DANMARKS NATIONALBANK

15 DECEMBER 2016

STRATEGY ANNOUNCEMENT

Strategy for Danish central government borrowing and risk management in 2017

Unchanged targets for sales

The target for sales of government bonds and T-bills in 2017 is kr. 65 billion and kr. 30 billion, respectively, which is unchanged from 2016.

Focus on 2-year and 10-year bonds

The central government maintains a broad list of on-the-run bonds but issuance in 2017 will predominantly be in 2-year and 10-year nominal bonds. In 2017, a new 10-year bond maturing in 2027 and a new 2-year bond maturing in 2020 will be opened.

Policy is still focused on supporting liquidity

The government debt policy is still focused on supporting liquidity by being active in the secondary market.

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BANKING AND MARKET

Central government borrowing strategy in 2017

The target for sales of government bonds in 2017 is kr. 65 billion

The estimate for central government finances in 2016 improved by kr. 11 billion according to Economic Survey, December 2016. As a result, the balance on the central government's account at year-end is estimated to be higher than the kr. 75-100 billion assessed to be a sufficient liquidity reserve.

In 2017, the net financing requirement is expected to be kr. 26 billion, or 1.2 per cent of GDP. Including redemptions, the financing requirement in bonds is kr. 77 billion. The target for bond sales in 2017 is set at kr. 65 billion, enabling the build up of the volume of two new on-the-run issues to support market liquidity. The remaining kr. 12 billion is drawn on the central government's account, which is expected to be just over kr. 100 billion at the end of 2017, cf. Chart 1.

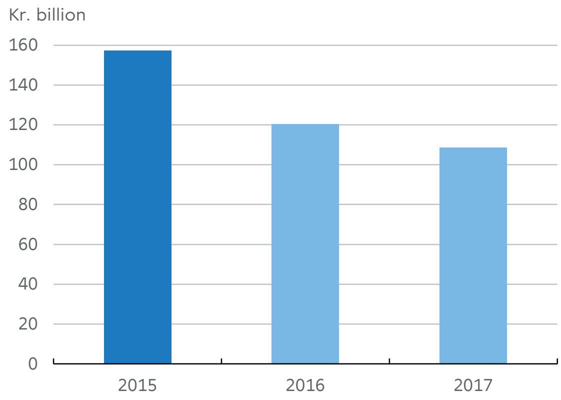
The central government maintains a broad list of on-the-run bonds with focus on 2-year and 10-year segments

The strategy for 2017 is to concentrate issuance in the 2-year and 10-year nominal maturity segments, in which new on-the-run bonds will be opened in 2017. Moreover, the on-the-run bonds will comprise a 5-year bond, the 2039 bond (which will be in the 20-year segment as from 2017), and an inflation--linked bond, cf. Table 1. The relatively broad list of on-the-run bonds is maintained as experience shows that demand for government securities can vary across issuance segments during a year.

New 10-year government bond to be opened on 25 January 2017

The time to maturity for the existing 10-year benchmark series, 1.75'2025, will be less than nine years at the beginning of 2017. That is why a new 10-year on-the-run series expiring in 2027 will be opened on 25 January 2017. The new bond will be the key on-

Gradual reduction of the balance on the central government's account Chart 1



Note: Balance on the central government's account at year-end. Estimates for 2016 and 2017.

On-the-run bonds in 2017 Table 1

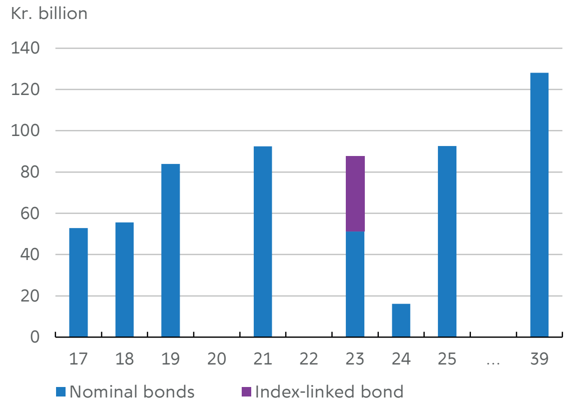
Segment	Outstanding volume, Kr. billion	Time to maturity, years	On-the-run issue/ new on-the-run issue
2-year nominal	55.6	2	0.25 per cent 2018/X per cent 2020
5-year nominal	92.5	5	3 per cent 2021
10-year nominal	92.6	9	1.75 per cent 2025/X per cent 2027
20-year nominal	128.0	23	4.5 per cent 2039
Index-linked bond	36.6	7	0.1 per cent inflation-linked loan 2023

Note: The outstanding volume is stated at nominal value as at 15 December. The index-linked bond is stated at indexed nominal value. The time to maturity is stated as at December 2016.
Source: Danmarks Nationalbank.

the-run bond. At the opening, the time to maturity will be just below 11 years, whereby it can be the 10-year benchmark issue for two years. The issuance policy will focus on building up the outstanding volume of the 2027 bond in order to support liquidity. The build-up can be advanced by use of switch operations. During the 1st half of 2017, the new 2027 bond will replace 1.75'2025 as the 10-year benchmark series.

New 2-year series to be opened during 2017
The time to maturity of the current 2-year on-the-run series, 0.25'2018, will be less than two years at the beginning of 2017. This is not enough for this series to be a 2-year on-the-run bond in the full year 2017. Hence, the strategy is to open a new 2-year on-the-run series during 2017. The new 2-year series will expire in 2020 and contribute to smoothing the central government's redemption profile, cf. Chart 2.

Redemption profile for domestic bonds Chart 2



Note: Stated as at 15 December 2016.

The target for the outstanding volume in the T-bill programme will be maintained

T-bills contribute to a flexible issuance policy and are a part of the central government's liquidity reserve. The target for the outstanding volume of T-bills at year-end 2017 is kr. 30 billion, which is assessed to be the lower limit for retaining investor interest. Two monthly T-bill auctions are held. New 6-month T-bills will be opened at the auctions with the first banking day in March, June, September and December, respectively, as the value date.

The central government still aims to support liquidity by playing an active role in the secondary market

The relatively concentrated issuance strategy may generate a need for supporting liquidity in the remaining series by being active in the secondary market.

In 2017, regular switch operations will be conducted twice a month. The dates will be announced in a calendar in the same way as the T-bill and bond auctions. The bonds offered will be announced one trading day before the switch operation at the latest. The switch operations support the primary dealers' opportunities to supply liquidity in the secondary market. Switches with a total market value of kr. 30 billion may be conducted, measured by the bond issued in the operation. Switches are not included in the target for issuance, but contribute to further build-up of the key on-the-run bonds.

The central government also supports the market via tap sales and buy-backs outside the switch operations. This gives the primary dealers an extra opportunity to buy and sell securities in smaller volumes outside the auctions, reducing the risk of trading in Danish government bonds. Buy-backs of bonds maturing in the current year allow investors to distribute their reinvestments across the year.

No issuance of foreign bonds in 2017

Foreign loans amounting to just over kr. 8 billion will fall due in 2017, and the central government's contribution to the foreign exchange reserve will be equivalently lower. All foreign loans will then be redeemed. The strategy is not to issue foreign bond loans in 2017.

The central government may raise short-term foreign loans via the European and US Commercial Paper programmes. This facilitates quick build-up of the foreign exchange reserve and contributes to the central government's liquidity reserve. Issuance in Commercial Paper in 2017 is possible on a limited scale in order to test the programmes.

Strategy for market risk management in 2017

Denmark's central government debt is very robust
The duration of Denmark's central government debt is high by international standards. The high duration can be attributed, inter alia, to the large outstanding volume in the 30-year bond and the relatively large balance on the government account.

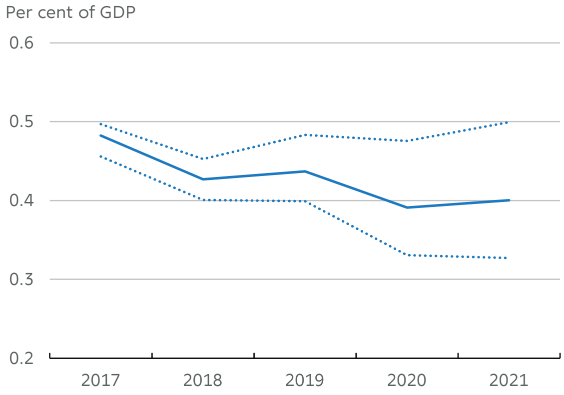
Estimates of the development in interest costs support the picture of a low central government interest rate risk. The central government's future interest costs are determined by developments in both government yields and the other items on the government budget. In the mean scenario, interest costs decline from 0.5 per cent of GDP in 2017 to below 0.4 per cent of GDP in 2020, cf. Chart 3, despite the deficit outlook for government finances. The effect of the current deficits is offset by the gradual pass-through of the low level of interest to a larger share of the government debt. GDP is expected to grow at the same time. Even if the future interest rates are at the upper end of the simulated distribution, the central government's interest costs will remain low.

The cost of maintaining a robust debt profile is found to be low
The current portfolio composition provides the capacity for reducing duration from the present level. This is supported by the relatively low government debt and by the central government's considerable liquidity reserve. The potential for reducing the robustness of the debt is thus primarily a question of whether reducing duration will save costs.

Long-term Danish government bond yields are at a very low level. Despite the low long-term interest rates, the immediate saving from reducing duration, expressed as the slope of the yield curve, is close to the average for the last 15 years, cf. Chart 4. However, the objective is to ensure the lowest possible long-term costs. This assessment requires estimation of term premia.

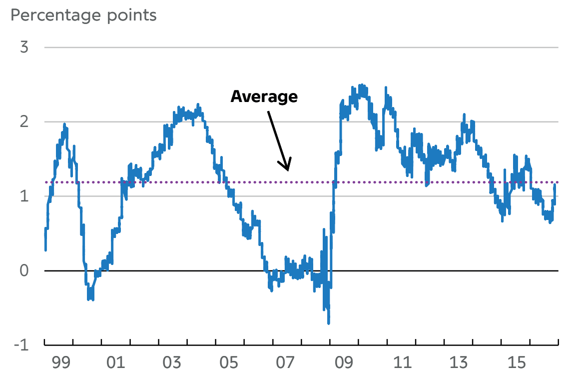
The current level of term premia indicates that the expected annual saving from ongoing issuance of very short-term bonds over the next 10 years, rather than issuing a 10-year bond today, is close to zero, cf. Chart 5. The estimation is subject to uncertainty, but the perception of low term premia is supported by, inter alia, international studies based on Euro-

Central government interest costs remain low in the projection Chart 3



Note: Distribution of future net interest costs based on a technical projection of the debt and 20,000 simulated scenarios from an interest rate model. Net interest costs comprise interest costs on the government debt less interest income from the government funds, on-lending and the balance on the central government's account.
Source: Ministry of Finance and own calculations.

The slope of the Danish government yield curve is close to average Chart 4



Note: The slope is defined as the difference between a 10-year and a 1-year par yield.
Source: Nordea Analytics.

pean government bond yields. As a consequence of the low term premia, the central government pays a limited premium for maintaining a robust portfolio composition with high duration.

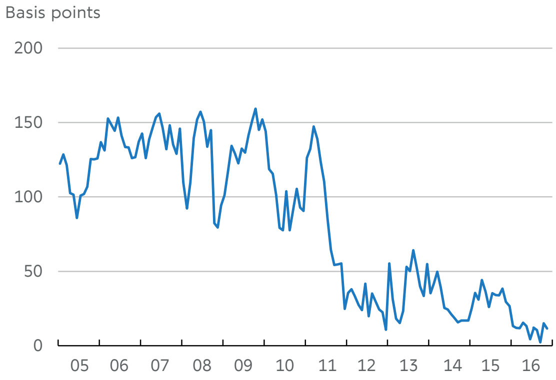
The robust debt profile is maintained

In the current situation, the saving from reducing duration is assessed to be limited. In addition, there is a limit to how much further short-term interest rates can fall, whereas potential interest rate increases are not subject to such a limit.

Due to the opening of two new bonds in 2017, the duration of issuances will be slightly higher in 2017 compared to 2016. Despite the increase in the duration of issuance, the duration of the debt portfolio is estimated to decline to around 11 years by the end of the year. This reflects a shorter time to maturity for the existing debt and a reduction of the balance on the central government's account. The target band for the average duration in 2017 is set at 11.0 years ± 0.5 year, calculated without discounting.

The 10-year term premium is close to zero

Chart 5



Note: The term premium is defined as the difference between a 10-year zero coupon yield and the geometric average of short-term yield projections over the next 10 years.
Source: Own calculations.

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