

3.11 DENMARK

By Mette Saaby Pedersen, Finance Denmark, Svend Bondorf and Anton Holmgaard Nielsen, Nykredit

I. FRAMEWORK

In Denmark the legal basis for covered bond issuance is the Danish Mortgage-Credit Loans and Mortgage-Credit Bonds etc. Act (the "Mortgage Act") (Lov om realkreditlån og realkreditobligationer mv.) and the Danish Financial Business Act (Lov om finansiel virksomhed). The Mortgage Act is applicable only to Danish mortgage banks. The mortgage banks are specialised banks. The Capital Requirements Regulation (CRR) is directly applicable to the commercial banks and the mortgage banks.

Specific bankruptcy regulations laid down in the Financial Business Act and the Mortgage Act prevail over general bankruptcy regulations (sections 247a-247i of the Financial Business Act and sections 22-33 of the Mortgage Act).

II. STRUCTURE OF THE ISSUER

The Danish Financial Supervisory Authority (FSA) may license mortgage banks, commercial banks and ship financing institutions¹ to issue covered bonds.

Until 1 July 2007, only mortgage banks were allowed to issue mortgage covered bonds. Since this date, also commercial banks can obtain a license to issue covered bonds.

This leads to the existence of three types of Danish covered bonds:

- > Særligt Dækkede Obligationer (SDOs) issued by either commercial or mortgage banks. SDOs are both UCITS (Article 52(4)) and CRR compliant (Article 129).
- > Særligt Dækkede Realkreditobligationer (SDROs) issued exclusively by mortgage banks, fulfilling the former as well as the new legal requirements. SDROs are both UCITS (Article 52(4)) and CRR compliant (Article 129).
- > Realkreditobligationer (ROs) issued exclusively by mortgage banks. ROs are UCITS compliant (Article 52(4)).

In addition, all ROs issued before 1 January 2008 have maintained their covered bond status in accordance with the grandfathering option under the CRR. The grandfathered bonds are both UCITS (Article 52(4)) and CRR (Article 129) compliant.

The covered bond legislation in Denmark allows for joint funding, i.e. two or more institutions joining forces to issue covered bonds in order to achieve larger issues. The first issue of joint funding between non-affiliated institutions took place in 2012.

Danish mortgage banks operate subject to a specialist banking principle in accordance with Danish legislation, which confines the activities of issuers to the granting of mortgage loans funded by the issuance of covered bonds. The cover pool may include unsecured loans to public authorities and guarantees issued by public authorities but this is rarely used. Mortgage banks may also carry on other business related to mortgage banking.

The specialist banking principle implies that mortgage banks are confined to granting loans that meet the requirements for cover assets imposed by legislation. Similarly, the funding sources are limited to ROs, SDOs and SDROs. This is due to the fact that Danish mortgage banks are not allowed to accept deposits, etc. as a source of funding, cf section 8 of the Financial Business Act.

The issuer (mortgage bank or commercial bank) holds the cover assets on its balance sheet as well as all rights under the cover assets. Bonds and cover assets are assigned to individual capital centres in mortgage banks and to registers in commercial banks. The individual bonds, however, are not linked to individual mortgage loans.

Issuers have their own employees. Outsourcing of activities is allowed if control measures are deemed satisfactory by the FSA, and consumer protection regulations are observed.

¹ Ship financing institutions are regulated by the Act on a Ship Financial Institute (Consolidating Act no 851-25 June 2014).

III. COVER ASSETS

Assets eligible as the basis for mortgage covered bond issuance:

SDO	SDRO	RO
> Loans secured by real property	> Loans secured by real property	> Loans secured by real property
> Exposures to public authorities	> Exposures to public authorities	> Exposures to public authorities
> Exposures to credit institutions	·	·
(up to a maximum of 15 %		
(CQS 1)/10 % (CQS 2))		
> Collateral in ships (not an option		
for mortgage banks)		

To serve as cover assets, mortgages must be entered in the Danish land register, which is kept by the Danish district courts. Land and loan registration has been digital since 2009 with faster and more efficient handling of customers' loans as a result.

The mortgage loans are originated in a mortgage bank or a credit institution in the same group, or transferred to a mortgage bank according to a structure in which the mortgage bank has knowledge of and is responsible for correct valuation of the mortgaged property and verification of the debtor's creditworthiness and ability to pay.

The difference between funding and lending may be hedged through derivatives, which are included in the cover pool assets.

In a capital centre in a mortgage bank the cover pool is dynamic as a result of the current addition and disposal of loans in connection with the granting and repayment of loans. In most capital centres assets may exclusively be transferred to or from the cover pool upon new lending and (p)repayment. On (p)repayment, the corresponding amount of issued bonds will be redeemed from the capital centre. Each mortgage loan (cover asset) refers to specific ISIN codes and both cover assets and ISIN codes are assigned to specific capital centres. It is therefore not possible for the issuer to (i) change the cover pool unless in connection with new lending and (p)repayment nor (ii) transfer cover assets between different cover pools. Such cover pools are thus less dynamic than cover pools where existing mortgages can be transferred into and out of the cover pools. Cover assets must be identifiable, and the FSA supervises cover asset identification.

IV. VALUATION AND LTV CRITERIA

The financial legislation contains provisions on property valuation. Valuations are based on the open market value of a property.

LTV limits - an overview

Loan Type Property category	SDO	SDRO	RO
Residential property	80% or 75% ¹⁾	80% or 75% ¹⁾	80%
Holiday property	75% ²⁾	75% ²⁾	75% ²⁾
Agricultural property	60%3)	60%3)	70%
Commercial property	60%3)	60%3)	60%

Note: 1) 80% for loans issued with up to 30 years maturity and 10 years interest-only period and 75% for loans with an unlimited maturity and interest-only period.

- 2) 75% for holiday property for private use. The LTV limit is 60% for holiday property for commercial use.
- 3) The LTV can be raised to 70% if the bank adds additional collateral.



In connection to the issuance of SDOs and SDROs, mortgage banks and commercial banks must ensure continuous LTV compliance – i.e. not just at disbursement of the loan as is the case for ROs. Where an LTV ratio exceeds the statutory limits, the bank must add supplementary collateral to the capital centre/register. Otherwise, the issues may lose their status as SDOs or SDROs.

Mortgaged property is valued (on-site inspection) as part of the processing of loan applications. When a loan is granted, the LTV thereof is assessed on a case-by-case basis. A basic principle of the valuation regulations is that valuations must be performed by a valuation officer of an issuer. Provided that a number of conditions are met, valuations may be outsourced. AVMs may also be used if approved by the Danish FSA and most Danish mortgage banks have got an approval to use own models. The detailed conditions for valuation are set out in the financial legislation.

V. ASSET - LIABILITY MANAGEMENT

The financial legislation and the Executive Order on bond issuance, balance principle and risk management require mortgage banks and commercial banks to observe a balance principle and a set of rules on risk management in connection with the issuance of RO, SDRO and SDO.

The Executive Order provides limits to the scope of differences allowed on one the hand the payments from borrowers and on the other hand the payments to the holders of the issued ROs, SDROs and SDOs. The limits are adjusted by loss limits to the interest rate, foreign exchange, option and liquidity risks that follow from cash flow differences in the balance sheet. The Executive Order also contains a number of other provisions limiting financial risk.

For commercial banks, the balance principle is applicable at register level. For mortgage banks, the balance principle is applicable at the level of the individual capital centres and the banks in general.

For each register/capital centre, mortgage banks and commercial banks must choose whether to comply with either the *specific balance principle* or the *general balance principle*. The choice of balance principle does not depend on the choice of bond type (RO, SDRO or SDO) issued out of the regis-ter/capital centre. The differences between the two balance principles are as follows:

Types of risk	Specific balance principle	General balance principle
Interest rate risk	Stress test on level and structure	Stress test on level and structure
	Loss limit of 1% of capital base + Risks in different currencies cannot be set off	Loss limit for mortgage banks dependent of stress test: 1%/5% of capital adequacy requirement + 2%/10% of the additional excess cover
		Loss limit for commercial banks dependent of stress test: 10%/100% of excess cover
Currency risk	Exchange rate indicator 2 (few currencies)	Simple stress test
	+	Loss limit for mortgage banks:
	Loss limit of 0.1% of capital base	10% of capital adequacy requirement + 10% of the additional excess cover
		for EUR and 1% of capital adequacy requirement + 1% of additional excess cover of other currencies
		Loss limit for commercial banks : 10% of excess cover

Types of risk	Specific balance principle	General balance principle
Option risk	Maximum term of 4 year + Structural limits on call options and index-linking	Stress test on volatility Loss limit for mortgage banks : 0,5% of capital adequacy requirement + 1% of the additional excess cover
		No maturity or structural limits Loss limit for commercial banks : 5% of excess cover No maturity or structural limits
Liquidity risk	Limitations on temporary liquidity deficits 25% (years 1-3) 50% (years 4-10) 100% (from year 11)	Limitations on interest payments: Interest (in) > Interest (out) (over a current period of 12 months) + Present value PV (in) > PV (out) (always)
Repayment of loans by bonds other than the underlying bonds	Max. 15% Both own issued bonds and bonds from other credit institutions + Approximately same cash flow	Max. 15% from other credit institutions – Own issued bonds unlimited

Despite the risk limits of the balance principle, Danish mortgage banks have in practice structured their mortgage lending business in such a way that they do not assume significant financial risks with respect to mortgage lending and funding. Thus, the mortgage banks have nearly eliminated interest rate risk, foreign exchange risk and prepayment risk.

Since mortgage bond issuance is the only eligible funding source for Danish mortgage banks, issuance takes place on a daily basis. The mortgage bank commonly achieves this through *tap issuance*. Each loan is closely matched to the future cash flow of one or several specific ISIN codes currently open for issuance. On any given banking day the mortgage bank calculates the bond amounts to be tapped in the relevant ISINs corresponding to the loans disbursed that day. These bond amounts are then issued and sold to investors. These simple principles ensure that the balance principle is maintained day by day and minimises the subsequent need for active asset-liability management.

A typical mortgage ISIN is open for tap issuance for several years after opening. Issuance trades are executed alongside with other trades in a unified, highly liquid and tightly priced market. Thus, there is no strict distinction between primary and secondary markets in the Danish system.

The Danish commercial banks, too, are subject to the strict ALM rules. In practice the commercial banks operate under a general asset and liability management and do not offer pass-through products.

Refinancing risk in a situation where a mortgage bank is unable to complete the refinancing of matured bonds on market terms is addressed in the legislation. The regulation applies to bullet bonds and floating-rate bonds where the loan term is longer than the maturity of the bond used to fund it, and contains a soft bullet mechanism controlled by two triggers: a refinancing failure trigger and an interest rate trigger. The refinancing trigger automatically extends the maturity of the covered bonds by 12 months at a time in case the issuer is unable to refinance maturing covered bonds by new issuance. The mechanism is not exercisable at discretion of the issuer, but it is conditional on the specific market event of "no refinancing". The interest rate trigger, which applies solely to bond maturities of 2 years or less, comes into effect in case of a 5 % point bond yield increase over the last year before ordinary maturity. This trigger may extend the bond maturity by 1 year. The legislation provides clarity for the position of borrowers, investors and mortgage banks in an extreme crisis



where a mortgage bank is unable to complete the refinancing by sale of bonds at market terms, or interest rates suddenly rise very sharply.

According to the legislation, the capital base must represent at least 8% of risk-exposure amount (REA). Mortgage banks must observe the capital adequacy requirement both at individual capital centre level and at the level of the institution. Overcollateralisation forms part of the cover pool. Furthermore there is an internal capital adequacy requirement (pillar 2) of around 2% of REA.

There are also requirements of regulatory capital buffers calculated on the basis of REA:

- > A capital conservation buffer of 2.5 % applicable at any time.
- > A countercyclical capital buffer which varies between 0% and 2.5% depending on the eco-nomic climate. The buffer is currently set at 0% (the buffer will raise to 0.5% from 31 March 2019).
- > A systemic risk buffer the size of which depends on the systemic importance of the institution. The buffer is currently up to 2% for mortgage banks and 3% for commercial banks. The buffer requirements will be phased in gradually towards 2019.

VI. TRANSPARENCY

A high level of transparency is an important characteristic of the Danish covered bond market. The Danish covered bond issuers publish information via many different platforms, such as prospectuses, investor reports, trading venues, standardised transparency templates and issuers' investor relations web sites. Information is thus easily accessible.

As part of the ECBC Label Initiative, the Danish issuers report information in the standardised format in the Harmonised Transparency Template (HTT). In addition, the Danish market participants have gathered available information and consolidated it in an intuitive and user-friendly structure in a national transparency template (NTT).

The Danish issuers report data uniformly cell by cell in Excel format as specified in the transparency template containing data from both HTT and NTT. The uniform reporting makes it easy for investors to compare data across issuers' cover pools and to extract data for further analysis.

This provides a single point of entry for the extensive information available on covered bond issues with means to compare key information across an array of issuers. The template is a valuable tool that supports covered bond investors' investment decisions by comprehensive overview of covered bond issues and making comparison of key information easier.

VII. COVER POOL MONITOR AND BANKING SUPERVISION

Specialised supervision of covered bond issuers is carried out by the Danish FSA (Denmark has not joined the single supervisory mechanism – SSM). The FSA supervises compliance with the legislative framework for carrying on mortgage banking activities and thereby the issuance of covered bonds.

The issuer monitors the cover pool continuously. Data from every single loan offer from the Danish mortgage banks and thus all property valuations for new lending purposes are reported to the FSA on a quarterly basis. The FSA performs random checks of mortgage banks' valuations by way of on-site inspections and by checks of the internal valuation reports and which other property has been used as reference to the basis for the valuation. In the Danish mortgage model where loans are originated, serviced and redeemed directly in the cover pool, there is no need for monitoring other than as provided by the FSA.

The commercial banks report on a quarterly basis to the FSA on the assets in the register. The statement of the registered assets must be verified by the external auditor of the bank.

Issuers are also required to prepare comprehensive reports on asset-liability management for the FSA on a quarterly basis. The FSA must be informed of any balance principle breaches without delay. If the capital requirement is not observed, the FSA must be informed without delay.

The FSA has the authority to issue an order with which the issuer must comply. In case of severe or multiple breaches of Danish law or of such orders, the FSA may revoke the operating licence and dismiss the management of the issuer, cf sections 373-374 of the Financial Business Act.

Since 2014 a macro-prudential tool known as the Supervisory Diamond for mortgage banks has been in place. The Supervisory Diamond is soft law based on quarterly reports submitted by the mortgage banks to the Danish FSA. The values reported are compared with a number of predefined limit values for five selected indicators. The indicators are interest-only loans, loans with short-term funding, borrower's interest rate risk, lending growth and concentration risk. If the limit values are breached, the Danish FSA opens a dialogue with the bank concerned. Upon individual and concrete assessment, the Danish FSA may take action, for instance in the form of increased supervision, risk disclosure requirements or orders.

VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS OF COVERED BONDS Capital centres of mortgage banks (regardless of whether the issuer has issued ROs, SDROs or SDOs)

The rules for resolving a mortgage bank are detailed and well considered.

The main considerations are to ensure (i) that bond investors receive timely payments and (ii) that the rights of borrowers are not prejudiced materially.

Balance sheets of Danish mortgage banks are structured with a number of separate capital centres (cover pools) out of which covered bonds are issued. A capital centre consists of a group of series in which covered bonds backed by an equivalent amount of mortgage loans (match funding) are issued and a joint series reserve fund (equity). In addition, supplementary capital (senior secured debt/Section 15 bonds) may be issued out of the capital centre for overcollateralisation purposes.

If a mortgage bank is declared bankrupt, a trustee in bankruptcy is appointed. The Danish FSA may declare a mortgage bank bankrupt.

The trustee looks after the interests of the estate in bankruptcy, i.e. the interests of the creditors and particularly the covered bond investors in relation to the individual capital centres. Today, the cred-itors of a mortgage bank are almost exclusively covered bond investors. The trustee must seek the most efficient administration of the estate, having regard to the fact that the position of covered bond investors and borrowers must remain essentially as if the capital centre had still been a going concern. If a mortgage bank is declared bankrupt, no acceleration therefore takes place in respect of covered bond investors or borrowers. This is the key principle. It is only possible because the mortgage system is structured around capital centres that offer very high statutory collateral for bonds based on ring-fenced, bankruptcy-remote capital centres and match-funded lending.

Winding-up is not fast, but orderly, with a minimum of changes for both bond investors and bor-rowers. No public funds are used for such winding-up, as borrowers' ongoing payments are passed through to bondholders. Holders of hybrid core capital and subordinate loan capital cannot use the bankruptcy of a mortgage bank as grounds for a claim of default. Similar rules apply to counterparties to financial instruments used to hedge risk in a capital centre.

The practical duty of a trustee is to simulate a going concern. Borrowers' rights in respect of pre-payment are unchanged. The trustee must, as far as possible, continue to make payments to bond investors and to look after the interests of existing borrowers. The trustee may not issue new loans or otherwise expand business, as the mortgage lender's licence to carry on mortgage banking has been withdrawn.



The trustee may issue bonds to refinance bonds which have matured (adjustable-rate mortgages). But such issuance may only take place if the trustee deems that there are "sufficient funds" to satisfy the claims of creditors. The bonds may also be extended by 12 months at a time, if there is an insufficient number of buyers for the bonds.

The trustee may also raise other loans for the purpose of paying bond investors. Such loans cannot be secured against existing mortgages, as these already serve as security for the issued covered bonds.

The trustee may transfer a total capital centre to another mortgage lender as an independent asset. A full transfer must be authorised by the Danish Minister of Industry, Business and Financial Affairs. Bondholders do not have a right of early redemption as a result of such transfer.

If a mortgage lender is declared bankrupt, the assets, after deduction of estate administration costs, will be segregated to satisfy bond holders, etc., in accordance with their legal position as secured creditors. Covered bond holders have a primary secured claim against all assets in the cover pool. Counterparties to financial instruments used to hedge risk in a capital centre rank pari passu with covered bond holders in the relevant capital centre.

Proceeds from loans raised for the purpose of over-collateralisation (senior secured bonds/Section 15 bonds) will serve to satisfy the claims of covered bond holders in case of bankruptcy.

The EU Bank Recovery and Resolution Directive (BRRD) has been implemented in Danish regulation and came into force on 1 June 2015. The bail-in tool does not apply to covered bonds (SDO, SDRO and RO) and senior secured debt/Section 15 bonds. While exempt from bail-in, the Danish mortgage banks is subject to a 2% debt buffer of unweighted loans. The debt buffer is phased in by 2020. An amendment of the level of the debt buffer is in process and is proposed be phased in by 2022.

In case of resolution the debt buffer can be used by the resolution authority (in Denmark the resolution authority is Finansiel Stabilitet) to capitalise the mortgage banks when using BRRD resolution tools other than the bail-in tool. These tools can only be used according to the principle of "no-investor-worse-off". Otherwise the winding-up will be handled according to the above mentioned principle.

Commercial bank registers

A commercial bank sets up a register segregating assets, which exclusively serve as SDO cover assets.

As is the case with mortgage banks, derivative counterparties have a primary preferential right in line with the SDOs provided that the derivatives contract stipulates that the suspension of payments or bankruptcy of a commercial bank does not constitute an event of default. Bonds issued to secure assets as compensation for LTV excess or over-collateral in general (also referred to as Section 15 bonds or senior secured bonds) have a secondary preferential right to all assets of the register.

The register is kept by the commercial bank and must at all times contain all assets, guarantees received and derivatives contracts, clearly individualised. The commercial bank must submit statements of the assets to the FSA. The external auditor must perform continuous regular control of the register and at least twice a year make unannounced of register audits.

Where the FSA suspends the licence of a commercial bank to carry on banking business, the FSA or the bank files a bankruptcy petition, or the bank is adjudicated bankrupt following the petition of a third party, the FSA will decide whether the register is to become subject to administration by an administrator as an estate in administration. The administrator (and not the ordinary trustee) will be in charge of the assets of the register.

Any unsatisfied residual claims by SDO holders and derivative counterparties against the register may be proved against the assets available for distribution of the commercial bank, but – contrary to the proceedings related to mortgage banks – exclusively as ordinary claims. Residual claims from Section 15, bonds or senior secured bonds may also be proved as ordinary claims against the assets available for distribution.

The register is – contrary to the capital centres of mortgage banks – not subject to any specific statutory minimum requirement as to capital adequacy. The 8% capital adequacy requirement must only be fulfilled at the level of the commercial bank.

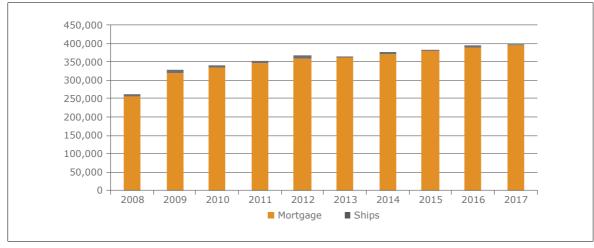
IX. RISK-WEIGHTING AND COMPLIANCE WITH EUROPEAN LEGISLATION

SDOs, SDROs and ROs fulfil the criteria of Article 52(4) UCITS. SDOs and SDROs also fulfil the re-quirements of Article 129 CRR². ROs issued before 1 January 2008 maintain the low risk weighting of 10% throughout the maturity of the bonds in accordance with the grandfathering option under the CRR. ROs issued after 1 January 2008 carry a risk weight of 20%. ROs, SDOs and SDROs are eligible for repo transactions and may be used as collateral for loans with the Danish central bank (Danmarks Nationalbank). Under the LCR the largest RO, SDO and SDRO series qualify as assets of the highest quality (Level 1 covered bonds).

When investing in ROs, SDOs and SDROs, the Danish investment legislation allows UCITS, to exceed the usual limits on exposures to a single issuer. Thus, acknowledging the reduced risk associated with covered bond assets (cf the Act on Investment Associations and Special-Purpose Associations as well as other Collective Investment Schemes etc.).

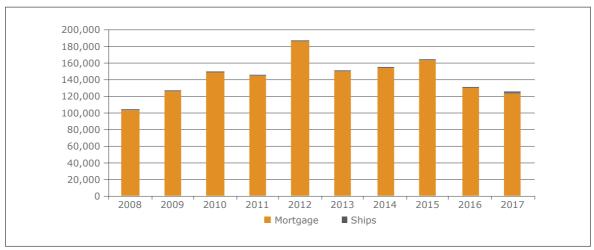
² Please click on the following link for further information on the UCITS Directive and the Capital Requirements Regulation (CRR): https://hypo.org/ecbc/covered-bonds/.

> Figure 1: Covered Bonds Outstanding, 2008-2017, EUR M



Source: EMF-ECBC

> FIGURE 2: COVERED BONDS ISSUANCE, 2008-2017, EUR M



Source: EMF-ECBC

Issuers: Covered bonds backed by real estate collateral are primarily issued by the specialised mortgage banks: BRFkredit a/s, DLR Kredit A/S, LR Realkredit A/S, Nordea Kredit Realkreditaktieselskab, Nykredit Realkredit A/S (incl. Totalkredit A/S), Realkredit Danmark A/S. At the end of 2017 the mortgage banks' outstanding volume of covered bonds was EUR 398 bn. Since the current Danish regulation on covered bonds entered into force on 1 July 2007, only one commercial bank, Danske Bank A/S, has utilised the possibility to issue covered bonds. Danske Bank has issued non-pass-through (euro-style) covered bonds of a value of around EUR 22bn. Danish Ship Finance is the only Danish issuer of covered bonds backed by ship loans. The outstanding volume of covered bonds backed by ships as collateral was EU 5 bn by year end 2017.

ECBC Covered Bond Comparative Database: http://ecbc.eu/framework/87/S%C3%A6rligt_D%C3%A6kkede_Obligationer_-_SDO, http://ecbc.eu/framework/88/S%C3%A6rligt_D%C3%A6kkede_Realkreditobligationer_-_SDRO and http://ecbc.eu/framework/89/ Realkreditobligationer_-_RO.



COVERED BOND: BRFkredit A/S (1 pool), Danske Bank A/S (3 pools), DLR Kredit A/S (1 pool), Realkredit Danmark A/S (2 pools), Danish Ship Finance A/S (1 pool), Nordea Kredit Realkreditaktieselskab A/S (2 pools), Nykredit Realkredit A/S (2 pools).