

# DANMARKS NATIONALBANK

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## New financing of social housing strengthens the market for Danish government securities

- In 2018, the central government has purchased all government-guaranteed mortgage bonds issued for financing social housing. The government will also bid for such bonds in 2019.
- These purchases allow the central government to build up series of liquid government securities and maintain a broad range of on-the-run issues.
- The government's interest rate risk is independent of the coupon and maturity of the bonds purchased.

### New model for financing social housing

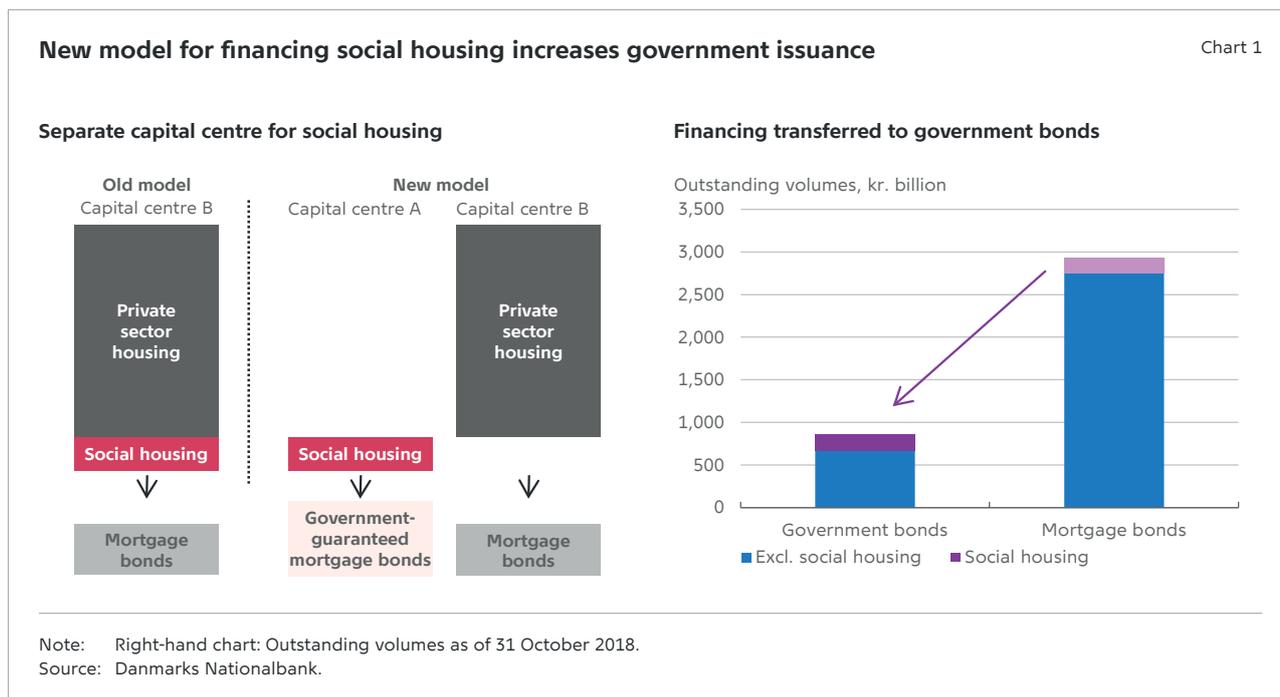
In November 2017, the Danish government decided that in future social housing in Denmark is to be financed via issuance of government-guaranteed mortgage bonds in separate capital centres. The capital centres are the legal entities in which the bonds issued, and the loans provided, are linked. This restructuring is expected to yield the government a saving of more than kr. 9 billion by 2025, primarily because interest costs will be lower.<sup>1</sup>

#### **Government guarantees reduce the government's interest costs**

In recent times, social housing has mainly been financed through mortgage bonds comprising mortgage loans for both social and private sector housing. In other words, social housing was financed on the same terms and conditions as those offered to private homeowners, cf. Chart 1 (left). By transferring mortgage loans for financing social housing to a separate capital centre, the government can guarantee the bonds. This reduces the financing costs as the creditworthiness of the central government is high.

When government-guaranteed mortgage bonds are issued via a separate capital centre, the series are, however, only built up to moderate volumes as the underlying pool of loans is smaller. In addition, the loans are distributed on a number of mortgage credit institutions.

1 Cf. Ministry of Transport, Building and Housing, press release (in Danish only), 23 November 2017 ([link](#)).

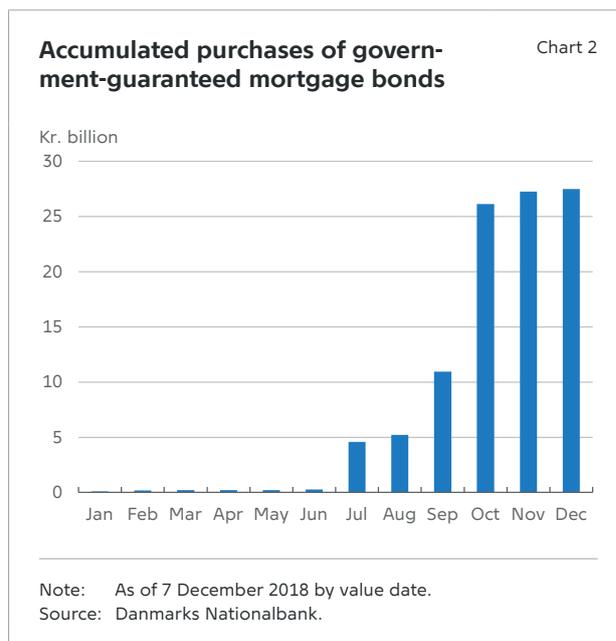


The government can achieve a further saving by purchasing the bonds and funding the purchases via issuance of government securities, for which the series are typically built up to around kr. 80 billion. This is because investors are willing to pay a premium for the higher liquidity of the government securities. Effectively, this corresponds to issuance of mortgage bonds in the market being substituted by increased sales of government bonds, cf. Chart 1 (right).

#### The central government bids for all issuances in 2018-19

Every year, the central government decides to which extent it will bid for the government-guaranteed mortgage bonds. For 2018-19 it has been decided that the government will bid in all auctions and ongoing tap sales. The government will offer a price whereby the yield corresponds to the yield on government bonds. Purchases are funded by issuing government securities.

In 2018, the central government has purchased all the government-guaranteed mortgage bonds issued, corresponding to approximately kr. 27 billion nominally, cf. Chart 2. By end-2019, the central government is expected to have purchased bonds for around kr. 80 billion. Today, the social housing sector has subsidised loans totalling approximately kr. 180 billion. Note that Danmarks Nationalbank publishes the central-govern-



ment holdings of government-guaranteed mortgage bonds on a monthly basis.<sup>2</sup>

The central government purchases government-guaranteed mortgage bonds irrespective of when the government securities are issued. Time differences are handled by drawing on the central government's account.

Purchases in 2018 were concentrated around the refinancing auctions on 2 July and 1 October. The purchases were funded as part of issuance of government securities on a continuous basis, cf. Chart 3.

Purchases were distributed on 50 different bond series issued by four mortgage credit institutions (Realkredit Danmark, Nykredit Realkredit, LR Realkredit and Jyske Realkredit (previously BRFKredit)) as well as KommuneKredit. Issuance of government securities was primarily concentrated on three bond series.

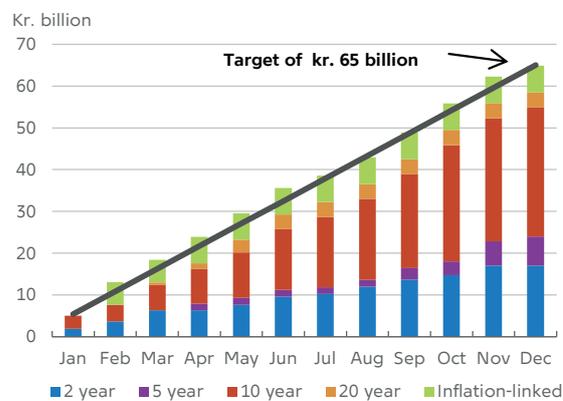
The purchases enables the central government to build up larger and more liquid series of government securities and to maintain a broad range of on-the-run issues at a time when funding requirements are low due to sound government finances.<sup>3</sup> Hence, the new model, whereby social housing is financed via government issuance, is not expected to have a negative impact on government yields.

### The mortgage credit institutions pay for government guarantees

Since the central government guarantees not only the bonds issued but also the loans, the mortgage credit institutions obtain a saving because they are exempted from capital requirements for government-guaranteed lending. Consequently, the institutions pay commission to the government for this guarantee, cf. Box 1.

### Even distribution of government issuance

Chart 3



Note: Accumulated sales of government bonds as of 7 December 2018.

Source: Danmarks Nationalbank.

### How much do the mortgage credit institutions pay to the central government?

Box 1

The mortgage credit institutions pay commission to the central government for the government guarantee. The guarantee commission has been set at 0.12 per cent of the original principal. As the mortgage loans are amortized on a continuous basis, this corresponds to a saving of around 0.20 per cent of the outstanding debt over the maturity of the loan.

In addition, the institutions pay "remuneration commission" of 0.03 per cent to the central government. The government reimburses this amount to the institutions on an annual basis if the government guarantee has not been invoked. This is meant to give the institutions an incentive to perform true and fair credit assessments and participate in the scheme for deteriorating social housing organisations (known as the "the fifths scheme").

<sup>2</sup> Cf. Danmarks Nationalbank's StatBank, Central-government finance and debt, Central government finance and debt by item (*link*).

<sup>3</sup> Cf. Danmarks Nationalbank, Central government borrowing strategy in 2019, *Danmarks Nationalbank Analysis (Strategy announcement)*, No. 25, December 2018.

## The central government's risk is unchanged

### Interest rate risk is integrated into the central government's risk management

The central government bears the risk that interest costs for financing social housing will rise (interest rate risk). This is because the government provides loan servicing subsidies, i.e. pays the part that exceeds the resident's payment, cf. Chart 4. So if interest rates go up, the government pays the additional amount in full. That is still the case under the new model.

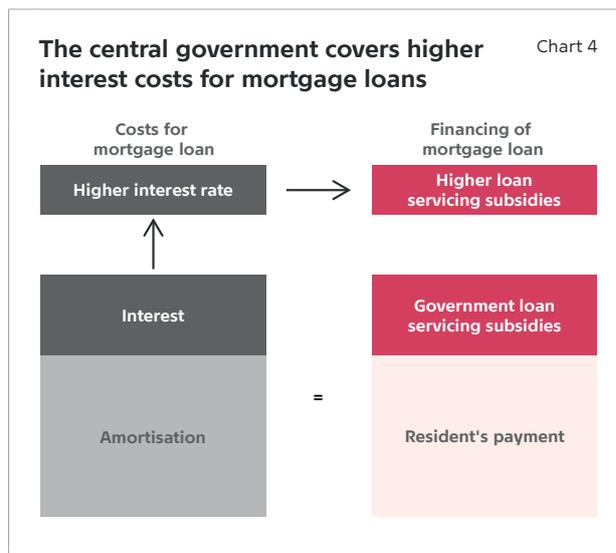
In recent years, the average maturity of mortgage bonds for financing social housing has been approximately eight years. This corresponds to the maturity of the government bonds issued. So the interest rate risk has been virtually the same for financing of social housing as for other government expenditure.

When the central government purchases government-guaranteed mortgage bonds, the interest rate risk is determined solely by the maturity of the government bonds issued. This means that the interest rate risk on financing of social housing is fully integrated into the risk management of government debt.

In other words, the government's interest rate risk is independent of the coupon and maturity of the government-guaranteed mortgage bonds purchased. Increased interest costs for financing social housing are matched by higher interest income from the bonds purchased.

### The central government's credit risk is virtually unchanged

Because the central government guarantees the loans, it assumes only the credit risk previously incurred by the mortgage credit institutions. The municipalities guarantee the risky part of the mortgage loans vis-à-vis the central government. In practice, this credit risk of the mortgage credit institutions is close to zero as they do not bear losses



until all municipal financial commitment has been lost. Typically, this will require a loss of around 65 per cent of the value of the property.<sup>4</sup> Furthermore, the Danish National Building Fund may subsidise the operations of struggling social housing organisations. Subsidies can also be provided in the form of capital injections, the housing organisation, municipality and mortgage credit institution each providing one fifth, while the Danish National Building Fund provides two fifths. Under the new model, the central government obtains a substantial saving without incurring a significantly greater risk.

## Government debt not affected, EMU debt increases

When the central government purchases government-guaranteed mortgage bonds by issuing government securities, the central government's assets and liabilities increase. The assets increase because the central government acquires a portfolio of government-guaranteed bonds backed by real estate. The liabilities, the central government's domestic debt, increase because more government securities are issued, cf. Chart 5 (left). Hence, the central government debt, which is calculated on a net basis, remains unchanged.

<sup>4</sup> Cf. Ministry of Housing, Urban and Rural Affairs, Den almene boligsektors effektivisering (streamlining of the social housing sector – in Danish only), report from working group on financing, efficient operation and fixing of rent in the social housing sector, 2014, Chapter 3 ([link](#)).

In an EU context, the debt is compiled based on EMU criteria and on a gross basis. In that compilation, only the central government's portfolio of bonds issued by KommuneKredit can be deducted. It is not possible to deduct government-guaranteed mortgage bonds.

So purchases of government-guaranteed mortgage bonds financed via issuance of government securities will increase the EMU debt. Denmark's EMU

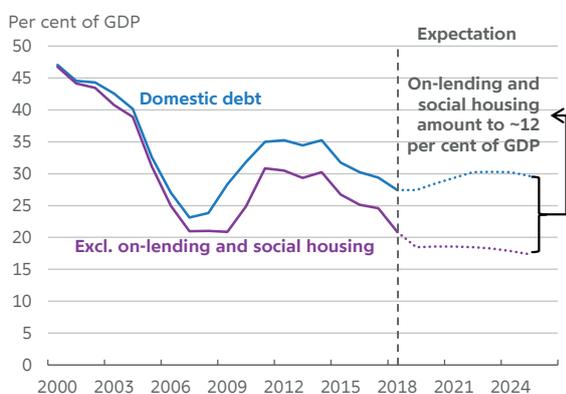
debt is expected to amount to 33 per cent of the gross domestic product, GDP, at end-2018, well within the EU requirement that it must not exceed 60 per cent of GDP, cf. Chart 5 (right).

In addition to the compilation of EMU debt, Eurostat publishes public sector guarantee commitments. In an EU context, the central government's purchases of guaranteed bonds can be offset in its guarantee commitments, which are thus reduced.

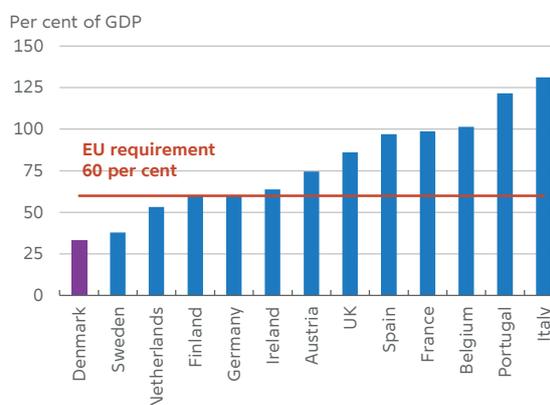
**Social housing increases the central government's domestic debt, but EMU debt remains low**

Chart 5

**Central government's domestic debt**



**EMU debt, selected EU member states**



Note: Right-hand chart: Estimate for end-of-2018.

Source: Danmarks Nationalbank, Denmark's Convergence Programme 2018, Economic Survey, December 2018, and the European Commission.

**ABOUT ANALYSIS**



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

Analyses are published continuously and include e.g. assessments of the current cyclical position and the financial stability.

The analysis consists of a Danish and an English version. In case of doubt regarding the correctness of the translation the Danish version is considered to be binding.

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