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# MREL for mortgage banks reduces funding needs in times of crisis

- An MREL will make the mortgage banks' funding need more stable
- An MREL will reduce the mortgage banks' need to issue debt to fund top-up collateral in times of crisis
- An MREL will increase the mortgage banks' funding need in normal times – but not in times of crisis

**Summary**

At present the Danish mortgage banks are exempted from a minimum requirement for own funds and eligible liabilities, MREL. An argument put forward against introducing an MREL for mortgage banks has been that especially in times of crisis it can be difficult to refinance debt to meet an MREL.

However, not only the need to refinance debt, but also the need to issue new debt has an impact on the mortgage banks' financing risk. Today, they have a large funding need in times of crisis as they are subject to a top-up collateral requirement which increases substantially when house prices fall, as they typically do in times of crisis.

Danmarks Nationalbank's calculations show that the mortgage banks' total funding need in periods of diving house prices will be smaller *with* an MREL than *without* an MREL.[1] This is because an MREL will increase the mortgage banks' funding need in normal times, thereby ensuring that they are better prepared for periods of falling house prices and an increasing top-up collateral requirement. This will make the funding needs of the mortgage banks less sensitive to house price fluctuations. The increased funding need in normal times will not constitute a significant financing risk, as access to the financial markets must be assumed to be good in such times.

1 In this analysis, the funding need is understood as the mortgage banks' need to issue debt to meet an MREL and fund top-up collateral.

**Introduction**
The financial crisis showed that the government had to rescue failing credit institutions by using taxpayer funds to limit the negative implications for society. A similar situation can be avoided with credible resolution plans for credit institutions. Consequently, the EU Bank Recovery and Resolution Directive, BRRD[2], was adopted after the crisis. The BRRD is to ensure that, as far as possible, taxpayer funds are not used to deal with failing credit institutions.

When the BRRD was implemented in Denmark, the Danish mortgage banks were exempted from having to meet an MREL, cf. Box 1. Danmarks Nationalbank recommends abolishing this exemption so that a risk-sensitive MREL can be set for mortgage banks, which will ensure that credible and robust resolution plans can be prepared for mortgage banks and the groups they are part of – also in situations where the risks of the mortgage banks increase.[3]

An argument put forward against introducing an MREL for mortgage banks has been that it will increase their funding need and hence their financing risk and costs. However, Danmarks Nationalbank's calculations show that the financing costs of introducing an MREL for mortgage banks are small, as the requirement can be met by means of eligible senior debt.[4] If the mortgage banks choose to meet the MREL by means of senior debt, this will involve a continuous funding need, given the limited maturity of senior debt.[5] When assessing the associated financing risk, it must be taken into account that mortgage banks already have a continuous funding need as they are subject to a top-up collateral requirement for loans funded by means of covered bonds.[6] Top-up collateral can be financed by means of MREL funds.

The analysis examines how an MREL for the Danish SIFI mortgage banks[7] will affect their funding needs, taking into account the existing funding needs for top-up collateral. The funding need is examined for a steep dive in house prices, since the MREL and the top-up collateral requirement are both expected to rise when house prices fall sharply, which typically coincides with a general downturn in the economy. An increased funding need may be a particular challenge in periods when the economy deteriorates, as access to the market may be limited.

**An MREL will currently exceed the top-up collateral pledged**
The mortgage banks' statutory top-up collateral varies over time as house prices fluctuate. Following the strong fall in house prices in the years around the eruption of the financial crisis, they have risen in recent years, cf. Chart 1. As a result, the mortgage banks' statutory top-up collateral has fallen in the same period, cf. Chart 2. The actual top-up collateral has shown the same trend so that the excess cover relative to the statutory requirement has been more or less constant. One of the reasons why mortgage banks pledge excess top-up collateral is that they wish to maintain the high credit ratings of their bonds.

In the analysis, the MREL has been set at twice the total capital requirement including capital buffer requirements. This is consistent with the Danish Financial Supervisory Authority's approach to setting

2 Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms.

3 Cf. Danmarks Nationalbank, Resolution strategy for SIFI groups, *Danmarks Nationalbank Analysis*, No. 21, December 2017 (*link*); Danmarks Nationalbank, Recommendation for handling failing SIFI groups, *Danmarks Nationalbank Recommendation*, No. 1, November 2017 (*link*) and Danmarks Nationalbank, Consultation response concerning the bill to amend the Danish Financial Business Act, Anti-Money Laundering Act, Act on Alternative Investment Fund Managers, etc. and various other acts (part III), February 2018 (*link*).

4 Cf. Asbjørn Klein and Jacob Malte Svanborg, Too-big-to-fail can be solved inexpensively, *Danmarks Nationalbank Analysis*, No. 1, January 2017 (*link*).

5 The senior debt issued by Danish SIFIs has an average maturity of 5 years, cf. data from Bloomberg.

6 Cf. section 152a of the Danish Financial Business Act. If top-up collateral is not pledged, the bonds lose their covered bond status and become traditional mortgage bonds.

7 Realkredit Danmark, Nykredit Realkredit, BRFkredit, Nordea Kredit and DLR Kredit. For Nykredit Realkredit, Totalkredit is included in the calculations, while Nykredit Bank is not included.

## MREL and mortgage banks

Box 1

Own funds and eligible liabilities are equity and debt instruments suitable for absorbing losses and recapitalising an institution in a resolution situation. With the implementation of the BRRD, a minimum requirement was introduced for the own funds and eligible liabilities of credit institutions – i.e. an MREL. The purpose of imposing an MREL on the institutions is to ensure that they have sufficient own funds and liabilities for the resolution authorities to be able to implement the resolution strategy chosen, including use of the bail-in tool. The concept of bail-in means that senior and subordinated liabilities are written down or converted to shares or other equity in order to absorb losses and/or recapitalise a failing credit institution.

The Danish Financial Supervisory Authority requires that the MREL must be met using capital instruments and debt liabilities that bear losses before senior unsecured creditors in connection with resolution and insolvency, also known as the subordination requirement.[1] A new creditor class – non-preferred senior debt – that complies with the subordination requirement has been introduced.[2] To be characterised as non-preferred senior debt, the liability must have an original maturity of at least 1 year, it must not have derivative-like characteristics, and in the contractual documentation explicit reference must be made to the creditor class.

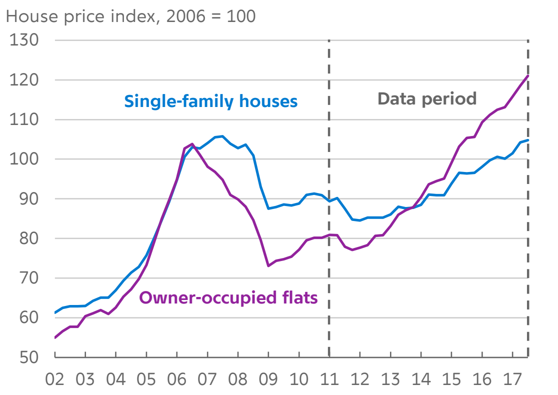
When the BRRD was implemented in Denmark, it was decided to exercise the option to exempt mortgage banks from bail-in, which entails that they are also exempted from the MREL.[3] Instead, they must meet a debt buffer requirement of 2 per cent of their unweighted lending.[4] Furthermore, it is required that the aggregate debt buffer, own funds and eligible liabilities of SIFI groups and SIFI mortgage banks make up at least 8 per cent of total liabilities and own funds. The debt buffer must be increased if this is necessary in order to meet the 8 per cent minimum requirement.[5] Since the requirement is not risk-sensitive, the authorities risk that it is insufficient to support the preferred resolution strategy if the risks of the mortgage banks increase.[6]

1. Cf. Danish Financial Supervisory Authority, Fact-sheet on the minimum requirements for own funds and eligible liabilities (MREL) for systemically important banks, March 2018 (*link*).
2. Cf. section 20 of the Act to amend the Danish Financial Business Act, etc. The Act entered into force on 1 July 2018 and applies to debt liabilities issued after 1 January 2018.
3. Cf. section 266(1) of the Danish Financial Business Act and section 24(4) of the Danish Act on Restructuring and Resolution of Certain Financial Enterprises.
4. Cf. section 125i(1) of the Danish Financial Business Act.
5. Cf. section 1, no. 21, of the Act to amend the Danish Financial Business Act, etc. The 8 per cent minimum requirement must be met by 1 January 2022.
6. Cf. Danmarks Nationalbank, Consultation response concerning the bill to amend the Danish Financial Business Act, Anti-Money Laundering Act, Act on Alternative Investment Fund Managers, etc. and various other acts (part III), February 2018 (*link*).

MRELs for systemically important banks.[8] Furthermore, it is assumed that the MREL as a minimum must amount to 8 per cent of total liabilities, as it is a requirement for access to the Resolution Fund that at least 8 per cent of total liabilities have been written down or converted.[9] Without access to the Resolution Fund, there is a risk of insufficient funds to cover the need for loss-absorption and recapitalisation in connection with very large losses. Danmarks Nationalbank's calculations show that in the period 2011-17, the 8 per cent requirement would have been higher for most mortgage banks than a

### Development in house prices

Chart 1




Note: The data period is the period for which the MREL and top-up collateral requirements for mortgage banks are examined.
Source: Statistics Denmark.

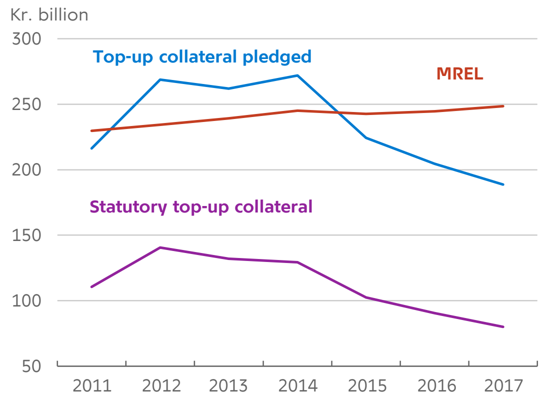
8 Cf. Danish Financial Supervisory Authority, Fact-sheet on the minimum requirements for own funds and eligible liabilities (MREL) for systemically important banks, March 2018 (*link*).

9 Cf. Article 44(5) of the BRRD and section 26(2) of the Danish Act on Restructuring and Resolution of Certain Financial Enterprises.

requirement of twice the total capital requirement including capital buffer requirements.

The total MREL for the mortgage banks would have exceeded their statutory top-up collateral in the period 2011-17, cf. Chart 2. However, compared to the top-up collateral actually pledged it would have been lower in 2011-14. Not until 2015 – when house prices had been rising for several years – would the MREL have exceeded the top-up collateral actually pledged. The mortgage banks are expected to opt for excess cover relative to a potential MREL, but it is uncertain how large this excess cover will be.

**Mortgage banks' aggregate MREL and top-up collateral** Chart 2




Note: The chart includes all Danish SIFI mortgage banks. The most recent observation is from the 3rd quarter of 2017. Other observations are from year-end.
Source: Danish Financial Supervisory Authority, financial statements and own calculations.

### The MREL funding need is more stable

In the analysis, the funding need is understood as the mortgage banks' need to issue debt to meet an MREL and fund top-up collateral. The funding need will depend on the volume of existing debt to be refinanced as well as the volume of new debt to be financed because the MREL or top-up collateral requirement changes.

As mentioned, the mortgage banks currently have a funding need arising from the top-up collateral requirement. Changes in this requirement mainly reflect fluctuations in house prices. If house prices plummet, the mortgage banks must fund large volumes of new top-up collateral. Conversely, the top-up collateral requirement is reduced when house prices rise. The need to fund top-up collateral can be a challenge to mortgage banks as it is a very volatile requirement and may rise sharply when house prices fall. A strong fall in house prices often coincides with a general economic downturn. The mortgage banks may have limited market access especially in periods when the economy deteriorates, and hence they may not be able to issue the debt instruments needed.

Relative to the top-up collateral requirement, the MREL is more stable, cf. Chart 2, and consequently fluctuations in the derived funding need will be smaller. However, the MREL is still risk-sensitive as it depends on the mortgage banks' risk exposure amount, REA. The REA varies with house prices: When house prices fall, the REA rises because the loans become riskier. As a result, the MREL increases. However, the minimum requirement of 8 per cent of total liabilities may cause the MREL to be unchanged.

### An MREL reduces the funding need in times of crisis

This section examines the mortgage banks' funding need in a scenario of a severe recession in 2017. It is assumed that house prices fall by 20 per cent in one year, and in combination with other factors this causes the risk exposures of Danish mortgage banks to rise by an average of 27 per cent.[10]

Before house prices dive, the mortgage banks' total MREL exceeds their top-up collateral requirement, but the latter increases so much in this scenario that it eventually exceeds the MREL. In the scenario, the top-up collateral requirement increases by kr. 167 billion, corresponding to 185 per cent, while the MREL is almost unchanged due to the 8 per cent minimum requirement. Without the 8 per cent minimum requirement, the MREL would rise by kr. 49 billion, corresponding to 27 per cent. This shows that the

10 Cf. aggregated calculations by the Danish Financial Supervisory Authority.

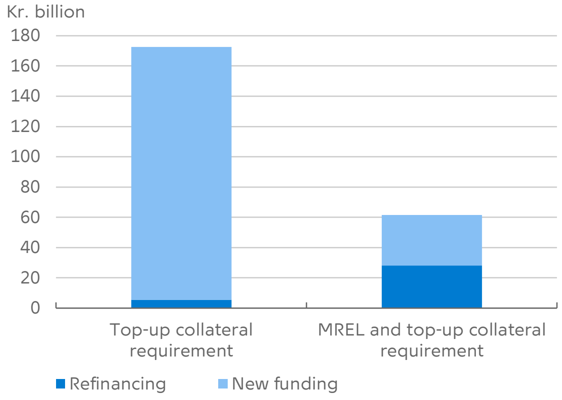
top-up collateral requirement is far more sensitive to changes in house prices than the MREL.

If the mortgage banks are comprised by a top-up collateral requirement only, they would have to fund kr. 172 billion in the scenario to continue to meet this requirement, cf. Chart 3. The funding need comprises kr. 5 billion to refinance existing top-up collateral and kr. 167 billion to fund new top-up collateral. If the mortgage banks choose to reduce their excess cover, the funding need is smaller.

By comparison, the mortgage banks need to fund only kr. 61 billion in this scenario if they are also subject to an MREL, cf. Chart 3. Of this, kr. 28 billion is to be used to refinance MREL funds already issued and kr. 33 billion to fund new issues as a result of an increase in the MREL or top-up collateral requirement. The reason for the lower funding need is that, because of the MREL, the mortgage banks have already issued a large share of the funds needed before house prices fall.

This scenario illustrates that under normal circumstances with stable or rising house prices the funding need will be higher if the mortgage banks are subject to an MREL as this involves a higher refinancing need. But with an MREL, the funding need will be lower in times of crisis and diving house prices as the increased funding need in normal times means that the mortgage banks are better prepared for periods of falling house prices. So an MREL will reduce the need to fund top-up collateral in bad times. In that way, the MREL makes the mortgage banks' funding need more stable. However, a more stable funding need is only a side benefit of introducing an MREL for mortgage banks, as the main objective of the MREL is to ensure that mortgage banks can be resolved without the use of taxpayer funds.

**Funding needs if house prices had fallen by 20 per cent in 2017** Chart 3




Note: The funding need has been calculated as the volume of existing senior debt to be refinanced plus the volume of new senior debt to be issued as a result of changes in the MREL or top-up collateral requirement. It is assumed that the mortgage banks wish to hold a constant level of excess cover relative to the top-up collateral requirement. Top-up collateral is funded by means of total capital, senior debt (including Junior Covered Bonds) and loss guarantees. The MREL is met by means of total capital and eligible senior debt. It is assumed that total capital and loss guarantees are perpetual, while senior debt has a maturity of 5 years.

Source: Danish Financial Supervisory Authority, financial statements and own calculations.

## ABOUT ANALYSIS

As a consequence of Danmarks Nationalbank's role in society we conduct analyses of economic and financial conditions.

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