

## Transaction Update: Realkredit Danmark A/S (Capital Center T Covered Bond Program)

Unlimited SDROs ("saerligt daekkede realkreditobligationer")

**Primary Credit Analyst:**

Tristan Gueranger, London (44) 20-7176-3628; tristan.gueranger@spglobal.com

**Secondary Contact:**

Alejandro Marcilla, Madrid +34 91 389 69 44; alejandro.marcilla@spglobal.com

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## Ratings Detail

<b>Reference Rating Level</b>	aa-		<b>Jurisdictional-Supported Rating Level</b>	aaa		<b>Maximum Achievable Covered Bond Rating</b>	aaa		<b>Covered Bond Rating</b>	
<b>Resolution Regime Uplift</b>	+2	+	<b>Assigned Jurisdictional Support Uplift</b>	+3	+	<b>Collateral Support Uplift</b>	+3	=	<b>AAA/Stable/A-1+</b>	
									<b>Rating Constraints</b>	aaa
<b>Systemic Importance</b>	Very Strong		<b>Jurisdictional Support Assessment</b>	Very Strong		<b>Overcollateralization Adjustment</b>	-1		<b>Counterparty Risk</b>	aaa
<b>Adjusted Issuer Credit Rating</b>	a					<b>Liquidity Adjustment</b>	0			
<b>GRE And Sovereign Support</b>	0		<b>Legal Framework</b>	Very Strong					<b>Country Risk</b>	aaa
			<b>Systemic Importance</b>	Very Strong		<b>Available Credit Enhancement</b>	+4			
<b>Issuer Credit Rating</b>	A		<b>Sovereign Credit Capacity</b>	Very Strong						

Note: Under our "Group Rating Methodology," Realkredit Danmark A/S is a core subsidiary of Danske Bank A/S. We therefore raise the ratings on the covered bonds according to the long-term ICR on Danske Bank A/S.

## Major Rating Factors

### Strengths

- Jurisdiction-supported rating level (JRL) of 'aaa', resulting in a low level of overcollateralization required to maintain the 'AAA' long- and 'A-1+' short-term ratings.
- The match-funded structure of the capital center helps to mitigate liquidity risk.

### Weakness

- Aside from the legislative minimum, no other commitment regarding available overcollateralization in the cover pool.

## Outlook

S&P Global Ratings' stable outlook on its ratings on Realkredit Danmark A/S' Capital Center T mortgage covered bonds reflects the fact that we would not automatically lower our ratings on the covered bonds if we were to downgrade Danske Bank A/S, Realkredit Danmark's parent company. This is because the program is eligible for six notches of uplift above the rating reference level (RRL) of 'aa-', but only requires three notches to achieve a 'AAA' rating.

## Rationale

We are publishing this transaction update as part of our review of Realkredit Danmark's Capital Center T mortgage covered bond program.

Our covered bonds ratings process follows the methodology and assumptions outlined in our "Covered Bonds Criteria," published on Dec. 9, 2014.

From our analysis of the legal and regulatory framework for covered bonds in Denmark, we believe that the assets in Realkredit Danmark Capital Center T's cover pool are isolated from the risk of the issuer's bankruptcy or insolvency. This asset isolation allows us to assign a higher rating to the covered bond program than the long-term issuer credit rating (ICR) on Danske Bank. Although the issuer of the covered bonds is Realkredit Danmark, we use the rating on Danske Bank as the starting point of our analysis. This is because, in accordance with our criteria "Group Rating Methodology," published on Nov. 19, 2013, we consider Realkredit Danmark to be a core entity of Danske Bank.

In application of our covered bonds criteria, we determine the issuer's RRL, and attribute notches of uplift from this level by assessing jurisdictional support and collateral-based support. Based on Danske Bank's long-term ICR of 'A' and our assessment of jurisdictional support, we assess the RRL at 'aa-' and the JRL at 'aaa'. In addition, the program could benefit from up to four notches of collateral-based uplift.

We determine the total collateral-based uplift by analyzing the cover pool's asset credit quality, payment structure, and cash flow mechanics. As of June 30, 2016, the cover pool amounts to Danish krone (DKK) 501 billion, made up of residential and commercial mortgages and substitute assets (commonly called a "reserve fund" in traditional Danish covered bonds).

We generally analyze the cover pool's mortgage credit quality with the help of two key indicators:

- The weighted-average foreclosure frequency (WAFF), which reflects the expected default rate; and
- The weighted-average loss severity (WALS), which describes the expected loss given default.

Our analysis, as of June 30, 2016, shows that the available credit enhancement is 8.30%. This is greater than the 3.64% credit enhancement commensurate with a 'AAA' rating, a level which is driven by an out-of-model test to address potential concentration risk among commercial loans.

As part of our analysis, we reviewed Realkredit Danmark's origination, underwriting, collection, and default

management procedures. We believe satisfactory policies are in place to support our ratings on the covered bonds. There are no further legal, counterparty, or country risk constraints on our rating.

Our covered bond ratings criteria outline our rating methodology (see "Covered Bond Ratings Framework: Methodology And Assumptions," published on June 30, 2015).

## Program Description

**Table 1**

Program Overview*	
Jurisdiction	Denmark
Year of first issuance	2011
Covered bond type	Legislation-enabled
Outstanding covered bonds (bil. DKK)	459.90
Redemption profile	Mixed
Underlying assets	Residential and commercial mortgages
Jurisdictional support uplift	3
Unused notches for jurisdictional support	0
Target credit enhancement (%)	5.77
Available credit enhancement (%)	8.30
Collateral support uplift	3
Unused notches for collateral support	3
Total unused notches	3

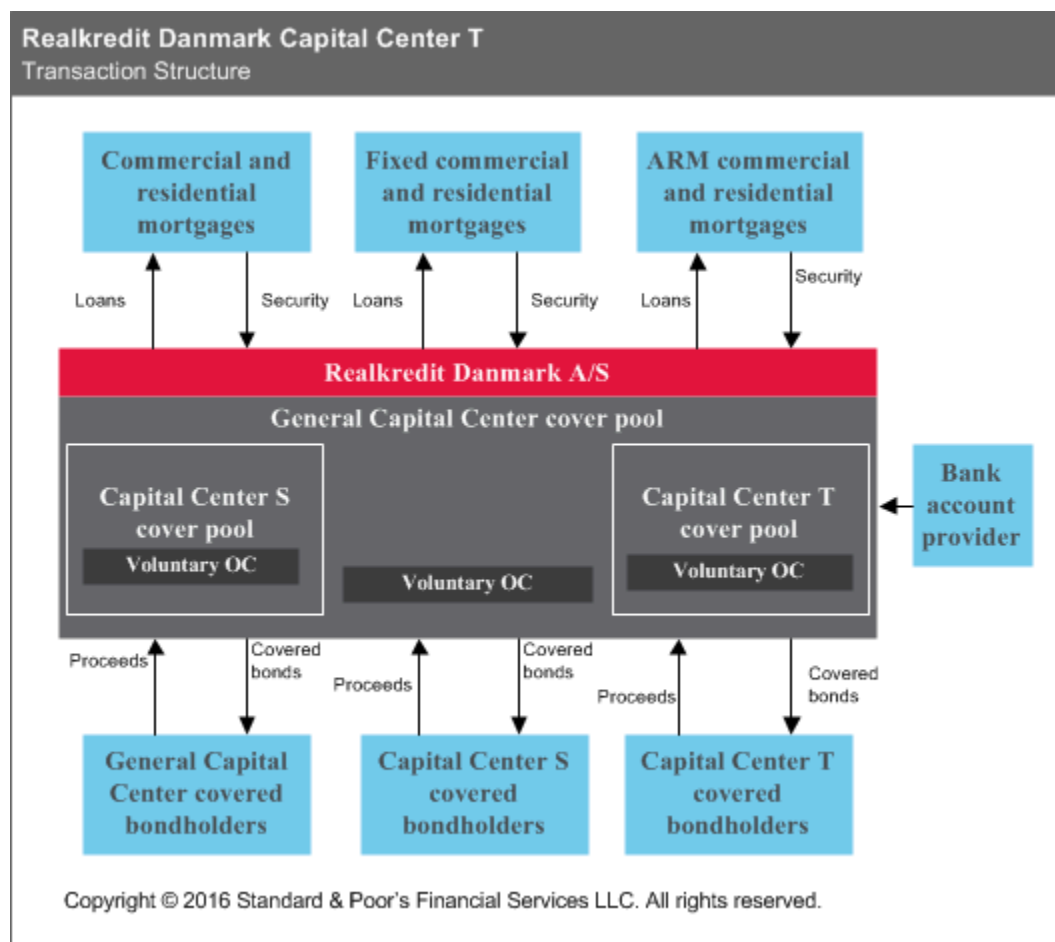
\*Based on data as June 2016.

Realkredit Danmark is a wholly-owned subsidiary of Danske Bank and is a specialist mortgage bank in Denmark, second in size to Nykredit Realkredit A/S. Realkredit Danmark is an established issuer of Danish mortgage covered bonds, "realkreditobligationer" (ROs), and "saerligt daekkede realkreditobligationer" (SDROs).

Capital Center T is currently actively issuing bonds, which includes mortgage assets--backed by both residential and commercial properties--as well as a reserve fund consisting primarily of Danish covered bonds.

Danske Bank acts as the main bank account provider. To mitigate counterparty risk, the issuer has replacement language in place, which is in line with our current counterparty criteria (see "Counterparty Risk Framework Methodology And Assumptions," published on June 25, 2013).

The cover pool assets would be ring-fenced if Realkredit Danmark were to become insolvent under the respective Danish legislative framework. SDRO covered bondholders have a primary secured claim against all assets in the cover pool.



**Table 2**

Program Participants			
Role	Name	Rating	Rating dependency
Issuer	Realkredit Danmark A/S	NR*	Yes
Originator	Danske Bank A/S	A/Stable/A-1	No
Arranger	Danske Bank A/S	A/Stable/A-1	No
Servicer	Danske Bank A/S	A/Stable/A-1	No
Bank account provider	Danske Bank A/S	A/Stable/A-1	Yes
Bank account provider	Jyske Bank A/S	A-/Stable/A-2	Yes
Bank account provider	Nordea Bank Danmark A/S	AA-/Negative/A-1+	Yes
Bank account provider	Grønlandsbanken	NR	No

\*In our analysis, we uplift the rating from the long-term issuer credit rating on the parent Danske Bank A/S.

## Rating Analysis

## **Legal and regulatory risks**

We analyzed legal risk by applying our European legal criteria and our criteria for rating covered bonds (see "Europe Asset Isolation And Special-Purpose Entity Criteria--Structured Finance," published on Sept. 13, 2013, and other covered bond ratings criteria listed in "Related Criteria").

In our view, the Danish covered bond framework sufficiently addresses the relevant legal aspects of our covered bond and European legal criteria. This enables us to rate the covered bonds above our long-term ICR on the issuer's parent bank. The Danish Covered Bond Act provides the legal framework for the issuance of the Danish covered bonds.

SDRO covered bond investors have a primary secured claim against all assets in the cover pool. The ratings on the covered bonds issued from Capital Center T rely on the issuer's active management of the overcollateralization to support the current ratings.

To become eligible as collateral, mortgage loans must be entered in the Danish land register. The registration is legally binding and will form the basis of any bankruptcy proceedings. If bankruptcy proceedings have been initiated, a trustee appointed by the bankruptcy court will administer the cover assets. The trustee is ordered by law to meet all payment obligations as they fall due. If payments from the cover assets are insufficient to meet the payment obligations, the trustee has the authority to raise additional loans.

The issuer must maintain an overcollateralization of at least 8% of risk-weighted assets. Banking supervision is carried out by the Danish Financial Supervisory Authority (DFSA, or Finanstilsynet). The DFSA has the authority to issue an order with which the issuer must comply. In case of severe or multiple breaches, the DFSA may revoke the license.

## **Operational and administrative risks**

In June 2016, we conducted a review of Realkredit Danmark's origination, underwriting, collection, and default management procedures for the capital center's cover pool assets. We also reviewed the cover pool's management and administration. We consider that Realkredit Danmark actively manages the cover pool and has strict underwriting and loan management policies. In addition to an annual meeting, we have ongoing regular contact with the issuer.

We analyzed operational and administrative risk by applying our covered bonds criteria.

## **Resolution regime analysis**

As part of our covered bonds criteria, our analysis considers any resolution regime in place in Denmark to determine the RRL. The EU's Banking Resolution and Recovery Directive was transposed into Danish law and came into effect on June 1, 2015. In Denmark, mortgage credit institutions like Realkredit Danmark are excluded from bail-in, but are required to issue a certain amount of "bail-inable" debt instruments. This does not affect our resolution regime analysis, as the covered bonds are still protected during resolution. As such, we assign two notches of uplift from the adjusted ICR, resulting in a RRL of 'aa-'.

## **Jurisdictional support analysis**

In analyzing jurisdictional support, we assess the likelihood of a covered bond under stress receiving support from a government-sponsored initiative instead of from the liquidation of collateral assets in the open market. Our assessment of jurisdictional support for mortgage programs in the Denmark is very strong (see "Assessments For Jurisdictional Support According To Our Covered Bonds Criteria," published on July 20, 2016). The assessment of very strong

means that the program can receive up to three notches of jurisdictional uplift. The JRL is therefore 'aaa'. This is the rating the program can achieve by covering the legal minimum overcollateralization requirement, according to our covered bonds criteria.

### Collateral support analysis

We have reviewed the mortgage asset and substitute collateral information as of June 30, 2016. We have analyzed the mortgage loan-by-loan data from the issuer and applied stresses commensurate with a 'AAA' rating scenario to estimate the WAFF and WALs. The cover pool primarily comprises Danish residential and commercial loans (92.4%), and substitute assets and cash (7.6%).

The WAFF is lower compared to September 2015, at 18.47% compared to 21.55%. WALs decreased to 34.08% from 37.12% during the same period. These results are mostly driven by a lower loan-to-value for the commercial loans. As measured by WAFF, WALs and 'AAA' credit risk, the credit quality of the pool remains better than peers (see table 4).

Our credit analysis of the substitute pool includes an asset-by-asset review of underlying securities to estimate the credit risk of each individual exposure. To determine the default and loss on the reserve fund, we apply our "Methodology And Assumptions For Assessing Portfolios Of International Public Sector And Other Debt Obligations Backing Covered Bonds And Structured Finance Securities," published on Dec. 9, 2014.

We consider the pool of substitute assets to exhibit low granularity as the 10 largest obligors account for over 99% of total substitute assets. For low granularity pools, in a 'AAA' stress scenario, we assume that assets with an S&P Global Ratings' rating of 'AAA' will not default, save for covered bonds that are issued by other Realkredit Danmark capital centers (we assume these default as our analysis presumes the issuer has already defaulted). For the assets that default, we determine the recovery by applying paragraphs 76 and 77 of the aforementioned criteria. As all of the bonds that we assume to default are structurally match-funded covered bonds, we are able to apply higher recoveries (see table 5 of the above criteria). The analysis results in an assumed default rate of the reserve fund of 1.27% and a recovery rate of 36.06%.

**Table 3**

Cover Pool Composition					
Asset type	As of June 30, 2016		As of Sept. 30, 2015		
	DKK	Percentage of cover pool (%)	DKK	Percentage of cover pool (%)	
Residential mortgages	253,989,357,041	50.68	244,079,579,261	50.92	
Commercial mortgages	184,789,585,149	36.88	173,783,365,852	36.26	
Subsidized housing	24,175,434,849	4.82	20,441,076,144	4.26	
Substitute assets and cash	38,168,766,028	7.62	41,008,980,788	8.56	
Total	501,123,143,067		479,313,002,046		

**Table 4**

Key Credit Metrics		
	As of June 30, 2016	As of Sept. 30, 2015
Average loan (DKK)	2,162,954	2,103,580
Weighted-average LTV ratio (%)	59.86	67.20

**Table 4**

<b>Key Credit Metrics (cont.)</b>		
	<b>As of June 30, 2016</b>	<b>As of Sept. 30, 2015</b>
Weighted-average loan seasoning (months)*	55.99	53.38
Balance of loans in arrears (%)	0.6	0.67
Interest-only loans (%)§	62.65	63.83
<b>Credit analysis results:</b>		
Weighted-average foreclosure frequency (WAFF; %)	19.35	21.55
Weighted-average loss severity (WALS; %)	34.08	37.12
AAA credit risk (%)	2.5	2.5
<b>Country averages:</b>		
WAFF (%)	19.92	20.04
WALS (%)	39.29	37.66
AAA credit risk (%)	6.10	6.47

\*Seasoning refers to the elapsed loan term. §Proportion of loans to residential and subsidized housing only.

**Table 5**

Residential assets (DKK '000s)	<b>Percentage of cover pool (%)</b>	
	<b>As of June 30, 2016</b>	<b>As of Sept. 30, 2015</b>
0-500	3.37	3.44
500-1000	14.53	14.97
1000-1500	19.70	20.12
1500-2000	17.43	17.7
2000-2500	13.17	13.27
2500-3000	9.14	8.99
Greater than 3000	22.65	21.5

**Table 6**

<b>Residential and subsidized assets (%)</b>	<b>Percentage of cover pool (%)</b>	
	<b>As of June 30, 2016</b>	<b>As of Sept. 30, 2015</b>
0-60	36.07	35.66
60-70	18.21	18.44
70-80	39.27	38.96
80-90	6.44	6.58
90-100	0.00	0.13
Above 100	0.00	0.23



**Table 7**

	Percentage of cover pool (%)	
	As of June 30, 2016	As of Sept. 30, 2015
Residential mortgages		
Less than 18 months	15.45	17.05
18-24 months	6.84	8.41
24-36 months	10.27	9.27
36-48 months	9.06	11.63
48-60 months	9.57	7.14
More than 60 months	48.02	46.51
Weighted-average loan seasoning (months)	55.99	53.38

\*Seasoning refers to the elapsed loan term.

**Table 8**

	Percentage of cover pool (%)	
	As of June 30, 2016	As of Sept. 30, 2015
Regional concentrations		
Residential assets		
Central Denmark Region	16.6	16.7
North Denmark Region	5.0	5.1
Region Zealand	19.4	19.6
Region of Southern Denmark	14.6	14.7
Capital Region of Denmark	44.5	43.9
Total	100	100
Commercial assets		
Central Denmark Region	17.6	18.6
North Denmark Region	6.9	7.2
Region Zealand	12.0	12.1
Region of Southern Denmark	22.2	22.9
Capital Region of Denmark	31.9	30.9
Sweden, Norway and Danish dependencies	9.4	8.3
Total	100	100

Our analysis of the covered bonds' payment structure shows that cash flows from the cover pool assets would be sufficient, at the existing rating level, to make timely payments of interest and principal to the covered bondholders.

As there is an active secondary market for mortgages in Denmark, the program can benefit from up to four notches of collateral-based uplift according to our covered bonds criteria. Before determining the number of collateral-based notches needed to reach a 'AAA' rating, we consider the following adjustments:

- According to paragraph 78 of the covered bonds criteria, a one-notch reduction applies if the program does not benefit from at least six months of liquidity. Due to the match-funded nature of the Realkredit Danmark Capital Center T, we consider that liquidity coverage is met. Each covered bond is matched to a specific mortgage loan, and any payments from the loan will be used to make payments on the bond.

- According to paragraph 81 of the covered bonds criteria, a further one-notch reduction applies if the program does not benefit from any form of commitment on overcollateralization. As Realkredit Danmark's Capital Center T only has voluntary overcollateralization without any commitment, this results in a one-notch reduction to the potential collateral-based uplift.

Given the JRL of 'aaa', the program needs to cover 'AAA' credit risk to reach a 'AAA' rating from a cash flow standpoint. However, in this instance, the credit enhancement required for a 'AAA' rating is floored by a supplemental test we carry out to address borrower concentration. This is because, under our commercial real estate criteria, we apply an out-of-model test to address borrower concentration risk.

Under this supplemental test, the assumed number of defaulted obligors is a function of the applicable stress scenario ('AAA', in our case) and the obligors' credit quality. Since mortgage assets in this pool are not rated, we assume an obligor rating in the 'B' to 'CCC-' range, so the credit enhancement commensurate for the cover pool is at least equal to the loss related to the 10 largest obligors, as defined by the gross outstanding balance of the largest loans in the cover pool. This represents 3.64% of overcollateralization. In order to cover a 'AAA' credit stress scenario, the available credit enhancement must exceed the higher of this net loss result, and our measure of 'AAA' credit stress. Therefore, the minimum level of overcollateralization to maintain 'AAA' ratings on the covered bonds is 3.64%.

We analyzed the cash flows under 'AAA' credit stresses, as well as liquidity, interest rate, and currency stresses to reflect the fact that the pool does not have recourse to derivatives but relies on "natural hedging." The terms of the issued bonds match those of the underlying mortgages due to the balancing principle. We also ran different default timing and prepayment patterns.

In our analysis the recession starts on day one. This is because we assume the insolvency of the issuing bank as the starting point of the analysis, and we assume that the bank would default at the beginning of the 'AAA' recession.

For prepayments, we ran a "low" scenario, with a 0.5% conditional prepayment rate (CPR) and a "high" scenario with a 24% CPR.

The target credit enhancement has decreased to 5.43% in June 2016 from 7.05% in September 2015, driven by the better credit results, as discussed above.

Our cash flow analysis is based on the applicable criteria in the "Related Criteria" section below.

**Table 9**

Collateral Uplift Metrics		
	As of June 30, 2016	As of Sept. 30, 2015
Asset WAM (years)	13.87	13.1
Liability WAM (years)	15.17	14.5
Available credit enhancement (%)	8.30	9.15
AAA credit risk (%)	2.50	2.50
Required credit enhancement for first notch of collateral uplift (%)	2.50	3.50
Required credit enhancement for second notch of collateral uplift (%)	2.98	4.69
Required credit enhancement for third notch Collateral Uplift (%)	4.20	5.87
Target credit enhancement for maximum uplift (%)	5.43	7.05

Table 9

Collateral Uplift Metrics (cont.)		
	As of June 30, 2016	As of Sept. 30, 2015
Largest obligor test (%)	3.64	3.65
Potential collateral-based uplift (notches)	4	4
Adjustment for liquidity (Y/N)	N	N
Adjustment for committed overcollateralization (Y/N)	Y	Y
Collateral support uplift (notches)	3	3

### Counterparty risk

We have identified several counterparty risks to which the covered bonds could be exposed. However, these are mitigated through either structural mechanisms, or by applying the Danish Covered Bond Act. Therefore, we consider them not to constrain our ratings on the covered bonds.

**Commingling risk.** The collection accounts are not held in Capital Center T's name, but under Realkredit Danmark's name. This introduces potential commingling risk. Indeed, the funds in the accounts are commingled with the funds collected for the other Realkredit Danmark capital centers, as well as with Realkredit Danmark's funds. However, under the Danish covered bond legislation, we understand that covered bondholders have the right to these funds. Therefore, we do not consider cash to be lost, but that it could be temporarily unavailable for a period of time. Therefore, commingling risk amounts not to a credit loss but to a liquidity stress.

Due to the balance principle in Danish covered bond law, mortgage banks in practice do not hold large cash balances but reinvest payments received before the bond due date in securities whose maturity matches the remaining maturity and interest of such bonds. Given the limited time--less than a working day--that funds stay in bank accounts, we do not apply a liquidity stress in our cash flow calculations.

**Bank account providers.** Several banks provide accounts for the program. Incoming cash is invested in a defined group of high-quality assets intraday. As a result, the cash balance on any collection accounts is managed to be as close to zero as practically possible. To mitigate bank account and commingling risk, the issuer has replacement language in place, which is in line with our counterparty criteria. The issuer commits to holding less than 5% cash with commercial banks that are rated at least 'BBB/A-2'. If the bank account provider does not meet this ratings requirement, Realkredit Danmark will make commercially reasonable efforts to replace the account holding bank with a bank that meets our criteria within 30 calendar days.

**Derivatives.** There are no swap counterparties in the program.

**Set-off risk.** The issuer is not a deposit-taking institution. The program is therefore not exposed to set-off risk.

### Country risk

Where applicable, our criteria for "Ratings Above The Sovereign – Structured Finance: Methodology And Assumptions," published on Aug. 8, 2016, cap our covered bond ratings. These criteria apply to multi-jurisdiction cover pools such as Capital Center T, where obligors in the pool are located in Denmark, Sweden and Norway. Under these criteria, we consider the exposure to country risk to be moderate.

Given that the long-term rating on all three countries is 'AAA', there is no constraint to our ratings on the covered bonds resulting from ratings above the sovereign.

## Potential Effects Of Proposed Criteria Changes

Our analysis is based on our current applicable criteria, including those set out in the criteria article "Methodology And Assumptions For Analyzing Mortgage Collateral In Danish Covered Bonds," published on May 2, 2012. On June 27, 2016, we published a request for comment (see "Request For Comment: Methodology And Assumptions For Analyzing Pools Of Austrian, Danish, And Swedish Residential Loans"). As a result, our future assumptions and methodologies may differ from our current criteria.

## Related Criteria And Research

### Related Criteria

- Ratings Above The Sovereign - Structured Finance: Methodology And Assumptions, Aug. 8, 2016
- Counterparty Risk Analysis In Covered Bonds, Dec. 21, 2015
- Covered Bond Ratings Framework: Methodology And Assumptions, June 30, 2015
- Methodology And Assumptions: Analyzing European Commercial Real Estate Collateral In European Covered Bonds, March 31, 2015
- Covered Bonds Criteria, Dec. 9, 2014
- Methodology And Assumptions For Assessing Portfolios Of International Public Sector And Other Debt Obligations Backing Covered Bonds And Structured Finance Securities, Dec. 9, 2014
- Group Rating Methodology, Nov. 19, 2013
- Europe Asset Isolation And Special-Purpose Entity Criteria--Structured Finance, Sept. 13, 2013
- Counterparty Risk Framework Methodology And Assumptions, June 25, 2013
- Methodology And Assumptions For Analyzing Mortgage Collateral In Danish Covered Bonds, May 2, 2012
- Update To The Cash Flow Criteria For European RMBS Transactions, Jan. 6, 2009
- Methodology: Credit Stability Criteria, May 3, 2010
- Use Of CreditWatch And Outlooks, Sept. 14, 2009
- Commercial Paper I: Banks, March 23, 2004
- Cash Flow Criteria for European RMBS Transactions, Nov. 20, 2003

### Related Research

- Global Covered Bond Characteristics And Rating Summary Q3 2016, Oct. 24, 2016
- Danish Covered Bond Index Report H1 2016: Improved Collateral Performance Reflects Return To Economic Growth, Oct. 6, 2016
- Kingdom of Denmark 'AAA/A-1+' Ratings Affirmed; Outlook Stable, Sept. 16, 2016
- Assessments For Target Asset Spreads According To Our Covered Bonds Criteria, Aug. 15, 2016
- Danske Bank A/S, July 22, 2016
- Assessments For Jurisdictional Support According To Our Covered Bonds Criteria, July 20, 2016
- Request for Comment: Request For Comment: Methodology And Assumptions For Analyzing Pools Of Austrian, Danish, And Swedish Residential Loans, June 27, 2016
- Banking Industry Country Risk Assessment: Denmark, Jan. 28, 2016
- Ratings Raised On Danish Section 15 Bonds From Six Capital Centers Following Clarification On Bank Resolution, Dec. 11, 2015
- Credit FAQ: The Danish Covered Bond Market Explained, July 15, 2014

**Additional Contact:**

Structured Finance Europe; [StructuredFinanceEurope@spglobal.com](mailto:StructuredFinanceEurope@spglobal.com)

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