade due to the different uplift factors above the bank's IDR.
- Cover Pool Composition:** The covered bonds are secured by mostly fixed-rate Danish residential mortgages (74.4%), commercial loans (18.7%) and substitute assets (6.9%). The mortgage loans are geographically diversified within Denmark. At end-March 2024, total cover assets were DKK288.5 billion (including substitute assets) with a WA seasoning of 14 years.
- Rating Sensitivities:** The 'AAA' rating of Realkredit Danmark's CC S mortgage covered bonds would be vulnerable to a downgrade if Realkredit Danmark's Long-Term IDR was downgraded by seven notches to 'BB' or below, or the level of OC Fitch gives credit to in its analysis falls below the 'AAA' break-even OC of 3%. If the relied-upon OC decreased to the legal minimum of 8% (of risk-weighted assets (RWAs)), we would downgrade the covered bonds to 'AA-', one notch above the bank's IDR.

#### Regional Distribution (% of Total Assets, 1Q24)



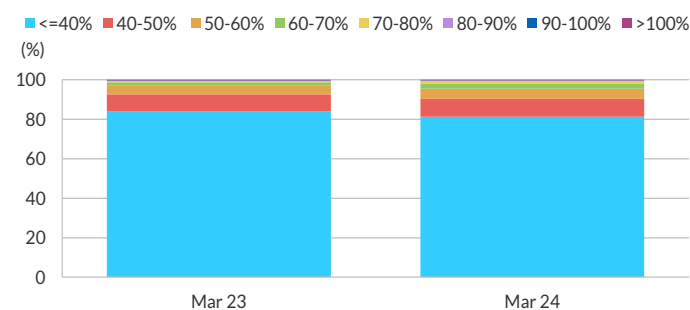
Source: Fitch Ratings, Realkredit Danmark

#### Overcollateralisation Breakdown



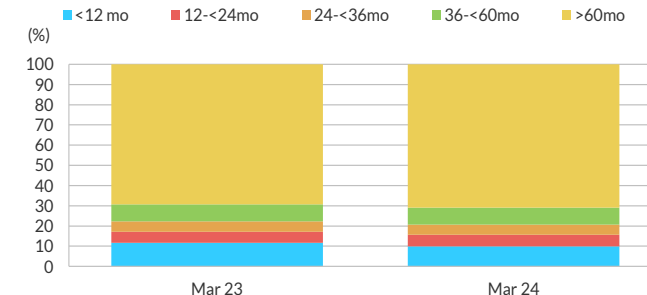
Source: Fitch Ratings, Realkredit Danmark

#### CLTV (% Residential Pool)



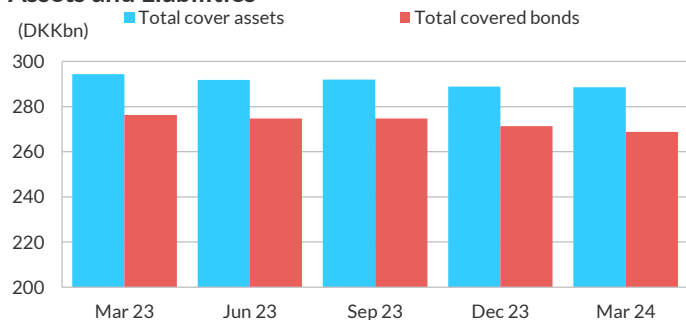
Source: Fitch Ratings, Realkredit Danmark

#### Loan Seasoning (% Total Pool)



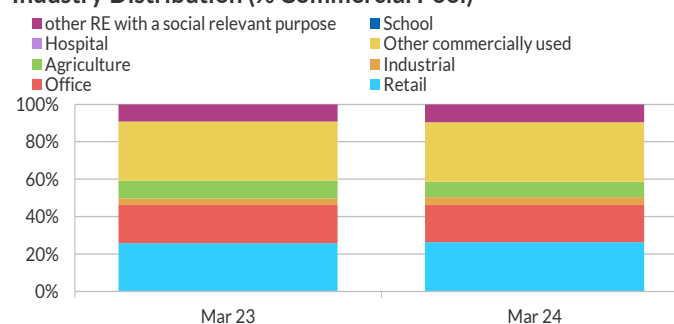
Source: Fitch Ratings, Realkredit Danmark

#### Assets and Liabilities



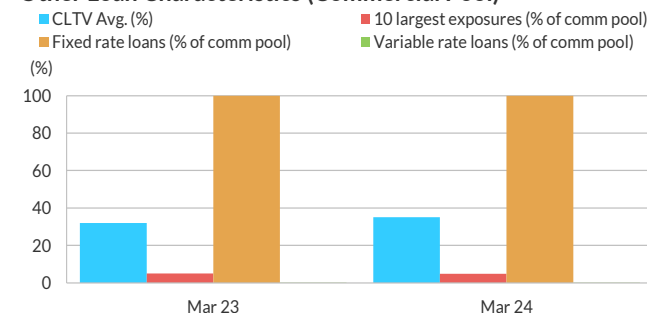
Source: Fitch Ratings, Realkredit Danmark

#### Industry Distribution (% Commercial Pool)



Source: Fitch Ratings, Realkredit Danmark

#### Other Loan Characteristics (Commercial Pool)



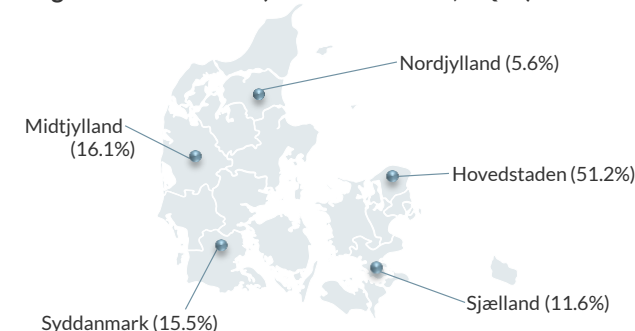
Source: Fitch Ratings, Realkredit Danmark

## Appendix 1B – Focus on CC T

### Programme Structure

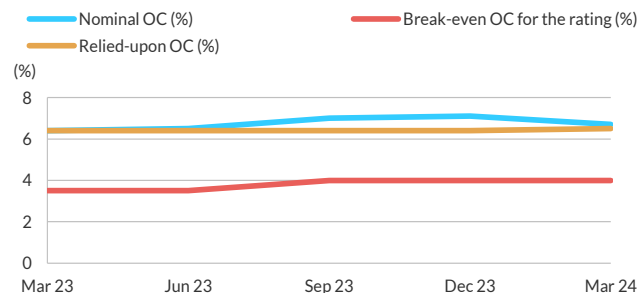
- Key Rating Drivers:** The 'AAA' rating of the covered bonds is based on Realkredit Danmark A/S's IDR of 'A+', a PCU of eight notches, a two-notch recovery uplift and the OC Fitch relies on of 6.5%, which provides more protection than the 'AAA' break-even OC of 4.0%. The Stable Outlook on the rating reflects the Outlook on Realkredit Danmark's IDR and the six-notch buffer against an IDR downgrade due to the different uplift factors above the bank's IDR.
- Cover Pool Composition:** The covered bonds are secured by mostly variable-rate or adjustable-rate residential mortgages (65.2%), commercial loans (28.4%) and substitute assets (6.4%). The mortgage loans are geographically diversified within Denmark. At end-March 2024, total cover assets were DKK479.5 billion (including substitute assets) with a WA seasoning of 12 years.
- Rating Sensitivities:** The 'AAA' rating of Realkredit Danmark's CC T mortgage covered bonds would be vulnerable to a downgrade if Realkredit Danmark's Long-Term IDR was downgraded by seven notches to 'BB' or below, or the level of OC Fitch gives credit to in its analysis falls below the 'AAA' break-even OC of 4%. If the relied-upon OC decreased to the legal minimum of 8% (of RWAs), we would downgrade the covered bonds to 'AA-', one notch above the bank's IDR.

### Regional Distribution (% of Total Assets, 1Q24)



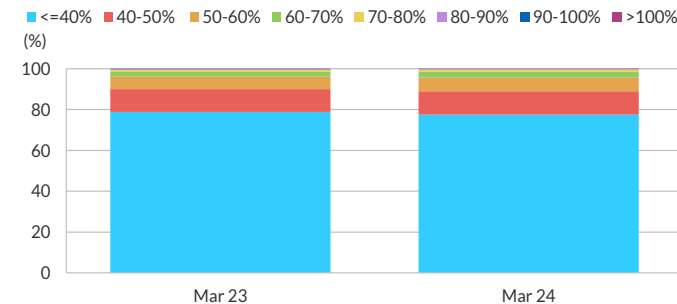
Source: Fitch Ratings, Realkredit Danmark

### Overcollateralisation Breakdown



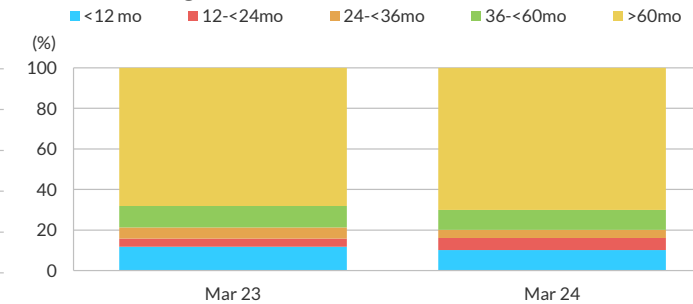
Source: Fitch Ratings, Realkredit Danmark

### CLTV (% Residential Pool)



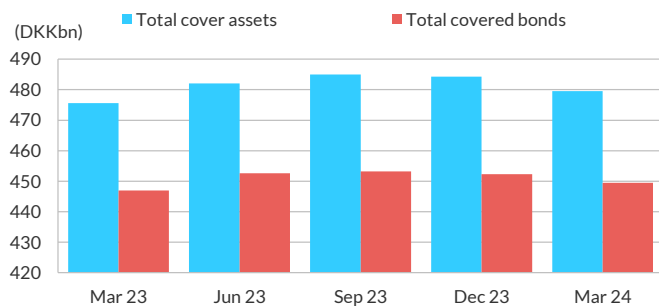
Source: Fitch Ratings, Realkredit Danmark

### Loan Seasoning (% Total Pool)



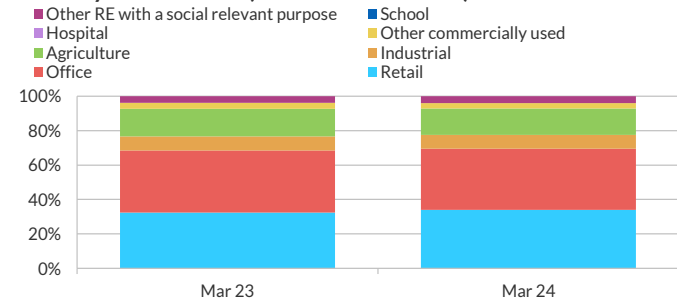
Source: Fitch Ratings, Realkredit Danmark

### Assets and Liabilities



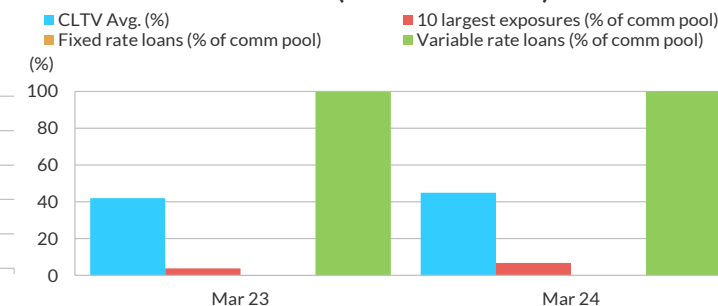
Source: Fitch Ratings, Realkredit Danmark

### Industry Distribution (% Commercial Pool)



Source: Fitch Ratings, Realkredit Danmark

### Other Loan Characteristics (Commercial Pool)



Source: Fitch Ratings, Realkredit Danmark

## Appendix 2 – Summary of Applicable Covered Bonds Legislation

Items	Description
Basis of the framework	Danish covered bonds legislation.
Issuer type	There are three types of Danish covered bonds: <ul style="list-style-type: none"> <li>• Realkreditobligationer (RO): Oldest type of bond, issued by mortgage banks only, UCITS-compliant, but not Capital Requirements Regulation (CRR)-compliant if issued after 31 December 2007</li> <li>• Særligt Dækkede Realkreditobligationer (SDRO): issued by mortgage banks only, both UCITS- and CRR-compliant, a minimum OC of 2% on a nominal basis</li> <li>• Særligt Dækkede Obligationer (SDO): implemented in 2007 following changes in legislation, can be issued by both commercial banks and mortgage banks, both UCITS- and CRR-compliant; a minimum OC of 2% on a nominal basis</li> </ul>
Dual recourse	To the assets of the capital centre (including OC) in the case of mortgage banks. To the issuer and, post insolvency, to the insolvency estate of the issuer, before other creditors for specialised mortgage banks or pari passu with other senior creditors for commercial banks.
Segregation	Assets used to cover the bonds have to be segregated into independent cover pools referred to as capital centres for mortgage banks and cover registers for commercial banks.
Minimum OC	Through the transposition of the European covered bond directive, Danish legislation now specify an OC requirement of 2%. In addition, capital requirements have to be fulfilled at the capital centre level and at the institution level, and translate into a mandatory OC level of at least 8% of RWAs. The OC can be funded by equity and senior debt. In practice, the OC for the mortgage bank's covered bonds is mostly invested in securities.
Cover assets	<ul style="list-style-type: none"> <li>• Loans granted against mortgages on real property</li> <li>• Exposure to public authorities: <ul style="list-style-type: none"> <li>– bonds and debt issued by or guaranteed by central government, central banks, public entities, and regional and local authorities in the EU/EEA</li> <li>– bonds and debt issued by or guaranteed by multilateral development banks or international organisations if risk-weighted 0% (or risk-weighted 20%, provided they do not exceed 15% of the outstanding covered bonds)</li> </ul> </li> <li>• Bonds and debt issued by credit institutions if risk-weighted 20%, provided they do not exceed 15% of the outstanding covered bonds</li> <li>• Mortgages on ships (only for commercial banks; a register may not include assets secured on both real estate and ships)</li> <li>• Other assets eligible for covered bonds financing according to the Capital Requirements Directive if allowed by the Danish Financial Services Authority (FSA)</li> <li>• In practice, the majority of supplementary collateral is made of exposure to public authorities and covered bonds</li> </ul>
Maximum LTV limits for the cover test	<ul style="list-style-type: none"> <li>• ≤ 80% for residential real-estate loans with up to 30 years' maturity and 10 years' interest-only period</li> <li>• ≤ 75% for residential real-estate loans with up to 30-year interest-only period and for holiday real-estate loans</li> <li>• ≤ 60% for commercial, agricultural and real-estate loans for commercial use. In some cases, the LTV requirement can be increased to 70% if the bank adds additional collateral</li> </ul>
Eligibility of loans with LTVs higher than the maximum thresholds	Eligible, but the part of mortgage loan above the limit is excluded from the calculation of the OC (for SDROs and SDOs only).
Balance principle or matched-funding	This is intended to ensure a close connection between the cash flow received from the borrowers and the cash flow due to the bondholders.
Treatment of swap counterparties	Derivative counterparties rank pari passu with covered bondholders when derivative contracts were concluded with the purpose of hedging cash flow between assets and liabilities.
Supervision	Danish Financial Supervisory Authority
Cover pool administrator	An administrator (trustee) will be appointed by the Danish FSA on, or prior to, insolvency of the mortgage lender. An alternative manager has the power to sell cover assets, take out loans and enter into repo agreements on behalf of the cover pool to make timely payment on covered bond obligations. This would facilitate actions the alternative manager may seek to take in meeting obligations.

Source: Fitch Ratings



## Appendix 3 – Related Research & Definitions of Terms Used

### Related Research

Details of the latest rating action for the programmes and the applicable criteria can be found in the following publications:

[Fitch Ratings Raises the PCU of Realkredit’s S and T Covered Bonds to Eight Notches from Six \(April 2024\)](#)

[SME Balance Sheet Securitisation Rating Criteria \(February 2024\)](#)

[Originator-Specific Residential Mortgage Analysis Rating Criteria \(January 2024\)](#)

[Originator-Specific Residential Mortgage Analysis Rating Criteria - Supplementary Data File \(April 2024\)](#)

[Realkredit Danmark A/S \(December 2023\)](#)

[Fitch Affirms Danske Bank A/S’s Mortgage Cover Pool C Covered Bonds at ‘AAA’; Outlook Stable \(December 2023\)](#)

[Fitch Affirms Realkredit Danmark’s CC S and CC T Covered Bonds at ‘AAA’ \(November 2023\)](#)

[Covered Bonds Rating Criteria \(October 2023\)](#)

[Fitch Upgrades Realkredit to ‘A+’; Outlook Stable \(September 2023\)](#)

[Fitch Affirms Danske Bank A/S’s Cover Pools D and I Mortgage Covered Bonds at ‘AAA’; Outlook Stable \(September 2023\)](#)

### Related Covered-Bonds Specific Research

[Covered Bonds Snapshot - 1Q24 \(April 2024\)](#)

[Covered Bonds Snapshot - 1Q24 - Data File \(April 2024\)](#)

[Global Housing and Mortgage Outlook 2024 \(February 2024\)](#)

[Global Covered Bonds Outlook 2024 \(December 2023\)](#)

[Covered Bonds Protection Dashboard \(December 2023\)](#)

### Definitions of Terms Used

CVB	Covered Bonds
LT IDR	Long-Term Issuer Default Rating
RRP	Resolution Reference Point
PCU	Payment Continuity Uplift
FF	Foreclosure frequency
WA	Weighted Average
WAL	Weighted Average Life
OC	Overcollateralisation
LTV	Loan-to-value
DTI	Debt-to-Income
RO	Realkreditobligationer
SDRO	Særligt Dækkede Realkreditobligationer
SDO	Særligt Dækkede Obligationer
FSA	Danish Financial Services Authority
CRR	Capital Requirements Regulation
CC S	Realkredit Danmark A/S - SDRO Capital Centre S
CC T	Realkredit Danmark A/S - SDRO Capital Centre T

Source: Fitch Ratings

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