Realkredit Danmark A/S – Capital Centres S and T

Mortgage Covered Bonds

Update

Ratings/Outlook

Realkredit CC S Mortgage Covered Bonds	AAA/Stable
Realkredit CC T Mortgage Covered Bonds	AA+/Stable

Rating Rationale

Capital Centre S/Capital Centre T

IDR/Outlook	A/Stable
IDR uplift	0/0
PCU	6/6
Tested rating on a PD basis	AA+/AA
Recovery given default uplift	1/1
Covered bonds rating	AAA/AA+
Lowest level of OC over the past 12 months (%)	6.5/8.2
AAA breakeven OC (%)/AA+ breakeven OC (%)	5.0/7.0

Key Data

	March 17
Asset type	Residential and commercial mortgages
Capital Centre S/Capital Centre T	
Mortgage assets (DKKbn)	244.7/460.7
Reserve OC (DKKbn)	16.5/39.1
Covered Bonds (DKKbn)	244.7/460.7
WA life of assets (years)	14.2/14.3
WA life of liabilities (years)	14.2/2.5

Source: Realkredit investor report, Fitch

Related Research

Covered Bonds Surveillance Snapshot (October 2017)

Realkredit Danmark A/S – Ratings Navigator (September 2017)

'B' Portfolio Loss Rates for Covered Bonds (September 2017)

Covered Bonds Extension Clauses (July 2017)

Global Housing and Mortgage Outlook - 2017 (February 2017)

Covered Bonds Investor Survey Year-End 2016 (January 2017)

Fitch 2018 Outlook: Covered Bonds (December 2017)

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Key Rating Drivers

Two- and Three-Notch Downgrade Buffers: The 'AAA'/Stable and 'AA+'/Stable ratings of Realkredit Danmark A/S's (A/Stable/F1) mortgage covered bonds is based on the issuer's Long-Term Issuer Default Rating (IDR) of 'A' and seven notches of uplift from a Payment Continuity Uplift (PCU) of six notches and a recovery uplift of one notch. This provides buffers of two and three notches against an IDR downgrade to maintain the ratings.

Stable PCU of Six for CC S: The PCU for Capital Centre (CC) S reflects the liquidity protection in place for at least 12 months. Of the bonds, 97% are passed-through while the redemptions of the remaining 3% hard-bullet bonds are covered by liquid assets (excluding Realkredit's own bonds) for at least 12 months. Government bonds cover for three months of interest payments.

PCU Increases to Six for CC T: The PCU for CC T has increased to six notches from four. This reflects increased liquidity protection for the hard-bullet bonds (28%) as their redemptions will be covered by eligible liquid assets for 12 months, once upcoming bonds mature in January 2018. Three months of interest payment are covered by government bonds.

No Currency Mismatches: There is a natural hedge between the assets and covered bonds due to the balance principle. As a result, the programmes are eligible for two notches of recovery uplift, subject to OC covering the credit losses in the target rating scenario. One notch was assigned as the lowest OC to support the rating is based on one notch of recovery uplift above the tested rating on a PD basis.

CC T's Rating Constrained by OC: CC T's bonds rating is constrained by the OC relied upon (lowest nominal level observed over the past 12 months) of 8.2%, as it is below the 'AAA' breakeven OC of 8.5%.

Rating Sensitivity: CC S would be vulnerable to a downgrade if Realkredit's Long-Term IDR were downgraded to 'BBB', the PCU were reduced to three or lower or the OC that Fitch Ratings takes into account decreased below the 'AAA' breakeven level of 5.0%. CC T may be downgraded if the issuer's IDR were downgraded to 'BBB-', the PCU is reduced to two or lower, or the OC that Fitch takes into account fell below the 'AA+' breakeven level of 7.0%.

Programme Highlights

Breakeven OC Improvement for CC S: The 'AAA' breakeven OC for CC S has been reduced to 5.0%, driven by the lower credit loss of 5.1% in a 'AA+' scenario. We removed the 4% expected loss floor on the residential sub-pool, given its very good historical performance.

Breakeven OC Improvement for CC T: The 'AA+' breakeven OC for CC T decreased to 7.0% from 8.0%, due to the lower credit loss of 6.8% on a 'AA' PD basis. This stems from the reduction of the foreclosure frequency adjustment for Adjustable Rate Mortgages in Fitch's updated Danish criteria. We also incorporated our prepayment assumptions into the portfolio credit model used for the analysis of the commercial sub-pool, which led to lower credit losses.

Mixed Asset Cover Pools: CC S comprises 67% residential assets and 33% commercial assets, while the respective figures for CC T are 54% and 46%. The expected losses are 6.1% for CC S in a 'AAA' scenario and 8.2% for CC T in 'AA+' scenario. The higher expected loss for CC T's cover pool is due to the larger share of ARM loans and commercial loans.

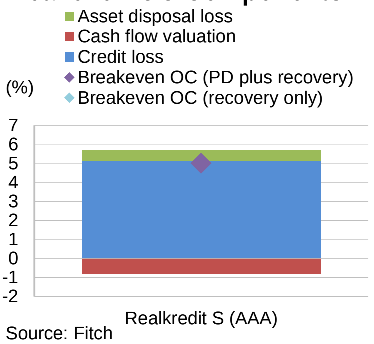
Cover Pool Characteristics: April 17

Capital Centre S/Capital Centre T	
Current balance (DKKbn)	238.3/469.7
Number of mortgages	160,054/ 262,199
Mortgage type (%)	
Residential	67.1/53.7
Commercial	32.9/46.3
Interest rate type (%)	
Fixed rate	93.0/0.1
ARM	2.4/76.7
Variable	2.5/23.2
Capped/ratchet	2.0/0.0
Repayment type (%)	
Repayment	74.5/42.4
Interest only	25.5/57.6

Source: Realkredit, Fitch

CC S

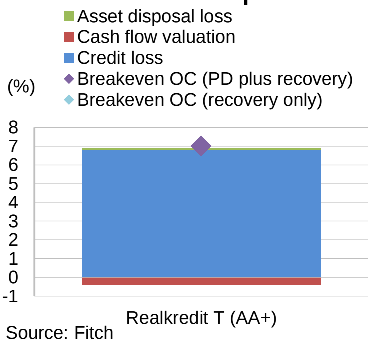
Breakeven OC Components



Source: Fitch

CC T

Breakeven OC Components



Source: Fitch

Related Criteria

Covered Bonds Rating Criteria (December 2017)

Counterparty Criteria for Structured Finance and Covered Bonds (May 2017)

Counterparty Criteria for Structured Finance and Covered Bonds: Derivative Addendum (May 2017)

EMEA RMBS Rating Criteria (October 2017)

Denmark Residential Mortgage Rating Criteria Addendum (November 2017)

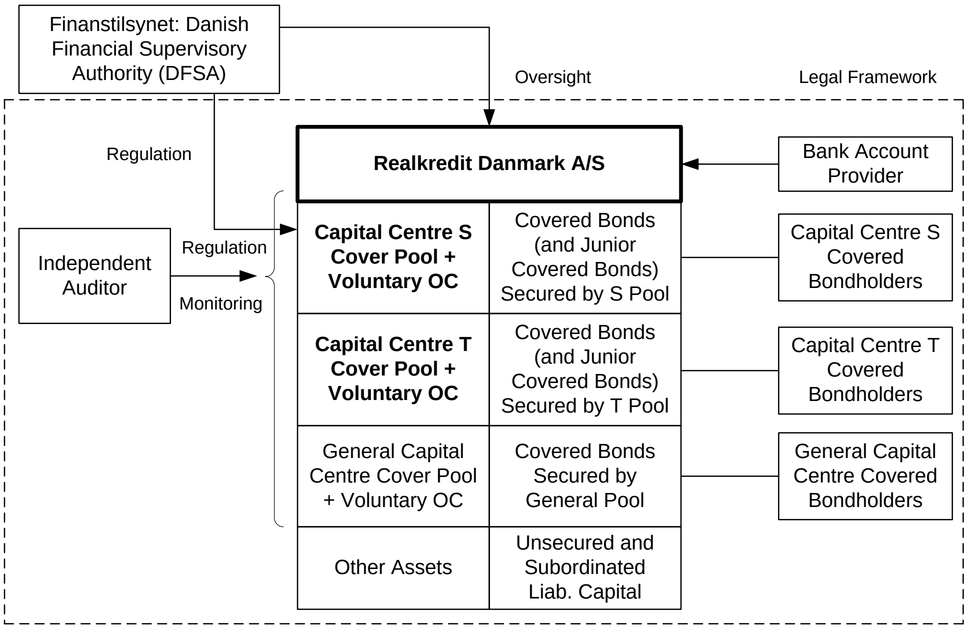
SME Balance Sheet Securitisation Rating Criteria (March 2017)

Commercial Real Estate Loans Securing Covered Bonds Rating Criteria (November 2017)

Structured Finance and Covered Bonds Interest Rate Stresses Rating Criteria (February 2017)

Structured Finance and Covered Bonds Country Risk Rating Criteria (September 2017)

Programme Structure Diagram



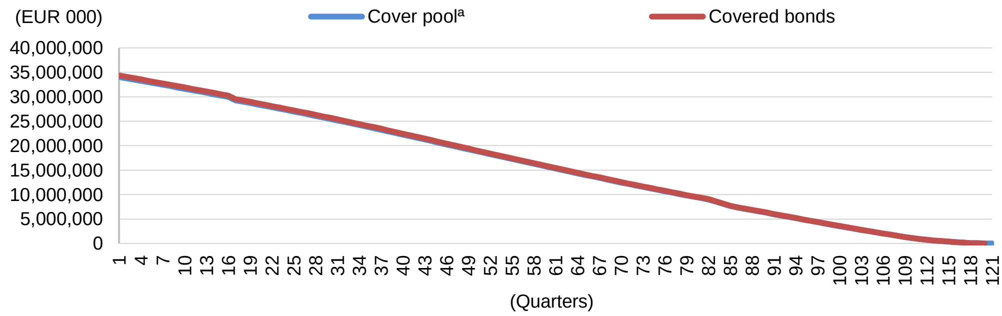
Source: Fitch

Fitch Default Model Output (%)

Rating level	WAFF	WARR	WAFF*(1-WARR)
CC S			
Instrument Rating level (AAA)	16.0	62.1	6.1
'B' case	3.6	82.2	0.6
CC T			
Instrument Rating level (AA+)	24.1	66.0	8.2
'B' case	6.5	83.5	1.1

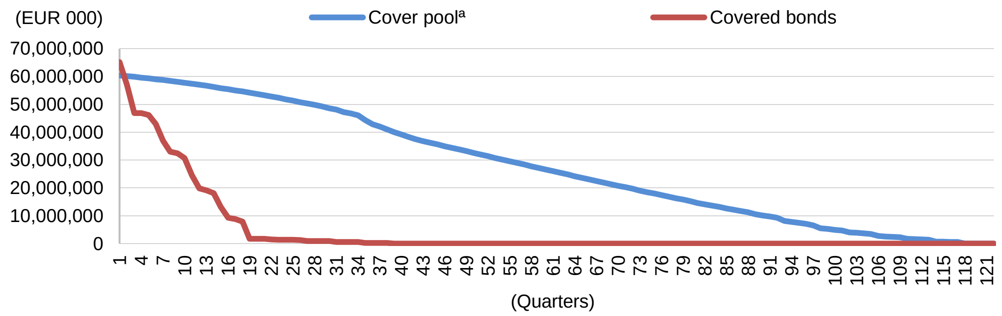
Source: Fitch

Amortisation Profiles of Assets and Bonds for Capital Centre S



[a] Total mortgage assets, excluding voluntary OC in the form of liquid assets
Source: Realkredit Danmark, Fitch

Amortisation Profiles of Assets and Bonds for Capital Centre T



[a] Total mortgage assets, excluding voluntary OC in the form of liquid assets
Source: Realkredit Danmark, Fitch

Appendix: Commercial Mortgage Loss and Cash Flow Assumptions

In its analysis of commercial mortgage loan portfolios, which include agriculture, business, private rental and multifamily mortgage loans, Fitch relied on its *Commercial Real Estate Loans Securing Covered Bonds Rating Criteria* (November 2017) and its *SME Balance Sheet Securitisation Rating Criteria* (March 2017). The asset analysis was performed using the Portfolio Credit Model (PCM).

Default Rate

Fitch derived the expected default rate for the commercial pool taking into consideration default and loss data provided by Realkredit and the macroeconomic developments in the country. As was done for the last analysis in 1Q17, Fitch differentiated the PD treatment between social and cooperative housing assets and the other commercial segments' assets.

Commercial Segment

The expected average one-year default rate (90 days passed due) for a performing commercial mortgage portfolio was assumed to be 1.75%, which is at the lower end of the assumptions used for commercial mortgage portfolios in other European jurisdictions (in the 1.75%-6.5% range, see *SME Balance Sheet Securitisation Rating Criteria*).

Fitch used Realkredit's credit scoring to distribute the assets' one-year PD around the benchmark, applying a 0.5% floor to the default probabilities. The one-year PDs were then combined with Fitch's long-term PD curves and with the maturities of the assets to derive long-term PD assumptions for each of the commercial assets in the pool. The foreclosure frequency rates were then derived based on the default rate outputs from PCM and applying a cure rate of 15% in a 'AAA' scenario and up to 50%, in a 'B' scenario. We took into account Realkredit observed cure rate and stressed it in line with our criteria.

Social and Cooperative Housing

Mortgage loans to social and cooperative housing represent about 16% of CC S cover pool balance and about 7% of CC T cover pool balance. Given the very good performance observed for these segments, the analysis differentiated the PD applied to these segments.

The expected average one-year default rate assumed for the performing social and cooperative housing mortgage sub-portfolio was 0.5%.

Fitch used Realkredit's credit scoring to distribute the assets' one-year PD around the benchmark, without applying a PD floor to the default probabilities. The one-year PDs were then combined with Fitch's long-term PD curves and with the maturities of the assets to derive long-term PD assumptions for each of the subsidised housing assets in the pool. The foreclosure frequency rates were then derived based on the default rate outputs from PCM and applying a cure rate of 15% in a 'AAA' scenario and up to 50%, in a 'B' scenario.

Most of these social housing loans benefit from a guarantee from local municipalities or the Danish state. The state contributes to the borrower's payment and the municipality provides a loss guarantee to Realkredit.

The guarantee can differ according to the disbursement of the loan. Mortgage loans granted prior to 2007 have a loss guarantee of up to 28.5% of the principal. Mortgage loans disbursed after 2007 have guarantees that cover the part of the loan that exceeds 60% of the property value. Furthermore, a 100% guarantee is granted from the municipality for major renovation works. This results in an average guarantee of about 50%.

The strong governance structure covering social housing explains the limited number of losses in this segment. In the past three years, Realkredit has only called guarantees three times, with a total value of DKK6 million.

Fitch did not give full credit to guarantees provided by municipalities on subsidised housing loans in a stressed scenario; rather, it conservatively assumed a 50% credit to these partial guarantees in a 'AAA' scenario.

Recovery Rate

With respect to recovery rates, Fitch derived a stressed property market value by applying market value decline (MVD) assumptions based on Realkredit repossession data and Fitch's stressed property price decline. The MVD assumptions used for the analysis of Realkredit's commercial mortgage portfolio are detailed in the table below.

MVD Assumptions for Commercial Properties

(%)	AAA	AA	A	BBB	BB	B
Agricultural	65	62	60	57	52	45
Business	65	62	60	57	52	45
Industrial	75	71	69	65	58	50
Multifamily/rentals	65	62	60	57	52	45
Subsidised housing	53	49	45	41	37	33

Source: Fitch

Cash Flow Assumptions

Transaction and Servicing Costs

Servicing fee assumptions are applied in Fitch's cash flow modelling to take account of the capital centre expenses and the costs of engaging a replacement servicer in the event of a servicer default in a stressed environment.

Transaction and Servicing Costs Assumptions

	AAA	AA	A	BBB	BB	B
Servicing costs (%)	0.40	0.30	0.25	0.20	0.20	0.20

Note: The fees are applied to the outstanding portfolio balance, including performing, delinquent and defaulted loans
Source: Fitch

Prepayment Rates

In its cash flow model, Fitch applies prepayment rate (ie voluntary early repayment) assumptions to the portfolio's performing principal balance to determine the excess spread available in each capital centre.

It also tested high and low prepayment assumptions in the portfolio credit model for the commercial sub-pool analysis. This allows for consistency with the assumptions used in the cash flow model for those assets.

The low prepayment assumption for commercial mortgages is 0.0% (see the *Commercial Real Estate Loans Securing Covered Bonds Rating Criteria* published in November 2017). The high prepayment assumptions have been derived from historical data obtained from Realkredit and stressed depending on the rating scenario. They are between 15.0% and 25.0%.

Prepayment Assumptions (%)

Commercial mortgages

	AAAsf	AAsf	Asf	BBBsf	BBsf	Bsf
High prepayment	25.0	22.5	20.0	17.5	15.0	15.0
Low prepayment	0.0	0.0	0.0	0.0	0.0	0.0

Source: Fitch

Foreclosure Timing

Fitch assumes that the foreclosure process will take 36 months across rating scenario.

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.