## DANMARKS NATIONALBANK

## DANISH GOVERNMENT BORROWING AND DEBT





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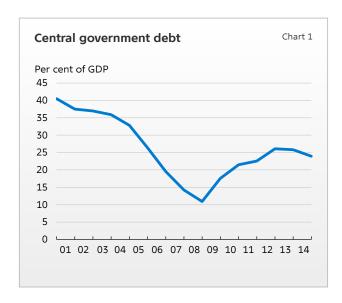
# HIGHLIGHTS OF GOVERNMENT DEBT POLICY

## **DEBT AND BORROWING IN 2014**

#### **DECREASE IN CENTRAL GOVERNMENT DEBT**

At the end of 2014, the Danish central government debt amounted to kr. 458 billion, equivalent to 24 per cent of GDP or approximately kr. 81,000 per capita. The central government debt fell by 2 per cent of GDP from 2013 to 2014, cf. Chart 1, as a result of the government budget surplus. The Danish government debt has the highest possible rating (AAA/Aaa) from the largest international credit rating agencies, due to, inter alia, the low debt level and its composition of long-term liabilities. Moreover, the central government's contingent liabilities are also moderate, cf. Chapter 6: On-lending and Government Guarantees.

The central government's interest costs totalled 0.8 per cent of GDP in 2014. This is a decline on



2013, which can be attributed to both the debt reduction and lower financing costs.

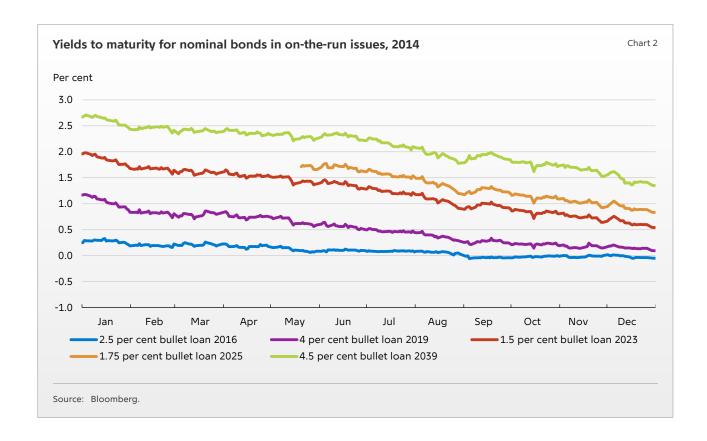
#### LOW INTEREST RATES ON ISSUANCE

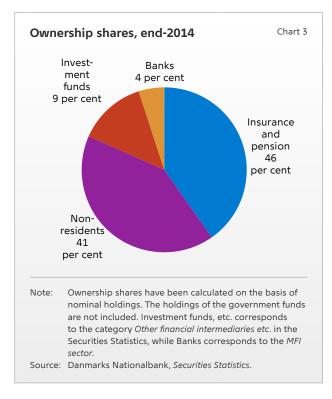
Danish government bonds were issued at historically low yields in 2014. The average yield to maturity on nominal issuance was 1.1 per cent. The low financing costs were mainly attributable to the strong decline in interest rates for the longer maturity segments throughout the year, cf. Chart 2. The development in interest rates should be seen in light of expectations of growth and inflation in the euro area declined throughout the year.

## SOLID DEMAND FOR DANISH GOVERNMENT SECURITIES

Domestic bond issuance by the central government in 2014 amounted to kr. 103 billion at market value. Bonds were issued in all on-the-run issues, but primarily in the long maturity segments, especially in the 10-year nominal maturity segment, in accordance with the strategy. This resulted in an average time to maturity of the bonds issued of 9.3 years.

Demand for Danish government securities was substantial among both Danish and international investors, with solid bid volumes at auctions throughout the year. At the end of 2014, most of the securities were held by the domestic insurance and pension sector and non-resident investors, cf. Chart 3.





#### STRATEGY FOR 2015

## **DOMESTIC BORROWING**

A financing requirement of kr. 135 billion is estimated for 2015. At the beginning of 2015, the

target for issuance of domestic bonds was kr. 75 billion, and the target for outstanding volumes in the T-bill programme was kr. 30 billion at the end of the year. The strategy implied a gradual reduction of the recent years' prefunding.

On 30 January 2015 the Ministry of Finance decided, upon the recommendation of Danmarks Nationalbank, to suspend the issuance of government bonds. Given the currency situation, it was no longer appropriate to reduce the issuance of government bonds over several years. The purpose of suspending the issuance of government bonds was to reduce the interest-rate spreads in the longer maturity segments and thereby limit the inflow of foreign exchange. A new strategy for sales of government bonds will be announced when a decision to resume issuance is made. The balance on the central government's account at Danmarks Nationalbank is more than sufficient to cover the financing requirement in 2015.

#### **FOREIGN BORROWING**

At the beginning of 2015, the strategy was to raise a foreign loan with final exposure in euro for up to kr. 10 billion. The strategy entailed a reduction of the foreign debt as a result of foreign redemptions of kr. 21 billion. On 30 January, issuance of foreign bond loans was suspended until further

notice due to inflow of foreign exchange. The strategy to issue Commercial Paper in 2015 to the same extent as in the preceding years remains in force.

## MARKET RISK MANAGEMENT

The target for the average duration of the central government debt is 12.5 years ± 1 year in 2015. The high duration ensures a robust debt structure where rising interest rates will be passed through very slowly to the central government's interest costs. The target has been increased by one year relative to 2014. The principal reason is that the expected additional costs of higher duration are found to be very low under the current market conditions. The decision to suspend the issuance of government bonds only affects the duration of the debt to a limited extent.

## REPORT SECTION



## 1

## DOMESTIC BORROWING

In 2014, government bonds totalling kr. 103 billion were issued. Demand was substantial from both Danish and international investors. The focus was on long-term issuance, especially in the 10-year maturity segment. On average, nominal bonds were issued at a historically low interest rate of 1.1 per cent and an average maturity of just over 9 years. Demand for the various maturity segments varied over the year, highlighting the importance of broad-based on-the-run issues.

Major unexpected budget improvements at the end of 2014 resulted in the build-up of the balance on the central government's

account to a level that is assessed to be considerably higher than necessary. In order to ensure continuity in bond issuance, the strategy was to gradually reduce the balance on the account rather than to reduce issuance substantially in 2015. Against this backdrop, the target for issuance of domestic bonds was set at kr. 75 billion in 2015, while the target for the outstanding volume of T-bills was maintained at kr. 30 billion.

In light of the inflow of foreign exchange at the beginning of the year, the Ministry of Finance decided, upon the recommendation of Danmarks Nationalbank, to suspend the issuance of government bonds.

## **DOMESTIC BORROWING IN 2014**

## FINANCING REQUIREMENT

In June 2014, the target for bond issuance was raised from kr. 75 billion to kr. 100 billion, while the outstanding volume of T-bills was maintained at kr. 30 billion, cf. Table 1.1. This implied prefunding of a high expected financing requirement in 2015. In the 2nd half of 2014, the government

budget improved by approximately kr. 50 billion, partly due to significantly higher one-off revenue at the end of the year as a result of capital pension restructuring. Hence, the expected deficit was reversed to a surplus and the prefunding was considerably higher than expected.

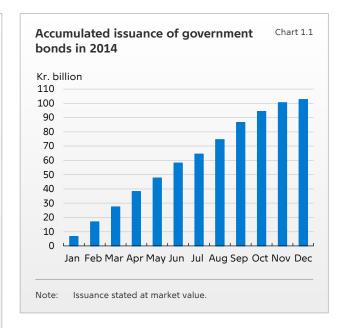
	entral government's domesti cing requirement	c <sup>1</sup>	Table 1.1
Kr. bill	ion	Mid- 2014	End 2014
Dome	stic net financing requirement	30	-21
	nptions on domestic long-term nment debt, etc.	54	55
	anding volume of T-bills, ning of year	32	32
Dome	stic financing requirement	116	66
Outsta	anding volume of T-bills,	100	103
year-e		30	30
Drawi accou	ng on central government's nt <sup>1</sup>	-14	-66
	Mid-2014 is based on Budget Outlook the borrowing strategy announced in 2014 are final figures for the financing borrowing. Drawing on the central gov is exclusive of the impact of foreign bo: Ministry of Finance and own calculations agative sign indicates prefunding.	lune 2014. requirement's rrowing.	End- nt and

#### SALES OF DOMESTIC GOVERNMENT BONDS

Domestic bond issuance by the central government in 2014 amounted to kr. 103 billion at market value. Demand was substantial from both Danish and international investors. The year saw solid bids at the auctions with an average bid-to-cover<sup>1</sup> that was slightly higher than in the preceding years. Issuance was fairly evenly distributed over the year, cf. Chart 1.1.

Bonds were issued in all on-the-run issues, but most of the issuance took place in the long maturity segments, especially in the 10-year nominal segment, cf. Table 1.2. This resulted in an average time to maturity of the bonds issued of 9.3 years. Nominal bonds were issued at an average yield to maturity of 1.1 per cent, which was historically low.

The reason for the low financing costs was mainly the strong decline in interest rates for the longer maturity segments throughout the year,

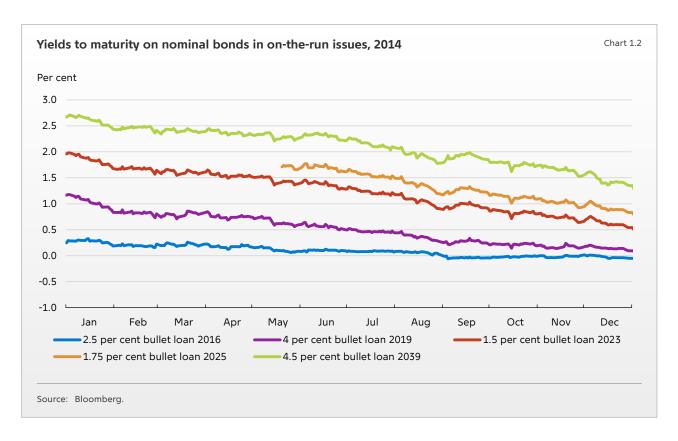


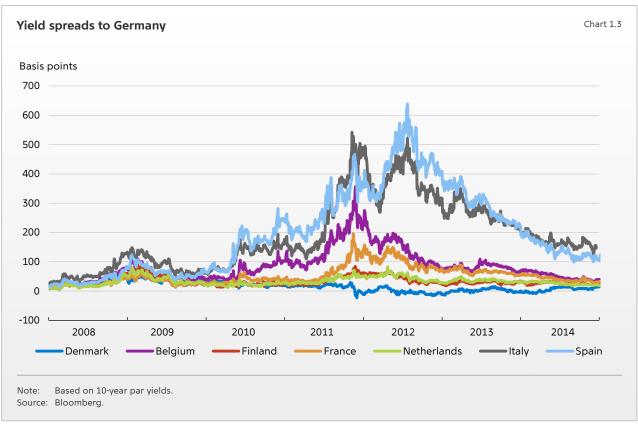


cf. Chart 1.2. Interest rate developments should be seen in light of expectations of growth and inflation in the euro area declined througout the year. Towards the end of the year, expectations of a new purchasing programme from the ECB contributed to further falls in interest rates.

The fall in interest rates in 2014 was accompanied by a further narrowing of yield spreads to

<sup>1</sup> The ratio between bids and the volume sold at an auction.





Germany for most euro area member states, cf. Chart 1.3. The decline in the yield spreads of the peripheral euro area member states reflects the gradual structural improvement of those member states' public finances. In addition, the low level of interest rates in the core member states may have increased investor appetite for more risky bonds in their search for higher returns. The Danish yield

#### Market developments in early 2015

Box 1.1

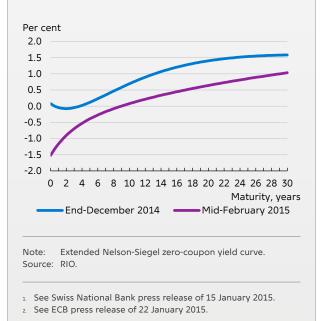
Two events dominated the European sovereign debt markets in early 2015.

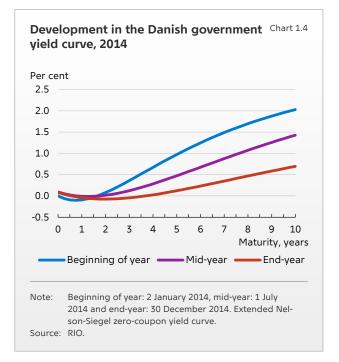
On 15 January, the Swiss National Bank chose to discontinue the minimum exchange rate of 1.2 francs per euro. At the same time, the Swiss National Bank lowered the sight deposit rate by 50 basis points to -0.75 per cent.¹ The discontinuation of the minimum exchange rate led to substantial volatility in the financial markets and caused the Swiss franc to strengthen.

On 22 January, the ECB announced an expansion of its existing asset purchase programme to include government bonds and government-guaranteed bonds. The combined monthly purchases are expected to amount to 60 billion euro and will continue until at least September 2016. The objective of the asset purchases is to facilitate access for households and firms to cheap funding in order to stimulate the economy in a situation where monetary policy interest rates are close to zero and the rate of price increase is some distance from the ECB's inflation target.² Although the market had expected the decision to expand the asset purchase programme, the size of the programme exceeded market expectations.

Danish government yields have declined markedly across all maturities relative to the level at the end of 2014, cf. the chart. In light of an increased inflow of foreign exchange at the beginning of the year, Danmarks Nationalbank lowered the monetary policy interest rates, which resulted in lower government yields for the short maturities. On 30 January, 2015 the Ministry of Finance decided, on the recommendation of Danmarks Nationalbank, to stop issuing government bonds. This contributed to lower interest rates and a negative spread to Germany across the yield curve.

## Danish government yield curve, end-2014 and mid-February 2015





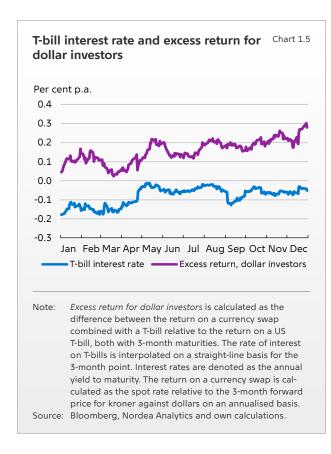
spread to Germany was still among the narrowest in Europe.

Danish government bond yields declined considerably in early 2015, cf. Box 1.1, which resulted in a negative spread to Germany for the entire yield curve.

## **VARYING DEMAND ACROSS MATURITY SEGMENTS**

Central government debt policy normally attaches importance to having broad-based on-the-run issues in order to be able to meet fluctuations in demand. At the beginning of 2014, demand was concentrated on short maturity segments despite interest rates close to zero. The subdued demand for long-term bonds reflected, among other things, that many investors expected the strong decline in the price of long-term bonds at the end of 2013 to continue in 2014. This led to a temporary overweight of issues in the short maturity segments during the first months of the year.

The economic indicators for the euro area were disappointing during the spring, which contributed to creating expectations of a low level of interest rates over a lengthy period. Against this backdrop, demand for the longer maturity segments increased, leading to a flattening of the yield curve, cf. Chart 1.4. In the course of the 2nd half of the year, the distribution of the issues was brought into compliance with the strategy of mainly issuing bonds in the longer maturity segments.



#### **SALES OF T-BILLS**

The outstanding volume of T-bills was kr. 30 billion at end-2014, which was in accordance with the target set. Generally speaking, demand was

high, especially from non-resident investors, and issuance took place at negative interest rates throughout most of the year. The strong interest from abroad was primarily attributable to the fact that investors were able to achieve excess returns of 10-20 basis points by swapping dollars to Danish kroner and placing the amount in Danish kroner in Danish T-bills, relative to direct placement in US T-bills, cf. Chart 1.5.<sup>2</sup>

#### **BUY-BACKS IN 2014**

In 2014, regular buy-back auctions were held for 2 per cent bullet loan 2014 and 4 per cent bullet loan 2015. The need for central government buy-backs in the shortest term series was limited, as demand was extraordinarily strong from non-resident investors due to the imbalance in the dollar swap market, cf. above.

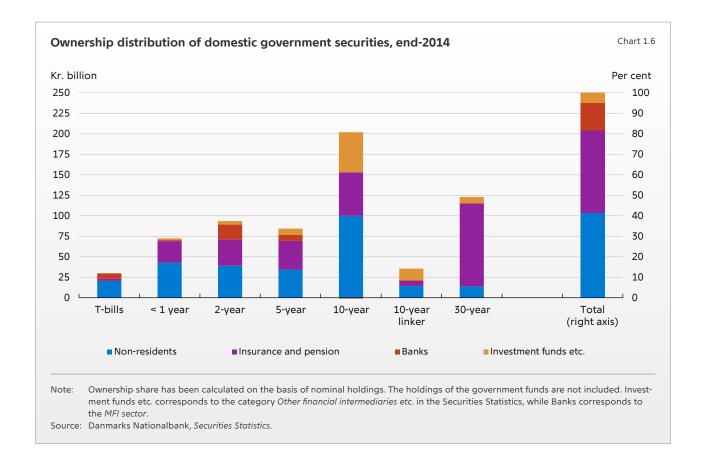
The placement needs of the government funds were primarily met by buying back securities in the longer maturity segments, cf. Table 1.3.

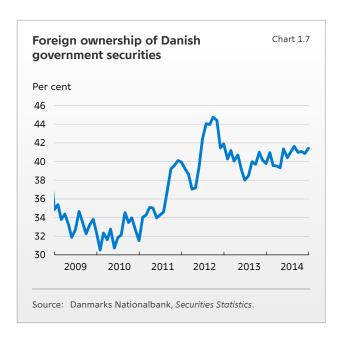
## BROAD GROUP OF INVESTORS IN DANISH GOVERNMENT SECURITIES

Danish government bonds are held by a broad group of investors, and issuance in several maturity segments contributes to investor group diversification. As in previous years, the two largest

			Fund for Better		
			orking Environ-		
	Central	Social Pension me	ent and Labour		,
Kr. million	government	Fund	Retention	Denmark	the market, tota
2.0 per cent bullet loan 2014	6,163	-327	45	76	5,95
4.0 per cent bullet loan 2015	2,715	-2,715	106		10
3.0 per cent bullet loan 2021		1,949		2,466	4,41
1.5 per cent bullet loan 2023		586		480	1,06
7.0 per cent bullet loan 2024		308			30
Total, Danish government securities	8,878	-199	151	3,022	11,85

<sup>2</sup> For a more detailed description of the imbalance between kroner and dollars in the currency swap market, see Mindested, Toftdahl and Risbjerg, The Danish money market at low interest rates, Danmarks Nationalbank, Monetary Review, 4th Quarter 2012, Part 1.





groups of investors were the domestic insurance and pension sector and non-resident investors, cf. Chart 1.6. The insurance and pension sector has a particularly high ownership share in the 30-year maturity segment.

Non-resident investors hold significant ownership shares in all government securities up to and including the 10-year segment, including of the inflation-linked bond. Non-resident ownership has grown in recent years. In 2011-12, demand for Danish government bonds increased due to the sovereign debt crisis in Europe, cf. Chart 1.7. During that period, several institutional investors, especially outside Europe, created new investment mandates in Danish government securities. Due to the crisis, investment of central banks' foreign exchange reserves in particular diversified into smaller government securities markets with high ratings. In 2013, uncertainty in the European government securities markets gradually declined, which meant that non-resident investors no longer used Denmark as a safe haven to the same extent. The reduction in non-resident ownership from end-2012 to mid-2013 was partially recovered in 2014. Overall, non-resident ownership grew by approximately 10 percentage points since the beginning of 2011.

## **ISSUANCE STRATEGY FOR 2015**

A financing requirement of kr. 135 billion is estimated for 2015, mainly reflecting redemptions on domestic debt, cf. Table 1.4. As a result of the

Kr. billi	on	2014	2015
Domes	stic net financing requirement	-21	34
	ptions on domestic long-term nment debt, etc.	55	72
	nding volume of T-bills, iing of year	32	30
Domes	stic financing requirement	66	135
Financi	ing:		
	ing: ce of domestic bonds	103	7 (75)
Issuan		103	7 (75) 30 (30)
Issuan Outsta	ce of domestic bonds  nding volume of T-bills, year-end  ng on central government's		

the inflow of foreign exchange.<sup>3</sup> A new strategy for sales of government bonds will be announced when a decision to resume issuance is made. The balance on the central government's account at Danmarks Nationalbank is more than sufficient to cover the financing requirement in 2015. If no further government bonds are issued in 2015, the balance on the central government's account is expected to be around kr. 100 billion at year-end.

#### **Buy-backs and switches**

Buy-backs can be made if the market prices are deemed to be fair, for example in relation to the prices of government issues. As a general rule, buy-backs cannot be conducted in key on-the-run issues. Buy-backs take place via auctions, on tap or via switch auctions. In 2015, regular buy-back auctions will be held for 4 per cent bullet loan 2015.

unexpected improvement in the government budget at the end of 2014, the central government's liquidity reserve, in the form of the balance on the central government's account at Danmarks Nationalbank, increased to kr. 213 billion at the end of 2014. That level is assessed to be considerably higher than necessary. At the beginning of 2015, the target for issuance of domestic bonds was kr. 75 billion, and the target for outstanding volumes in the T-bill programme kr. 30 billion at the end of the year. This entailed expected drawing on the central government's account of kr. 30 billion in 2015.

1. A negative sign indicates prefunding.

On 30 January 2015, the Ministry of Finance decided, upon the recommendation of Danmarks Nationalbank, to suspend the issuance of government bonds. Given the currency situation, it was no longer appropriate to reduce the issuance of government bonds over several years. The purpose of suspending the issuance of government bonds was to reduce the interest-rate spreads in the longer maturity segments and thereby limit

<sup>3</sup> Danmarks Nationalbank's reductions of the monetary policy interest rates had widened the negative spread between money market interest rates in Denmark and the euro area, while the yield spreads for government bonds remained positive for the longer maturity segments, cf. press release 30 January 2015.

## 2

## FOREIGN BORROWING

In 2014, the central government raised a 3-year dollar loan of 1.5 billion dollars. The loan was swapped to 1.1 billion euro, corresponding to kr. 8.1 billion. The central government's foreign debt was reduced due to redemptions of kr. 26 billion.

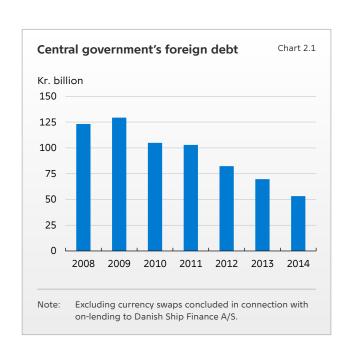
At the beginning of 2015, the strategy was to raise a foreign loan with final exposure

in euro for up to kr. 10 billion. The strategy entailed a reduction of the foreign debt as a result of foreign redemptions totalling kr. 21 billion. In light of the inflow of foreign exchange, the issuance of foreign bond loans was suspended on 30 January 2015 until further notice.

## **FOREIGN BORROWING IN 2014**

In 2014, the central government's foreign borrowing consisted of a 3-year dollar loan of 1.5 billion dollars, cf. Box 2.1. The loan is in line with the strategy of recent years of raising one foreign loan with final exposure in euro for up to kr. 10 billion. With total redemptions on foreign bond loans and swaps in 2014 of just under kr. 26 billion, the central government's contribution to the foreign exchange reserve¹ was reduced from just under kr. 70 billion at end-2013 to kr. 53 billion at end-2014, cf. Chart 2.1.

<sup>1</sup> Corresponds to the central government's foreign debt excluding currency swaps concluded in connection with on-lending to Danish Ship Finance A/S.

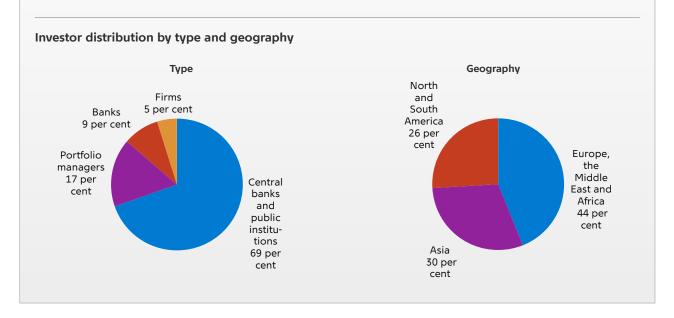


On 11 March 2014, the central government issued a syndicated 3-year loan of 1.5 billion dollars. BNP Paribas, HSBC, J.P. Morgan and Nordea were lead managers. The yield to maturity in dollars was 0.9 per cent, corresponding to mid-swap -2 basis points or 13 basis points higher than a corresponding US government bond.

As in previous years, the syndicate banks were asked to quote a price for a currency swap at a notional value of 0.5 billion dollars. A swap was entered with the bank quoting the best price. The remainder of the loan was swapped with

Danmarks Nationalbank on the same terms. Hence, the loan proceeds were swapped to 1.1 billion euro with a fixed 3-year yield to maturity in euro of 0.48 per cent, which was in line with the interest rates on issuances with the same maturity in the Netherlands and France.

Investor interest in the issuance was high. Central banks and public institutions accounted for the majority of the issuance, and there was a wide geographical distribution of investors from many parts of the world, cf. the chart below.

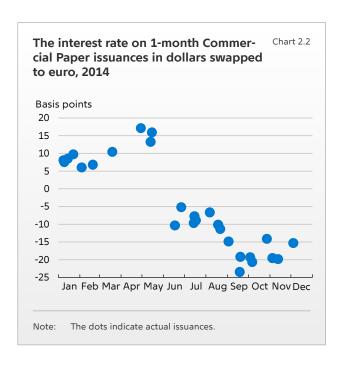


## **ISSUANCE OF COMMERCIAL PAPER**

Commercial Paper is issued to a limited extent through the central government's two Commercial Paper programmes, USCP (USA) and ECP (Europe). The outstanding amount of Commercial Paper totalled around kr. 5 billion in 2014, which was in line with the preceding years. Issuance in both programmes was primarily in dollars. This reflects that imbalances in the currency swap market in large parts of the year made it more advantageous for the central government to issue in dollars combined with a currency swap to euro rather than to issue directly in euro. A widening of the Eurodollar basis swap let to issuances at negative interest rates after the swap to euro in the 2nd half of 2014, cf. Chart 2.2.

#### Changes in the USCP programme in 2015

The legal basis of the USCP programme was updated in January 2015. This took place in connection with Bank of America replacing JP Morgan as Issuer and Payer Agent. At the same time, the



number of dealers in the programme was increased from three to five. The two new dealers are Citibank and Goldman Sachs, cf. Chapter 5.

## **ISSUANCE STRATEGY FOR 2015**

The central government raises loans in foreign currency in order to maintain the foreign exchange reserve. The foreign funding rule entails that, as a general rule, the central government issues debt denominated in foreign currency equivalent to the redemptions on the foreign debt. It is possible to depart from the general rule in the event that Danmarks Nationalbank wishes to expand or reduce the foreign exchange reserve.

The strategy is to issue an annual syndicated foreign loan with final exposure in euro for up to kr. 10 billion. As a result of the inflow of foreign exchange at the beginning of the year, it was decided to suspend foreign issuance until further notice.

The strategy is still to issue Commercial Paper to the same extent in 2015 as in the preceding years. With redemptions totalling kr. 21 billion, cf. Table 2.1, the foreign debt is expected to be reduced further in 2015.

Foreign redemptions			Table 2.1
Kr. billion	2015	2016	2017
Euro loans	11.2	9.3	-
Dollar loans	10.2	8.6	8.1
Loans in Swedish kronor	-	2.2	-
Total	21.3	20.1	8.1

Note: Including currency swaps related to the individual loans, but excluding currency swaps concluded in connection with on-lending to Danish Ship Finance A/S.

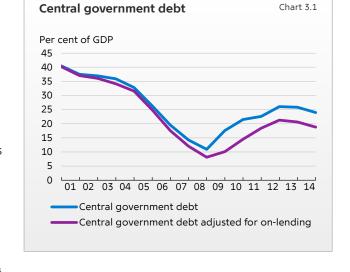
# DEBT AND INTEREST COSTS

The government budget surplus in 2014 led to a decrease in the central government debt from 26 per cent of GDP in 2013 to 24 per cent of GDP in 2014. The debt is low compared with the level in other EU member states, which has contributed to the highest possible rating of Danish govern-

ment securities (AAA/Aaa) from the largest international credit rating agencies. The central government's interest costs amounted to 0.8 per cent of GDP in 2014. This a decline relative to 2013, reflecting both the debt reduction and lower financing costs.

## CENTRAL GOVERNMENT DEBT REMAINED LOW IN 2014

The Danish government debt has the highest possible rating (AAA/Aaa) from the largest international credit rating agencies<sup>1</sup>, due to, inter alia, the low debt level and the composition of long-term liabilities. The decline in central government debt as a percentage of GDP in the last two years represents a turning point after the debt accumulation seen during the financial crisis, cf. Chart 3.1. A part of the central government debt reflects borrowing on behalf of government-owned companies. Adjusted for such on-lending the central government debt amounted to 19 per cent of GDP in 2014.



<sup>1</sup> See Appendix Table 8.1 and 8.2 for an overview of the current ratings from Moody's, Standard & Poor's, DBRS Rating and Fitch Ratings.

Composition of central government debt			Table 3.1
Kr. billion, year-end	2012	2013	2014
Domestic debt	668	664	698
Foreign debt	90	76	59
Collateral for swaps <sup>1</sup>	-	4	4
Central government's account at Danmarks Nationalbank	-162	-162	-213
Social Pension Fund	-93	-82	-75
Innovation Fund Denmark	-14	-12	-14
Fund for Better Working Environment and Labour Retention	-2	-1	-1
Central government debt	487	487	458
Central government debt, per cent of GDP	26.1	25.8	24.0

Note: A positive sign denotes a liability. A negative sign denotes an asset. The central government's account includes the funds' balance on the account. Domestic debt is exposed in kroner, and foreign debt is exposed in foreign exchange.

Source: Central government's accounts 2012 and 2013. Figures for 2014 are provisional figures from the central government's accounting.

1. The debt item is offset by an equivalently larger balance on the central government's account resulting from collateral for the swap portfolio.

## COMPOSITION OF THE CENTRAL GOVERNMENT DEBT

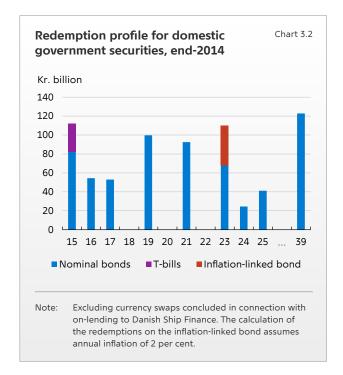
The central government debt is calculated as the nominal value of domestic and foreign debt less the balance on the central government's account at Danmarks Nationalbank and the assets of the three government funds, cf. Table 3.1.

## DOMESTIC DEBT AND THE CENTRAL GOVERNMENT'S ACCOUNT

Due to the government budget surplus, the central government debt fell in 2014, but domestic debt rose despite the surplus. This can be attributed to substantial overfinancing in 2014, cf. Chapter 1, which led to a marked increase in the balance on the central government's account.

The outstanding volume of domestic bonds is characterised by a relatively long time to maturity, cf. Chart 3.2. This reflects recent years' strategy of issuing predominantly in the long maturity segments. This has contributed to reducing the central government's interest rate and refinancing risks.

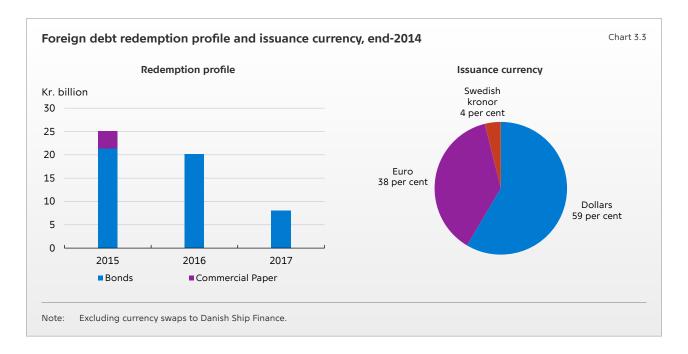
Most of the domestic debt consists of fixedrate bond loans. The T-bill programme and the inflation-linked bond account for a smaller share. In addition, the central government has a small



amount of outstanding interest rate swaps at variable rate.

#### **FOREIGN DEBT**

The central government's foreign debt was reduced by kr. 17 billion in 2014, to kr. 59 billion at



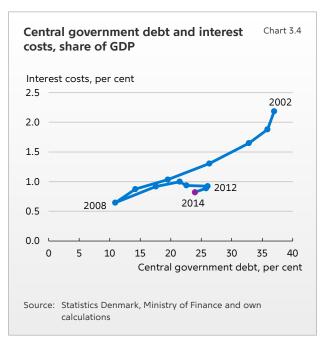
end-2014.<sup>2</sup> The debt will fall due within the next three years, cf. Chart 3.3, left. This is attributable to recent years' issuance in 3-year maturities rather than longer maturities. Given the diminishing foreign issuance volume, issuance in shorter maturity segments ensures that the securities can still be built up to benchmark size. Just over half of the foreign debt has been issued in dollars, cf. Chart 3.3, right. Loans in other currencies than euro are combined with currency swaps to euro. As a result, the foreign debt has a low exchange rate risk.<sup>3</sup>

## LOW INTEREST COSTS

Despite the increase in the central government debt from 2008 to 2012, interest costs were maintained at a low level on account of the strong drop in interest rates in this period, cf. Chart 3.4. Over the last two years, interest costs have declined even more due to the decreasing central government debt and further drops in interest rates. In total the interest costs on the central government debt amounted to kr. 15.7 billion or 0.8 per cent of GDP in 2014, cf. Table 3.2.



<sup>3</sup> Denmark pursues a fixed exchange rate policy against the euro.



Interest payments on central government debt			Table 3.2
Kr. billion	2012	2013	2014
Domestic debt	22.3	21.5	19.8
Foreign debt	2.0	1.4	0.9
Interest rate swaps, net	-2.5	-2.6	-2.5
Central government's account at Danmarks Nationalbanken¹	-0.2	0.0	0.0
Government funds	-4.3	-3.6	-2.5
Central government debt	17.2	16.7	15.7
Central government debt, per cent of GDP	0.9	0.9	0.8
Central government debt, adjusted for on-lending	14.4	13.8	13.4
Central government debt, adjusted for on-lending, per cent of GDP	0.8	0.7	0.7

Note: A positive sign denotes interest costs. A negative sign denotes interest income.

Source: Central government's accounts 2012 and 2013. Figures for 2014 are provisional figures from the central government's accounting.

1 In 2014, deposits of the central government's at Danmarks Nationalbank accrued interest at the current account rate. In future, the interest on the central government's deposits is changed in periods when the rate of interest on certificate of deposit is negative, such that deposits of up to kr. 100 billion accrue interest at the current account rate and deposits above kr. 100 billion accrue interest at the rate of interest on certificates of deposit.

## ON-LENDING AND GOVERNMENT GUARANTEES

The central government provides on-lending and government guarantees to a number of government-owned companies. On-lending and guarantees contribute to better borrowing terms for the companies due to the central government's high credit rating. In recent years the type of financing has moved gradually from guarantees towards on-lending. This is motivated by the usually lower financing costs of on-lending, as the loan is financed by issuing government bonds, which are considerably more liquid than equivalent government-guaranteed issues by the companies. Government-owned companies typically combine on-lending with conclusion of derivatives contracts with commercial banks. This enables them to improve their risk management while benefiting from the low financing costs of on-lending, cf. Chapter 6.

## ON-LENDING AND GOVERNMENT GUARANTEES IN 2014

At almost kr. 100 billion, the total outstanding volume of on-lending was virtually unchanged from 2013 to 2014, cf. Table 3.3. The central government provided on-lending for kr. 15.5 bil-

lion in 2014, corresponding to redemptions and early redemptions. Most on-lending was granted to Energinet.dk, EKF (the Danish Export Credit Agency), the Metro Company and the Great Belt Bridge. The Financial Stability Company, which is in the process of discontinuing its activities, made substantial redemptions and early redemptions in 2014. From being among the companies with the largest portfolios of on-lending during the financial crisis, it has now reduced its outstanding volume of on-lending to kr. 5.3 billion at the end of 2014.

In 2014 harmonisation of on-lending agreements was sought, so that individual companies' access to on-lending does not deviate from the standard facility. In that connection agreements were concluded with DR (the Danish Broadcasting Corporation) and EKF on replacement of their access to par yield loans and serial loans, respectively, with ordinary on-lending.

The decision in January 2015 to suspend the sales of government bonds does not affect the government-owned companies' access to onlending. On-lending will be financed by drawing on the government's account, and the derived

Table 3.3 On-lending in 2014 Closing balance, end Gross additions in Redemptions and early Closing balance, Kr. billion, nominal value 2013 2014 redemptions in 2014 14.8 16.7 EKF (Danish Export Credit Agency) 3.3 1.5 3.8 16.3 Energinet.dk 12.6 The Great Belt Bridge 13.8 26 0.6 15.8 CPH City & Port Development 11.8 1.4 11.8 1.4 Øresund Landworks 0.5 10.3 9.8 The Metro Company 7.1 5.2 1.9 Danish Ship Finance<sup>1</sup> 7.3 1.3 6.7 The Financial Stability Company 12.9 \_ 7.5 5.3 DR (Danish Broadcasting Corporation) 3.3 0.3 0.4 3.2 Ireland 3.0 3.0 Femern 1.1 1.3 8.0 1.6 Femern Landworks 0.5 0.4 0.2 0.1 SSI (Statens Serum Institut) 0.4 0.4 Sund & Bælt Holding 0.5 0.3 0.4 0.4 Iceland 1.5 1.5 Danish North Sea Fund Ring 3 Letbane I/S Total 98.2 15.5 15.4 99.0 1. The change in the balance from 2013 to 2014 is not identical with the redemption in 2014 due to dollar fluctuations during the year.

effect on the central government's interest rate risk is included in the central government's consolidated risk management.

## Early redemption of loan to Iceland

In cooperation with the other Nordic countries, Denmark granted a bilateral loan to Iceland in 2010. In July 2014, the remainder of the Ioan, which was due to expire in 2021, was redeemed prematurely. In the days just before the redemption, Iceland had issued a 6-year Ioan in euro at a rate of interest which was approximately 1 percentage point lower than the rate of interest on the Ioans from the Nordic countries.

#### **Government guarantees**

In 2014 the central government provided guarantees for new loans to the Danish State Railways for kr. 0.9 billion and to Øresundsbro Konsortiet for kr. 1.5 billion. At the end of 2014, Danmarks

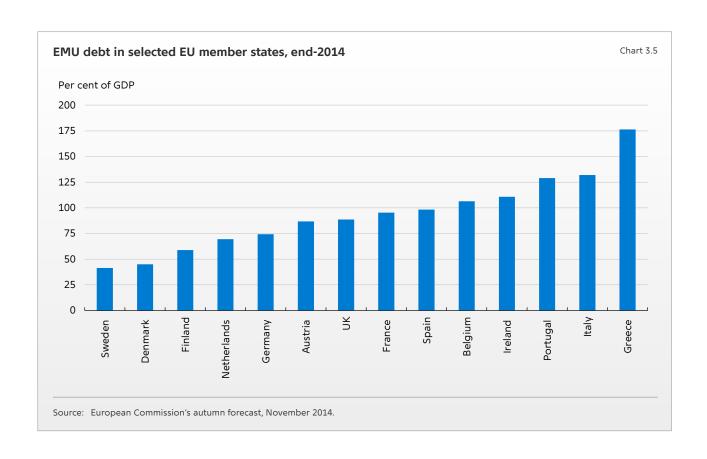
End-2014	Kr. billion Per	cent of GDP
Øresundsbro Konsortiet	15.9	0.8
The Great Belt Bridge	8.9	0.5
DSB (Danish State Railways)	5.4	0.3
DR (Danish Broad- casting Corporation)	0.8	0.0
Øresund Landworks	0.5	0.0
Sund & Bælt Holding	0.0	0.0
Total	31.6	1.7

Nationalbank administered government loan guarantees on behalf of the central government for kr. 31.6 billion, cf. Table 3.4, which is kr. 4.8 billion lower than in 2013.

## OTHER DEBT CONCEPTS

The gross general government debt (EMU debt) is often used in international comparisons of sovereign debt. In recent years, the EMU debt has been considerably below the reference value of 60 per cent of GDP in the Stability and Growth Pact. At the end of 2014, Denmark's EMU debt amounted to 45 per cent of GDP, which is low compared with the level in other EU member states, cf. Chart 3.5. The primary difference between central government debt and EMU debt is that local government debt of around 6 per cent of GDP is included and that the balance on the central government's account of approximately 10 per cent of GDP is not offset in the EMU debt.

The net debt, including all financial assets and liabilities of the public sector, was 7 per cent of GDP, which is also very low in an international context.



## 4

## MARKET RISK

The central government debt has high duration. This ensures a robust debt structure where rising interest rates will be passed through slowly to the central government's interest costs. Under normal circumstances, high duration entails expected additional costs compared with lower duration. In the current interest rate environment, the

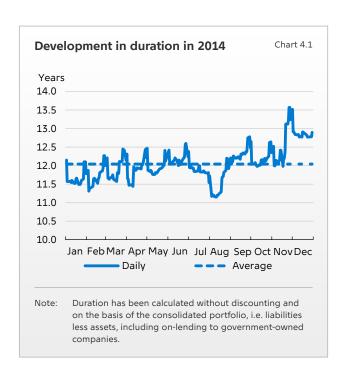
expected additional costs are estimated to be very low. The central government therefore maintains a high duration in 2015. The target for average duration in 2015 is set at 12.5 years ± 1 year. The decision to suspend the issuance of government bonds only affects the duration of the debt to a limited extent.

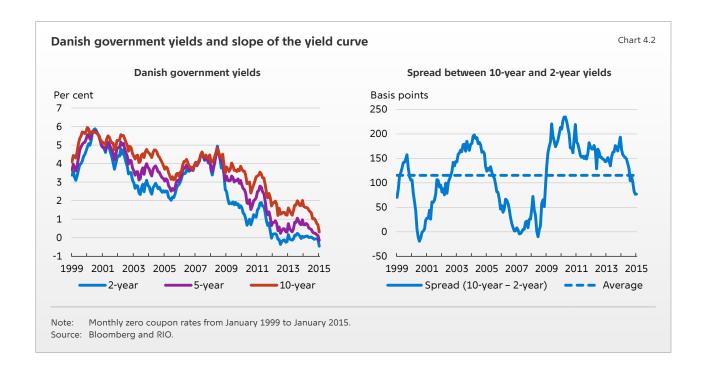
## MARKET RISK IN 2014

In 2014, the issuance policy was aimed at ensuring low refinancing risk by issuing long-term government bonds. As a result, the average duration of the government debt portfolio was 12.0 years in 2014, cf. Chart  $4.1.^1$  This is in the upper part of the band of 11.5 years  $\pm$  1 year that was set at the beginning of the year.

As a main rule, management of the interest rate risk profile of the central government debt is separated from the issuance policy by means of interest rate swaps. In 2014, it was not found to be advantageous for the central government to

<sup>1</sup> The duration is calculated without discounting and based on the consolidated portfolio, i.e. liabilities less assets, including on-lending to government-owned companies.





use interest rate swaps to counteract the increase in duration.

## STRATEGY FOR MARKET RISK MANAGEMENT IN 2015

## LOW INTEREST RATES FOR ALL MATURITIES

The high duration of the central government debt portfolio ensures a low interest rate risk for the central government, but will, under normal circumstances, entail expected additional costs compared with a portfolio with lower duration. In the current interest rate environment it is found to be appropriate to maintain a high duration.

Government yields are very low for all maturities at the end of January 2015, cf. Chart 4.2, left. Due to the low long-term interest rates, a high duration can be obtained at low costs. Despite the low long-term interest rates, the immediate savings from reducing the duration, expressed as the slope of the yield curve, is close to the average since 1999, cf. Chart 4.2, right. However, the estimated benefit from reducing the duration depends not only on the short-term savings, but also on the expected savings and risk in the medium term.

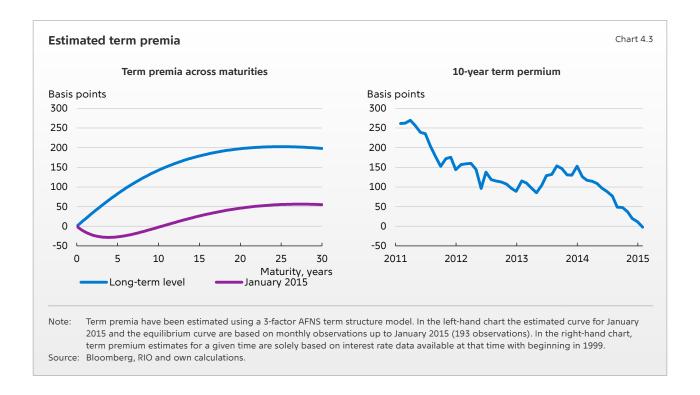
## ESTIMATED TERM PREMIA ARE VERY LOW IN THE CURRENT INTEREST RATE ENVIRONMENT

The expected additional cost of high rather than low duration can be expressed as the term premium.<sup>2</sup> Term premia cannot be observed directly in the market, but are derived from a model-based projection of interest rates. At end-January 2015, the estimated 10-year term premium was around zero, cf. Chart 4.3 left. The current level of the 10-year term premium is unusually low, cf. 4.3, right. This assessment is in line with term premia estimates in other currencies.<sup>3</sup>

In view of term premia around zero, there are no expected savings from reducing the duration of the portfolio. However, a reduction of the duration, e.g. via entering into interest rate swaps,

<sup>2</sup> The term premium for a given maturity can be defined as the difference between the current level of the observable yield at the given maturity and the current expected (geometric) average of short-term yields over the given term. A positive term premium entails that issuance of long-term rather than short-term bonds will involve expected additional costs for the central government, cf. Chapter 9 in Danish Government Borrowing and Debt 2013.

According to Adrian, Crump and Moench of the Federal Reserve Bank of New York, the term premium on 10-year US Treasury bonds is estimated at -15 basis points at end-2014, relative to an average of approximately 160 basis points since 1961. The estimates are published on the Federal Reserve Bank of New York website on an ongoing basis. The method is described in T. Adrian, R. Crump and E. Moench (2013), Pricing the term structure with linear regressions, *Journal of Financial Economics* 110:1, pp. 110-138. 10-year term premia in the euro area have been negative during most of the period since the beginning of 2012, cf. W. Lemke and A. Vladu (2014), A shadow-rate term structure model for the euro area, conference paper, ECB.



will increase the risk on the central government's interest costs in the medium term. Against this backdrop, the target for the average duration in 2015 is set at 12.5 years ± 1 year, i.e. 1 year higher than the target for 2014. The decision to suspend the issuance of government bonds only affects the duration of the debt to a limited extent.

## SLOW PASS-THROUGH OF INTEREST RATES AND LOW REFINANCING RISK

## SLOW PASS-THROUGH OF INTEREST RATE INCREASES TO INTEREST COSTS

The current low debt ratio and portfolio composition imply very low vulnerability to interest rate increases for the central government, cf. Chart 4.4, left. A permanent rise in all interest rates of 500 basis points at the beginning of 2015 will reduce net interest costs by approximately 0.3 per cent of GDP in 2015. The negative pass-through in the first years is primarily due to the large balance on the central government's account. Higher interest rates have an immediate impact on the rate of interest on the central government's account, while the pass-through to interest costs is slower. The pass-through will increase to just over 0.3 per cent of GDP by 2019 as more and more of the existing bond debt is refinanced.

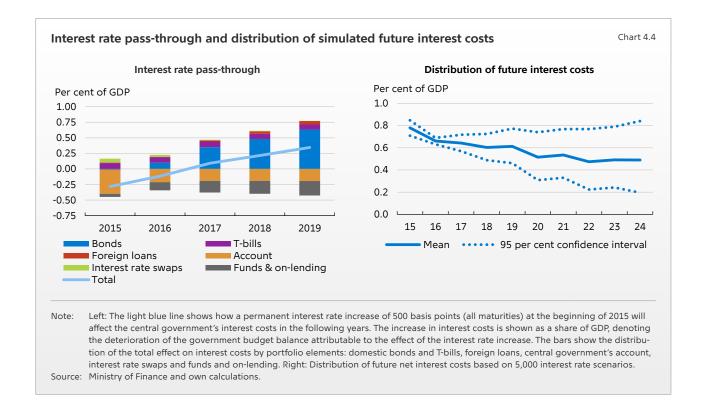
The central government's future interest costs are determined by debt and interest rate developments. The Cost-at-Risk, CaR, model provides distributions of future interest costs for the coming 10 years based on simulated interest rate scenarios and future financing requirements. The future financing requirements are the results of technical assumptions, cf. Box 4.1. Chart 4.4, right, shows yearly interest costs in the mean scenario and a confidence interval of 95 per cent. In the mean scenario, interest costs decline from around 0.8 per cent of GDP in 2015 to around 0.5 per cent of GDP in 2024. The risk on net interest costs related to interest rate developments is negligible, and in the 97.5th percentile interest costs do not in any year exceed 1 per cent of GDP.

## Technical assumptions in the baseline scenario of the projection

Box 4.1

The projection of the central government's debt structure is based on a number of assumptions:

- The scenario for the primary balance and GDP towards 2024 mirrors the Ministry of Finance's projections.
- Expected on-lending based on the governmentowned companies' reports in connection with Budget Outlook 3, December 2014.
- The existing interest rate swap portfolio is kept until maturity, and no new swaps are concluded.



The low and slow pass-through of even a pronounced rise in interest rates emphasises that an adverse interest cost/debt spiral is unlikely to be triggered by the central-government debt portfolio unless deficits deteriorate markedly. Moreover, the low and slow pass-through ensures that even in the event of substantial interest rate increases there will be time to make the necessary fiscal adjustments.

## THE REFINANCING RISK REMAINS LOW DESPITE HIGHER DEBT

As in the previous years, the share of long-term bond issuance was substantial in 2014, and the time to maturity of domestic liabilities was maintained at 9 years. The long time to maturity of the debt and the reduction of the T-bill programme have contributed to maintaining a low short-term refinancing volume despite the relatively large issuance volumes in recent years. Compared with other EU member states, the central government's short-term refinancing volume is low as a percentage of GDP.

The central government's liquidity reserves constitute an important element of the assessment of the central government's total refinancing risk. At the beginning of 2015, the balance on the central government's account was more than sufficient to cover all domestic and foreign redemp-

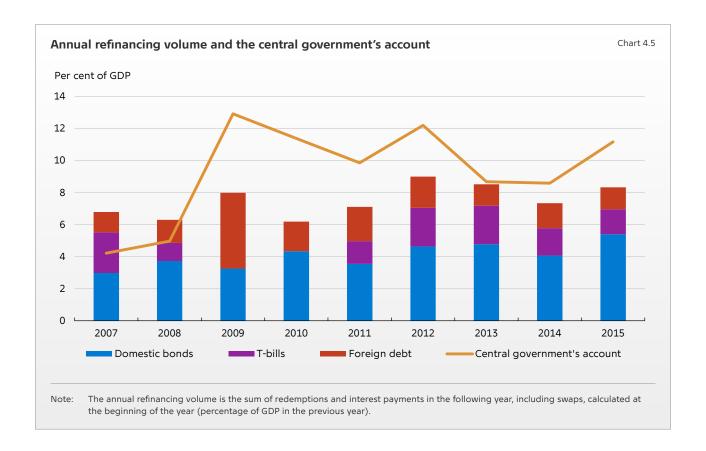
tions and interest payments more than one year ahead, cf. Chart 4.5.

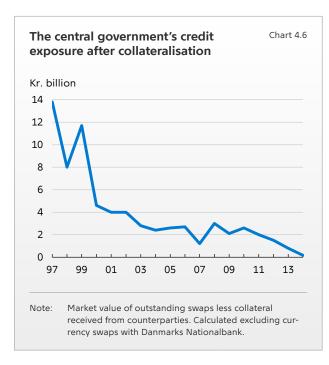
The projection of the central government's debt and interest costs in the baseline scenario behind the CaR analysis shows that the short-term domestic refinancing volume is maintained at 5-7 per cent of GDP throughout the projection period.

## CONSIDERABLE REDUCTION OF RISKS RELATED TO THE SWAP PORTFOLIO

The credit risk related to the central government's swap portfolio is the risk that one or more swap counterparties fail to meet their obligations to the central government. A swap with a positive market value is an asset for the central government and exposes the central government to the counterparty's ability to pay. The credit exposure to the individual counterparty is calculated as the positive market value for the central government of the individual counterparty's swap portfolio less the collateral provided by the counterparty.

The central government's credit exposure has been reduced markedly over the past 15 years, cf. Chart 4.6. One reason is the conclusion of one-way collateral service agreements, CSAs, in 1999-2000. The agreements include a rating-dependent





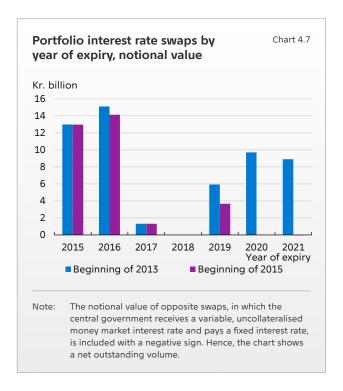
threshold value, entailing that the counterparties must pledge collateral when the market value exceeds the threshold value.

In 2013, the central government embarked on negotiations with all active swap counterparties for new two-way CSAs in which the rating-dependent threshold values are replaced by zero values.<sup>4</sup> At the end of 2014, most counterparties had transferred to the new agreements with threshold values of zero. This has further reduced the credit exposure. The total exposure is expected to be reduced to close to zero when all active counterparties have transferred to the new two-way CSAs.<sup>5</sup>

# FURTHER REDUCTION OF BASIS RISKS IN THE CENTRAL GOVERNMENT'S EXISTING SWAP PORTFOLIO

In the central government's existing interest rate swaps, the variable interest payments are based on uncollateralised money market interest rates Cibor and Euribor. During the financial crisis and the sovereign debt crisis, the spread between

- 4 Higher financing costs for banks and new financial sector regulation enable the central government to obtain better terms for swaps by transferring to two-way collateral. Moreover, the central government's transfer to two-way collateral will be in accordance with the new European regulation of the swap markets.
- A small part of the central government's existing swap portfolio has been concluded with counterparties that have not yet transferred to two-way CSAs with threshold values of zero. As regards the counterparties that are not expected to transfer to the new agreements soon, the central government's credit exposure will gradually be eliminated as the swaps concluded with these counterparties expire. In future, the central government will conclude swaps only with counterparties that have transferred to two-way CSAs.



uncollateralised money market interest rates and short-term government yields widened markedly. In order to reduce this basis risk, interest rate swaps have been terminated or opposite interest rate swaps concluded for a total notional value of kr. 22 billion since the beginning of 2013, cf. Chart 4.7. In future, the central government is expected to conclude interest rate swaps based on short-term Eonia or Cita rates, thereby ensuring a better match between the return on the central government's assets and liabilities.

### 5

# ISSUANCE OF AND TRADING IN DANISH GOVERNMENT SECURITIES

Danish government securities are primarily sold via auctions where investors can buy on-the-run issues by submitting bids via one of the central government's primary dealers. At the auctions in 2014, bid volumes totalled more than twice the volume sold. In addition to acting as counterparties

at the auctions of government securities, the primary dealers support liquidity in the secondary market by quoting prices on an ongoing basis. Liquidity in the market for government securities was good in 2014 – in line with the preceding years.

## ISSUANCE OF DOMESTIC GOVERNMENT SECURITIES

Domestic government securities are primarily sold via regular auctions supplemented with tap sales. At auctions, investors can buy a large amount of government securities by submitting bids via one of the central government's primary dealers. Tap sales are current issuances in which securities are offered directly to primary dealers in the secondary market.

#### **AUCTIONS**

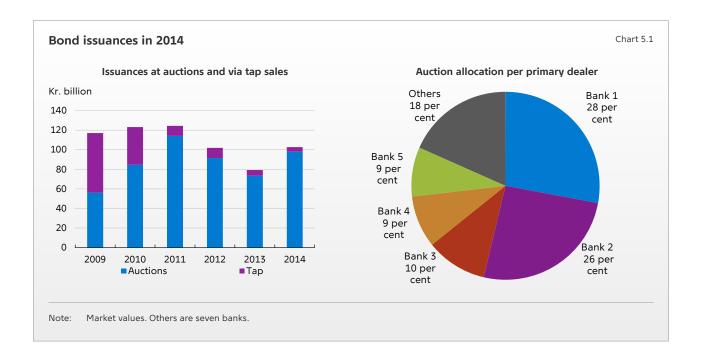
Since auctions were introduced as a primary method of issuance in September 2009, most issuances of domestic bonds have taken place at auctions, cf. Chart 5.1 (left). In 2014, 95 per cent of total issuances took place at auctions and the rest via tap sales. Two primary dealers accounted for

just over half of the securities sold at the auctions in 2014, cf. Chart 5.1 (right).

Auctions are held throughout the year, giving primary dealers ongoing access to on-the-run issues. The auction process is described in Box 5.1.

Like most of the European sovereign debt market, on 6 October 2014 Denmark introduced a settlement period of two trading days (T+2) instead of the previous three days (T+3) in the primary and secondary markets.<sup>1</sup> In that connection, the auction day for domestic government bonds

<sup>26</sup> European government debt management offices decided to switch to a standard settlement period of two trading days for transactions in the secondary market from 6 October 2014. The majority of the government debt management offices also chose to switch to T+2 on primary issuances from the same date.



#### **Danish government bond auctions**

securities are offered at each auction. The choice of securities for auction will be based on the issuance strategy. Investor demand for the various maturity segments is also taken into account. To obtain information about investor demand for the various maturity segments, the central government's primary dealers are consulted prior

Box 5.1

The central government's auctions are conducted through the MTS Denmark auction system with the primary dealers as counterparties. Investors can place bids at the auctions through primary dealers. The auction procedure can be summarised in four steps:

#### 1. Announcement of auction calendar

An auction calendar with preliminary auction dates for the next three months is published. Auctions are announced via DN News¹ and published at <a href="www.gov-ernmentdebt.dk">www.gov-ernmentdebt.dk</a>. The conduction of auctions depend on stable market conditions.

#### 2. Choice of government securities for auction

The securities to be auctioned will be announced no later than three trading days prior to the auction, typically on a Thursday. As a general rule, two different government

#### 3. Pricing, bids and allotment

to each auction.

The auction principle is uniform pricing where bids at the cut-off price or above are met at the cut-off price. Securities can be allotted on a pro rata basis at the cut-off price. An auction can be completed without allotment.

#### 4. Announcement of auction results

When the auction has been completed, the auction results are announced via DN News and published at <a href="https://www.governmentdebt.dk">www.governmentdebt.dk</a>.

1. Danmarks Nationalbank's system for dispersing information to connected news agencies, including Bloomberg, Reuters and RB-Børsen.

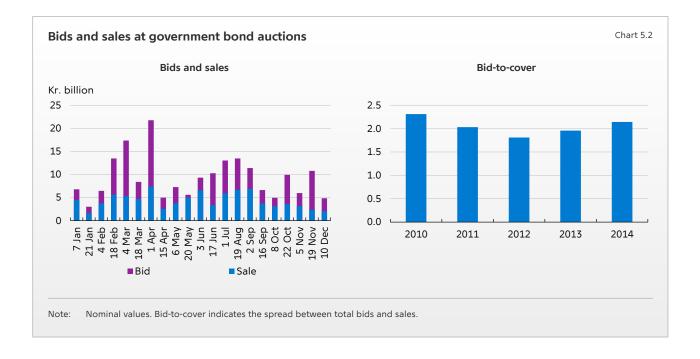
was changed from Tuesday to Wednesday. Hence, settlement still takes place on Friday, which eases the banks' liquidity management, as Danmarks Nationalbank conducts weekly open market operations on the last banking day of each week.

## High demand and no issuance premium at auctions

At the 21 government bond auctions held in 2014, cf. Chart 5.2 (left), bids totalled kr. 9.3 billion on

average and issuance totalled kr. 4.4 billion per auction. Thus, overall bid-to-cover, measured as the spread between total bids and the volume sold, was 2.1 in 2014, which is the highest since 2010, cf. Chart 5.2 (right).

In 2014, cut-off prices at auctions more or less matched prices in the secondary market at the time of issuance, cf. Table 5.1. This indicates that, on average, the central government did not pay any issuance premium at the auctions.



verage prices	Market price prior to auction	Auction price	Issuance premium
.5 per cent bullet loan 2016	105.72	105.74	-0.02
per cent bullet loan 2019	117.80	117.84	-0.04
.5 per cent bullet loan 2023	99.56	99.68	-0.12
.75 per cent bullet loan 2025	104.36	104.36	0.00
.5 per cent bullet loan 2039	148.07	148.12	-0.05
.1 per cent inflation-linked loan 2023	97.90	97.90	0.00

#### **TAP SALES**

To supplement auction issuances, government bonds are sold via tap sales. Tap sales are current issuances in which securities are offered directly in the secondary market.<sup>2</sup> Issuance via tap sales enables banks to meet the demand from investors outside auction days, e.g. in the event of extraordinary demand.

#### FOREIGN ISSUANCE

The strategy for foreign loans entails that, as a general rule, the central government issues bonds denominated in foreign currency once a year. In 2015, issuance of foreign loans has been suspended until further notice. Danish government securities denominated in foreign currency are issued through syndication. The reason is that the pricing and sale of a foreign loan are associated with greater uncertainty than domestic issuance, be-

<sup>2</sup> Tap sales take place via the MTS Denmark trading platform with primary dealers as counterparties.

cause, inter alia, there are few direct price benchmarks in the secondary markets and issuance for the entire year takes place in one day. Hence, the choice of issuance day may have a considerable impact on investor demand. Syndication helps ensure that securities can be sold and facilitates a good composition of investors.

#### SYNDICATION OF FOREIGN BOND LOANS

When syndication is used for issuance of government securities, a group of banks (the syndicate) undertakes the book-building process and marketing of the issuance to investors. The price is determined on the basis of the composition and strength of the order book and can be changed during the process towards closing of the order book. It is sought to compose the syndicate of a group of primary dealers who supplement each other and have investor relations that ensure good allocation of the securities.

## DEALERS IN THE CENTRAL GOVERNMENT'S COMMERCIAL PAPER PROGRAMMES

In January 2015, an agreement was entered into with two new dealers in the central government's USCP programme, Citibank and Goldman Sachs, cf. Table 5.2. Commercial Paper is issued regularly and directly to dealers, who normally buy the securities for resale to an end-investor.

Dealers in ECP	Dealers in USCP	
Bank of America Merrill Lynch	Bank of America Merrill Lynch	
Barclays Bank	Barclays Bank	
Citibank	Citibank (new in 2015)	
Credit Suisse	Goldman Sachs (new in 20	015)
Deutsche Bank	J.P. Morgan	
ING		

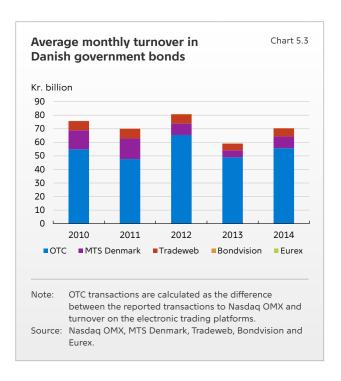
purchase and sale o government securiti	
Interdealer platforms	Dealer-to-customer platforms
MTS Denmark	Tradeweb
Eurex Bonds	Bloomberg
ICAP/BrokerTec	Bondvision
Nasdag OMX	

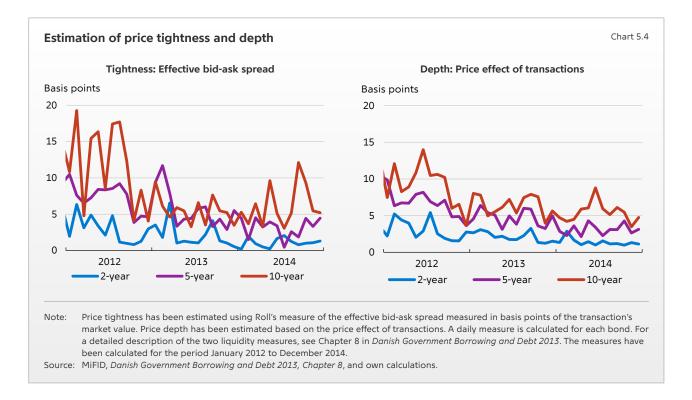
#### SECONDARY MARKETS

#### TRADING PLATFORMS AND ELECTRONIC TRADING

Danish government securities are traded on a number of electronic interdealer and dealer-tocustomer trading platforms, cf. Table 5.3.

The majority of Danish government securities are still traded outside the organised market-places (over-the-counter, OTC), cf. Chart 5.3. A similar pattern is seen in many other countries, reflecting that the development towards increased electronic trading has been slower for bonds than for other asset classes, e.g. equities. However, several factors, including increasing automation of the trading process and new regulation, indicate that trading on established electronic trading platforms will gain ground.





## LIQUIDITY IN DANISH GOVERNMENT SECURITIES REMAINS HIGH

Liquidity can be defined as the ability to make large transactions, rapidly and at any time, without a significant price impact. If liquidity is high, investors can make transactions rapidly and at low costs, which results in a higher price of the asset traded. In this way, a liquid market for government securities contributes to lower borrowing costs for the central government.

Pre-trade information<sup>3</sup> provides the most true and fair picture of liquidity in a market, but is not systematically available for trades in the OTC market for government securities and thus for the majority of transactions in Danish government securities. Alternatively, a data set constructed on the basis of post-trade information from MiFID reports<sup>4</sup> is used. Post-trade information is a less accurate indicator of an investor's ability to trade at a given time without affecting the price

(ex-ante perspective), since data reflects transactions that have already been concluded (ex-post perspective).

Chapter 8 of Danish Government Borrowing and Debt 2013 provides a detailed review of how the different dimensions of liquidity can be estimated. The two most important liquidity dimensions are the tightness and depth of prices, which can be estimated on the basis of the effective bidask spread and the price effect of transactions, respectively. Based on those estimators, where a low value indicates high liquidity, it appears that liquidity in Danish government securities in 2014 was at the level of previous years, cf. Chart 5.4.

## PRIMARY DEALERS AND MARKET MAKING IN DANISH GOVERNMENT SECURITIES

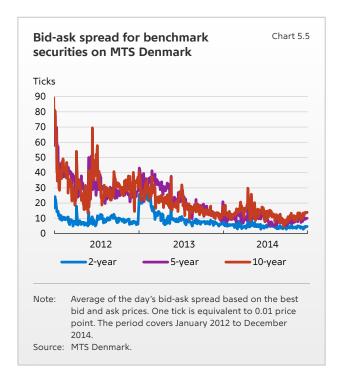
Primary dealer contracts have been entered into with a number of regional and international banks, cf. Table 5.4. In 2015, the group of primary dealers in Danish government bonds comprises 11 banks, five of which are international banks. In 2014, Deutsche Bank announced that it would not continue as a primary dealer in Danish government securities in 2015.

Primary dealers support the market for Danish government securities by quoting prices in the secondary market on an ongoing basis, by acting as counterparties to the central government's transactions in the primary market, and by

<sup>3</sup> A distinction is made between pre- and post-trade information. Pretrade information expresses the prices and quantities at which trades can be carried out. Post-trade information expresses the prices and quantities for the trades that have actually been carried out.

<sup>4</sup> The MiFID Directive (Directive 2004/39/EC of the European Parliament and of the Council) entails that since November 2007 all investment firms and credit institutions in the EU have had an obligation to report securities transactions to the national supervisory authorities. Transactions in Danish government bonds to which at least one party is such an institution are therefore reported to the Danish Financial Supervisory Authority on an ongoing basis.

Government bonds	T-bills	
Barclays Bank	Danske Bank	
BNP Paribas	Nordea	
Danske Bank	Nykredit Bank	
HSBC	SEB	
J.P. Morgan	Sydbank	
Morgan Stanley		
Nordea		
Nykredit Bank		
SEB		
Spar Nord Bank		



distributing and marketing Danish government securities to investors, cf. Box 5.2. This contributes to a high level of price transparency in the Danish market for government securities.

In addition, the central government has a price quoting system on Nasdaq OMX under which four Danish banks have committed to quote current bid-ask prices.

#### **Evaluation of primary dealers**

Once a month, the primary dealers receive a report on their compliance with the market making requirements. To prevent inappropriate conduct among primary dealers, such as transactions concluded exclusively to improve their ranking

relative to other primary dealers, a formal quantitative ranking system is not applied to primary dealers. However, primary dealers are evaluated on an ongoing basis using various indicators.

The evaluation is an overall assessment, including both quantitative and qualitative elements such as turnover in the secondary market, the quoted bidask spread, participation in auctions and quality of advisory services.

The average quoted bid-ask spread for primary dealers on MTS Denmark, where the central government carries out open market operations, narrowed in 2014 compared with the preceding years, cf. Chart 5.5.

#### Primary dealers' market making obligation

Primary dealers can fulfil their market making obligations using either MTS Denmark or Eurex Bonds.¹ The minimum requirements can be found at <a href="https://www.governmentdebt.dk">www.governmentdebt.dk</a>. One of the main tasks of the primary dealers is to quote prices on an ongoing basis in government bonds, enabling market participants to monitor price developments and trade at known prices, which supports liquidity in the secondary markets.

Box 5.2

As specified in the primary dealer agreements, a primary dealer must quote a bid-ask spread for five hours a day below the average bid-ask spread for all primary dealers multiplied by a factor 1.25.2 A relative evaluation entails that a deterioration in the market conditions under which, for instance, higher volatility leads to a higher bid-ask spread, is automatically factored into the requirements for primary dealers.

- 1. The procedure for approval of trading platforms on which primary dealers may fulfil their market making obligations is described in *Danish Government Borrowing and Debt 2013, Chapter 4*.
- 2. For a full review of market making obligations, see *Danish Government Borrowing and Debt 2009, Chapter 12*. In 2014, the multiplication factor for the average spread was changed from 1.5 to 1.25.

## SPECIAL-TOPIC SECTION



## 6

## ON-LENDING AND GOVERNMENT GUARANTEES

On-lending<sup>1</sup> and government guarantees arise from a political wish to support certain projects. On behalf of the central government, Danmarks Nationalbank administers a portfolio of on-lending and guarantees that amounted to approximately 7 per cent of GDP at end-2014. In addition, the central government has issued guarantees equivalent to approximately 11 per cent of GDP, primarily relating to commitments to international development banks, the EU, export credits and social housing.

From a risk perspective, on-lending and government guarantees entail the same exposure for the central government. The guarantee model is typically chosen if a high degree of borrowing flexibility is required. However, the lowest funding costs are usually achieved in the on-lending model, which exploits the high liquidity of government bonds. The combination of on-lending and use of swaps gives companies flexibility while also allowing them to benefit from the lower funding costs linked to on-lending.

<sup>1</sup> Previously referred to as re-lending. On-lending has evolved to be the internationally recognised designation.

#### CONTINGENT LIABILITIES – RISKS AND COSTS

On-lending and government guarantees arise from a political wish to support certain projects. The loans and guarantees are issued mainly to government-owned companies involved in large infrastructure projects. In Denmark, a thorough assessment is made of the individual project's costs and benefits in a broad economic perspective.<sup>2</sup> In this connection, the risk linked to the project is also taken into account. Due to the central government's high credit rating, on-lending and guaranteed loans give the companies access to cheaper funding than loans without guarantees.

## MANAGEMENT OF ON-LENDING AND GOVERNMENT GUARANTEES TO GOVERNMENT-OWNED COMPANIES

On behalf of the central government, Danmarks Nationalbank administers on-lending and loan guarantees to a number of government-owned companies. These contingent liabilities<sup>3</sup> have not involved any losses, which reflects the low risk on the assets underlying most on-lending and loan guarantees.

The Executive Boards and Boards of Directors of government-owned companies with access to on-lending and/or government-guaranteed loans are responsible for funding, including borrowing and risk management, etc.<sup>4</sup> Danmarks Nationalbank and the Ministry of Finance formulate the overall guidelines for these companies' loan types in accordance with the central government's management of financial risk.

The government-owned companies have access to on-lending on the basis of existing government bonds.<sup>5</sup> This ensures that the gov-

2 Cf. En samlet strategi for offentlige investeringer (a comprehensive strategy for public sector investment – in Danish only), Ministry of Finance, September 2014.

- 3 Contingent liabilities are liabilities that may materialise. In this chapter, the term is used about both guarantees and on-lending as these facilities involve the same risk for the central government.
- 4 A credit line is made available for each company. It is the responsibility of the company to observe the framework conditions and risk
- 5 As a main rule, the on-lending list includes government bonds in the 2- to 10-year maturity segments. In addition, companies with special requirements have access to the 30-year bond and the 10-year inflation-linked bond.

ernment does not incur any significant market risk in connection with on-lending. Companies that cannot immediately hedge their risk via the on-lending list can conclude derivatives contracts with commercial banks.

## ON-LENDING AND GOVERNMENT GUARANTEES ENTAIL THE SAME RISK

Under a government guarantee, the central government guarantees that loans raised by a government-owned company will be serviced. If the company defaults on a guaranteed loan, its payment obligations vis-à-vis the lender are transferred to the government. In the case of on-lending, the company raises a loan directly from the government, financed via the government's own borrowing. Again, the central government is exposed to the government-owned company's ability to pay. So the two types of funding entail the same risk of credit losses.

However, on-lending and guarantees affect the compilation of government debt in different ways. Since guarantees are not included in government budgets until they take effect and lead to payments from the government to the recipient of the guarantee, the government debt is affected only if the company defaults on its obligations, cf. Box 6.1. In connection with on-lending, the government debt increases when the loan is granted since it is financed via issuance of government bonds. Initially, this increase is temporary as the company is expected to meet its payment obligations. If it fails to do so, the increase in debt becomes permanent.

## INTERNATIONAL FOCUS ON GREATER TRANSPARENCY IN RELATION TO GOVERNMENT GUARANTEES

Government guarantees have led to large losses for a number of countries and have made it clear that traditional compilations of debt do not always give a true and fair view of the government's actual financial obligations. Hence, there is international focus on compilation of government guarantees<sup>6</sup> as a supplement to conventional debt compilations, and rating agencies factor in guarantees more or less on a par with the central

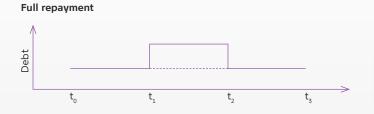
<sup>6</sup> For example, the IMF and the World Bank have just revised their guidelines for government guarantees, cf. Revised Guidelines for Public Debt Management, World Bank and IMF, 2014.

#### Impact of government on-lending and guarantees on the debt

Box 6.1

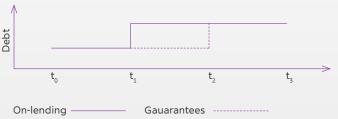
The chart illustrates the impact of on-lending and government guarantees on government debt in two scenarios:
(i) the government-owned company meets its payment obligations, and (ii) the government-owned company does not meet its payment obligations. At time t<sub>1</sub>, a govern-

ment-owned company obtains on-lending or a guarantee expiring at time  $t_2$ . Over the full time horizon ( $t_1$  to  $t_3$ ), the funding type has no impact on the debt. In the intervening period, there is a time lag between the impacts of the two types of funding on the level of debt.<sup>1</sup>



- On-lending: Temporary impact on debt
- Guarantee: No impact on debt

### No repayment



- On-lending: Permanent impact on debt when on-lending is raised
- Guarantee: Permanent impact on debt when guaranteed loan falls due
- $_{\perp}$  It is assumed that the government's other debt remains constant from time  $t_{_0}$  to time  $t_{_3}$ . Interest payments on both loan types are disregarded.

### EMU debt and the debt of government-owned companies

Box 6.2

The debt of government-owned companies classified as General government is included in the EMU debt whether or not it is guaranteed by the government. Consequently, the debt of these companies increases the EMU debt irrespective of the type of funding. The debt of other government-owned companies is not included in the EMU debt. A characteristic of these companies is that their revenue is expected to cover at least half of their expenses. In Denmark, the debt of the Great Belt Bridge and Øresund Landworks is included in this category. This means that the EMU debt would be reduced if on-lending to these companies was converted into government-guaranteed issues. It is inexpedient that the different statistical treatments can provide an incentive to prefer funding via guarantees despite the cost-related advantages of on-lending.

Eurostat is working to supplement the EMU debt with a measure of net debt. In the compilation of net debt, financial assets, including on-lending, will be offset against EMU debt. This means that the type of funding chosen by the government-owned companies will not affect this compilation, which will facilitate cross-border debt comparisons.

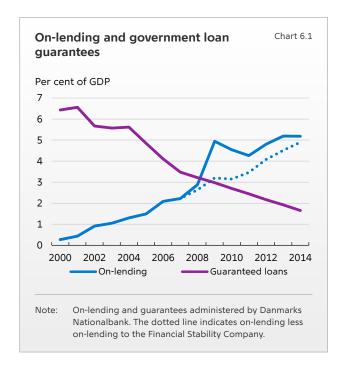
 Cf. Measuring net government debt: theory and practice, Eurostat. 2014. government's direct debt in their assessments of sovereign credit ratings.

In the compilation of EMU debt, steps have also been taken to include the debt of government-owned companies to a greater extent, cf. Box 6.2.

#### **DIFFERENCES IN COSTS AND FLEXIBILITY**

While the central government's risk of loss is the same for guarantees and on-lending, the costs and flexibility of the two types of funding differ. On-lending is usually the less expensive option as the loan is financed by issuing government bonds, which are considerably more liquid than equivalent government-guaranteed issues. In addition, the banks charge a fee for undertaking issuance of government-guaranteed bonds. But in connection with government-guaranteed issuance the company has a better opportunity to tailor the funding package to its specific risk profile.

<sup>7</sup> Companies that may raise government-guaranteed loans or have access to on-lending generally pay an annual commission of 0.15 per cent of the loan value to the government.





In Denmark, new companies have primarily gained access to on-lending rather than government guarantees in recent years. In addition, companies that already had access to both on-lending and guarantees have increasingly resorted to on-lending. This has gradually shifted the distribution of contingent liabilities towards on-lending over the past 10 years, cf. Chart 6.1. The increase in the share of on-lending primarily reflects the cost efficiency of this type of loan. Overall, on-lending and government-guaranteed loans have constituted a virtually unchanged share of GDP since 2000, except for the temporary increase in on-lending during the financial crisis.

To simplify the management of government debt, on-lending is typically restricted to lending in outstanding government securities. This means that the companies may need to combine on-lending with swaps in order to achieve the desired risk profile. If the companies have the expertise to conclude swaps and manage the derived credit risk, on-lending is the cheapest form of borrowing. Besides the difference in financing costs, administrative savings can be achieved in

connection with on-lending as there is only one loan source.<sup>9</sup>

## CONTINGENT LIABILITIES IN DENMARK

Compared with most other countries, Denmark has very low debt commitments. This is because the volumes of central, regional and local government debt are small and the volume of on-lending and government guarantees is limited, cf. Table 6.1.

It should be emphasised that the contingent liabilities are related to assets with payment flows, e.g. the Great Belt Bridge, so the central government's risk is much smaller than the nominal value of the commitments.

The following sections outline the contingent liabilities.

#### **ON-LENDING**

The Danish government has granted on-lending totalling around 5 per cent of GDP, broken down

<sup>8</sup> In Denmark, the companies have in special cases achieved cheaper funding by issuing in foreign currency combined with a swap into Danish kroner. This can be because there are imbalances in the foreign exchange market, or because a foreign investor has a specific interest in a government-guaranteed bond issued in the investor's own currency rather than kroner.

<sup>9</sup> These savings relate to e.g. maintenance of loan documentation and contact to investors.

End-2014	Kr. billion	Per cent of GDP	Duration
Infrastructure			
Energinet.dk	16.3	0.9	11.6
The Great Belt Bridge	15.7	0.8	4.0
CPH City & Port Development	11.8	0.6	4.3
Øresund Landworks	10.3	0.5	6.7
The Metro Company	7.1	0.4	7.4
Femern	1.6	0.1	1.7
Femern Landworks	0.5	0	1.3
Sund & Bælt Holding	0.4	0	3.7
Other			
EKF (Danish Export Credit Agency)	16.7	0.9	5.6
Danish Ship Finance	6.7	0.4	2.6
The Financial Stability Company	5.3	0.3	2.2
DR (Danish Broadcasting Corporation)	3.2	0.2	6.9
Ireland	3.0	0.2	0.1
SSI (Statens Serum Institut)	0.4	0	4.9
Total	99.0	5.2	6.1

Note: GDP for 2014 has been projected by 1.1 per cent relative to GDP for 2013. This projection corresponds to Danmarks Nationalbank's projection from December 2014.

by 12 government-owned companies. Lending for infrastructure projects constitutes the largest part, cf. Table 6.2. The portfolio also includes on-lending to Danish Ship Finance and a bilateral loan to Ireland.<sup>10</sup>

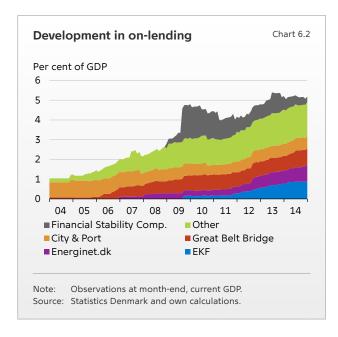
The duration of the companies' debt reflects their activities. This means that companies with a long investment horizon typically have on-lending with a long duration. This applies to e.g. Energinet.dk, Øresund Landworks and the Metro Company. Conversely, companies with short-term assets typically have on-lending with equivalently short duration.

The Financial Stability Company, which is responsible for the resolution of distressed banks, obtained considerable on-lending from the government at the beginning of the financial crisis, but has subsequently reduced the volume considerably, cf. Chart 6.2. In addition, the Danish Export Credit Agency was given the option to supplement government guarantees with government on-lending in 2010.

<sup>1.</sup> Calculated at a fixed discount rate of zero.

<sup>2.</sup> Variable rate loan.

<sup>10</sup> In November 2010, the EU member states and the IMF granted Ireland an 85 billion euro loan facility. Together with Sweden and the UK, Denmark has committed itself to a bilateral loan facility. Loans to Danish Ship Finance are described in *Danish Government Borrowing* and Debt 2003.



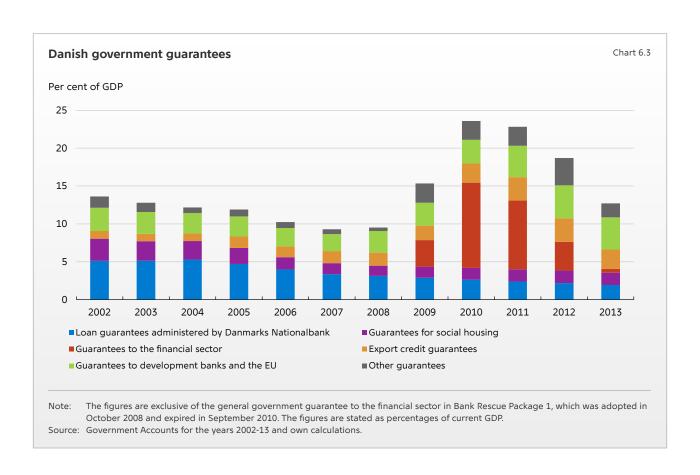
#### **GOVERNMENT GUARANTEES**

At end-2013, Danish government guarantees totalled 13 per cent of GDP, cf. Chart 6.3. Following a period with temporary increases, the outstanding volume of government guarantees is more or less back at the pre-crisis level. Danmarks Nationalbank administers a limited share of the total guarantee commitments.

### GUARANTEES ADMINISTERED BY DANMARKS NATIONALBANK

At end-2014, Danmarks Nationalbank administered government loan guarantees corresponding to 1.7 per cent of GDP, cf. Table 6.3. The largest guarantees have been issued to Øresundsbro Konsortiet and the Great Belt Bridge. Guarantees to these two companies account for most of the loan guarantees. Via government-owned companies, the Danish and Swedish governments have joint and several liability for the debt of Øresundsbro Konsortiet.

Danmarks Nationalbank's tasks in relation to issuance of loan guarantees are mainly of a legal nature. The individual company is legally responsible, but Danmarks Nationalbank checks that the borrowing is within the framework before a guarantee is issued for a specific loan or swap agreement.



Øresundsbro Konsortiet		
	15.9	0.8
The Great Belt Bridge	8.9	0.5
DSB (Danish State Railways)	5.4	0.3
DR (Danish Broadcasting Corporation)	0.8	0.0
Øresund Landworks	0.5	0.0
Sund & Bælt Holding	0.0	0.0
Total	31.6	1.7

## GUARANTEES NOT ADMINISTERED BY DANMARKS NATIONALBANK

At end-2013, government guarantees not administered by Danmarks Nationalbank amounted to 11 per cent of GDP.<sup>11</sup> These guarantees have primarily been given to the financial sector related to the financial crisis, international organisations, export credits and social housing.

#### Guarantees in connection with the financial crisis

During the financial crisis, a number of government rescue packages for the financial sector were launched with a view to ensuring financial stability. Subsequently, these temporary initiatives have been replaced by solutions that do not involve contingent liabilities for the central government.

In October 2008, the Folketing (Danish parliament) adopted an unlimited guarantee for all depositors and unsecured creditors against losses in Danish banks until 30 September 2010. The total losses came to around kr. 22.5 billion.<sup>12</sup>

In connection with the Credit Package from February 2009, the government issued individual guarantees for bonds issued by private sector credit institutions. These government guarantees, of which the majority expired in 2012 and 2013, have now been redeemed. The preliminary result of the individual guarantees is a profit of kr. 30 million.<sup>13</sup>

As part of the Credit Package, credit institutions were also able to apply for government injections of Additional Tier 1 capital. A total of kr. 46 billion was injected during 2009, the bulk of which has now been repaid. Overall, the central government expects to realise a profit from capital injections as the credit institutions pay a considerably higher rate of interest on these loans compared with the government's funding conditions.<sup>14</sup>

#### **Guarantees to international organisations**

The Danish government has provided guarantees to a number of development banks and the EU, reflecting Denmark's involvement in international cooperation and development. These guarantees total 4 per cent of GDP, of which the guarantee to the European Investment Bank accounts for 2 per cent, cf. Table 6.4.

and the EU		
End-2013	Kr. billion	Per cent of GDP
European Investment Bank, EIB	38.6	2.0
Nordic Investment Bank, NIB	12.3	0.7
World Bank, IBRD	9.7	0.5
European Commission, including EFSM	9.6	0.5
African Development Bank, AfDB	5.2	0.3
Asian Development Bank, AsDB	2.9	0.2
European Bank for Reconstruction and Development, EBRD	2.1	0.1
Inter-American Development Bank, IDB	1.5	0.1
Total	82.0	4.3

<sup>11</sup> A list of the central government's total guarantee commitments can be found in the notes to the Government Accounts.

<sup>12</sup> As of 4 February 2011 and including losses in relation to Roskilde Bank. In total, the central government realised a surplus of around kr. 2.5 billion from Bank Package 1.

<sup>13</sup> Cf. press release from the Financial Stability Company dated 11 February 2015.

<sup>14</sup> Medio February 2015 the preliminary profit is kr. 9.7 billion.

#### Guarantees for export credit, social housing, etc.

At end-2013, the Danish Export Credit Agency had granted export credit guarantees corresponding to 2.5 per cent of GDP. The Danish model for export guarantees observes the internationally agreed framework for export credit subsidies.<sup>15</sup>

In addition, the central government has other contingent liabilities, which amount to 3 per cent of GDP. About half of these liabilities relates to funding of social housing projects, <sup>16</sup> while the remaining share includes guarantees related to pension schemes for former employees of the postal services and a guarantee for insurance companies that will take effect in the event of acts of terrorism.

<sup>15</sup> Cf. Officially supported export credits and the financial crisis: Measures taken at the national level by the participants to the arrangement, as at 30 June 2009, OECD 2009.

<sup>16</sup> Financing of social housing projects also receives a guarantee from municipalities. For further information, please see *Den almene* boligsektors effektivisering (Rationalisation of the social housing sector – in Danish only), Ministry of Housing, Urban and Rural Affairs, 2014.

## APPENDICES



### MAIN PRINCIPLES OF THE MANAGEMENT OF GOVERNMENT **DFBT**

The management of the government debt, as well as related tasks, is carried out by Government Debt Management at Danmarks Nationalbank on behalf of the Ministry of Finance. The Minister of Finance holds the overall and political responsibility for central government borrowing and debt, including relations with the Folketing (Danish parliament).

#### **OBJECTIVES**

The overall objective of the government debt policy is to cover the central government financing requirement at the lowest possible long-term borrowing costs, while taking the degree of risk into account. Furthermore, the aim is to facilitate the central government's access to the financial markets in the longer term and to support a well-functioning domestic financial market. The objectives of Denmark's government debt policy are in accordance with international standards.1

focused on maintaining a low refinancing risk by

Management of the Danish government debt is

vance, ensuring a large investor base and holding substantial liquidity reserves.

meeting the financing requirement well in ad-

#### STRUCTURE OF GOVERNMENT DEBT MANAGEMENT

The Minister of Finance is authorised by law to raise government loans, cf. Box A1.1, and has the overall and political responsibility for central government borrowing and debt, including relations with the Folketing (Danish parliament).

In most countries, the government debt is managed by the Ministry of Finance or a designated

<sup>1</sup> Revised Guidelines for Public Debt Management, World Bank and IMF, 2014.

Under the Danish Constitution, debt can be issued by the central government on a statutory basis only. The statutory basis for central government borrowing is set out in the *Act* on the authority to raise loans on behalf of the central government<sup>1</sup>, which authorises the Minister of Finance to raise loans on behalf of the central government for a maximum of kr. 2,000 billion. This amount is the upper limit for domestic

and foreign gross debt. In connection with current debt management, the Minister of Finance is also authorised to enter into swap agreements and other financial transactions. The central government's costs of borrowing, i.e. interest costs and capital losses on issues and buy-backs, must be appropriated under the annual finance acts.

1. Act no. 1079 of 22 December 1993 as amended, see www.nationalbanken.dk/en/governmentdebt/about\_government\_debt\_management/Pages/default.aspx.

government debt management office. In Denmark, these tasks are undertaken by Danmarks Nationalbank on behalf of the Ministry of Finance. Tasks and organisation correspond to those of government debt management offices in other countries. The distribution of responsibilities is specified in the Agreement on the division of work in the area of government debt between Danmarks Nationalbank and the Ministry of Finance.<sup>2</sup>

As part of the management of central government borrowing and debt, Government Debt Management administers on-lending and government guarantees and the assets of the three government funds: the Social Pension Fund (SPF), Innovation Fund Denmark<sup>3</sup> and the Fund for Better Working Environment and Labour Retention. The framework for management of the assets of SPF is laid down in the Regulations governing the management of the Social Pension Fund.<sup>4</sup> Tasks concerning the management of the assets of Innovation Fund Denmark and the Fund for Better Working Environment and Labour Retention as well as the tasks related to on-lending and government guarantees are laid down in separate agreements.

The functions of Government Debt Management are divided into front, middle and back offices, cf. Chart A1.1. Separation of functions and clear procedures reduce operational risks and ensure a clear distribution of responsibilities. This facilitates internal control. The placement of the

tasks at Danmarks Nationalbank makes it easier to monitor interaction between government debt policy, monetary policy and financial stability. This is consistent with the IMF's recommendations (Stockholm principles).<sup>5</sup>

The middle office formulates the government debt policy and prepares proposals for borrowing strategies and risk management. The middle office also lays down guidelines for the front office with regard to issuances, buy-backs and swap transactions in accordance with the agreed strategies. Moreover, the middle office lays down the framework for the individual auctions and undertakes the overall administration of foreign borrowing, on-lending and government guarantees and participates on the SPF Board and in the financing group for social housing.

The front office is responsible for the operational element of the government debt policy within the framework of the monthly guidelines. This comprises issuance of government securities, including holding of auctions, buy-backs, securities lending and swap transactions. It also determines market terms for on-lending.

The back office settles payments concerning central government debt, including servicing of debt and swaps. Government Debt Accounting prepares the central government accounts together with the Ministry of Finance.

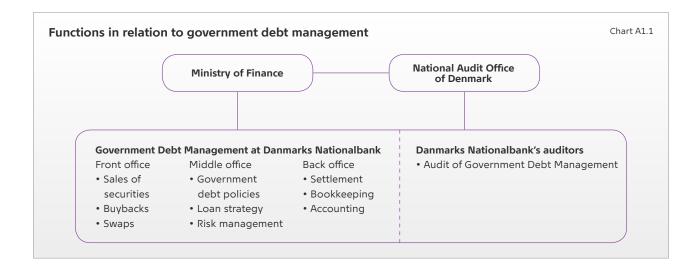
The government debt area is audited by Danmarks Nationalbank's auditors on behalf of Rigs-

<sup>2</sup> The agreement is available at www.governmentdebt.dk.

<sup>3</sup> On 1 April 2014, the Advanced Technology Foundation, the Danish Council for Strategic Research and the Danish Council for Technology and Innovation were merged into Innovation Fund Denmark.

<sup>4</sup> The Regulations are available at <u>www.nationalbanken.dk/en/govern-mentdebt/centralgovernment\_debt/Pages/Government-Funds.aspx.</u>

<sup>5</sup> Guiding Principles for Managing Sovereign Risk and High Levels of Public Debt, IMF, 2013.



revisionen (the national audit office of Denmark). Danmarks Nationalbank's auditors ascertain that the government debt accounts give a true and fair view, i.e. that they are without significant errors and omissions. In addition, Rigsrevisionen may assess whether the government debt is managed in an appropriate way. The results of its investigations are published at <a href="https://www.rigsrevisionen.dk">www.rigsrevisionen.dk</a>.

## RESPONSIBILITIES OF GOVERNMENT DEBT MANAGEMENT

Government Debt Management at Danmarks
Nationalbank must ensure that the objectives of
government debt policy are met. This is achieved
by carrying out the tasks specified in the Agreement on the division of work in the area of government debt between Danmarks Nationalbank and
the Ministry of Finance. Government Debt Management undertakes the following responsibilities:

## PREPARATION OF ISSUANCE STRATEGY AND ISSUANCE OF GOVERNMENT SECURITIES

- Preparation of issuance strategy on the basis of the government budget forecast from the Ministry of Finance.
- Issuance of domestic government securities to cover the central government's domestic financing requirement.
- Issuance of foreign government securities in order to maintain an adequate foreign exchange reserve and to ensure the central government's market access.
- Supporting a well-functioning market for domestic government securities, e.g. through

- agreements with primary dealers in Danish government securities for ongoing price quotation (market making).
- Managing the central government's account in order to ensure a robust liquidity buffer.

#### **RISK MANAGEMENT**

- Analysis and management of relevant risks on the central government debt portfolio, including interest rate and refinancing risk. In the management of interest rate and refinancing risk, focus is on the consolidated portfolio of the central government's financial assets and liabilities.
- Conclusion of swaps and use of other financial instruments and management of credit risk on such instruments.

## MANAGEMENT OF GOVERNMENT FUNDS, ON-LENDING AND GOVERNMENT SECURITIES

- Management of the assets of the three government funds.
- Management of government guarantees and on-lending to government-owned companies.
- Management of special lending, e.g. bilateral loans to other sovereign states.

## ADVISORY SERVICES AND INTERNATIONAL COOPERATION

- Advising the Ministry of Finance concerning the central government's other financial risks, e.g. interest rate risk in relation to the financing of social housing.
- Advising ministries and agencies on financial regulation of importance to the government securities market.

- Advising other government debt management offices.
- Participation in international cooperation in the area of government debt management, including in the OECD, the IMF, the World Bank and the EU.

## CONTACTS WITH CREDIT RATING AGENCIES AND INVESTORS

- Contacts with credit rating agencies concerning the central government's credit rating.
- Information to investors on the government debt policy and financial and economic conditions.

#### STRATEGY AND FUNDING RULES FOR THE GOVERNMENT'S DOMESTIC AND FOREIGN BORROWING

#### **DETERMINATION OF STRATEGY**

The strategy for management of central government borrowing is agreed at quarterly meetings between the Ministry of Finance and Danmarks Nationalbank on the basis of a strategy proposal from Government Debt Management at Danmarks Nationalbank. The Ministry of Finance authorises Danmarks Nationalbank to implement the agreed strategy.

At the meeting in December, the strategy for the following year is determined. At the subsequent quarterly meetings, Government Debt Management reports on the implementation of the strategy, and any adjustments of the overall strategy for the year are adopted.

The government debt strategy is announced to the market immediately after the meetings in June and December. The strategy is assessed on an ongoing basis in order to ensure the best possible fulfilment of the objectives, and to ensure that Danish government debt policy complies with international standards formulated by the OECD, the IMF and the World Bank.

The strategy for the management of the central government debt is organised within the framework of the domestic and the foreign funding rules.

#### DOMESTIC AND FOREIGN FUNDING RULES

The Danish government and Danmarks National-bank have agreed on funding rules for the distribution and volume of the central government's domestic and foreign borrowing. The funding rules describe the framework for central government borrowing, laying down the overall principles warranted by the government debt policy. There are two sets of funding rules: domestic and foreign. Together they support the separation of fiscal and monetary policy.

#### **Domestic funding rule**

Under the domestic funding rule, the central government borrows in kroner to cover its financing requirement resulting from the current budget deficit and redemptions on the domestic debt.

The central government may continue to issue government securities even though the financing requirement for the year has been met. This contributes to prefunding of the borrowing requirement for the following year. The option of prefunding gives the central government greater flexibility in its issuance strategy, which supports the government debt policy objective of covering the central government financing requirement at the lowest possible long-term borrowing costs, while taking the degree of risk into account. For example, prefunding can be based on a wish to strengthen the central government's liquidity buffer, thereby reducing the exposure to shocks to future financing requirements.

Under the EU Treaty, the central government's account at Danmarks Nationalbank must never show a deficit.<sup>6</sup>

#### Foreign funding rule

The central government raises loans in foreign currency in order to maintain the foreign exchange reserve. The foreign funding rule determines that, as a general rule, the central government raises foreign loans equivalent to the redemptions on the foreign government debt. If the foreign exchange reserve is smaller than what is deemed appropriate, it may be necessary for the central government – with the exchange rate policy in mind – to raise loans abroad in order to strengthen the foreign exchange reserve. Con-

<sup>6</sup> Cf. Article 123 of the EU Treaty.

versely, it is possible to reduce the foreign government debt if the foreign exchange reserve is greater than what is deemed appropriate.

Even when the size of the foreign exchange reserve does not make foreign borrowing necessary, it may be expedient continuously to be present in the market since a need to borrow considerable amounts in foreign currency may arise at short notice. This is because it can be costly and time-consuming to restore contacts with foreign banks and investors. As borrowing in foreign currency is included directly in the foreign exchange reserve, domestic liquidity is not affected by foreign borrowing.

The central government primarily issues foreign debt in the form of bonds. In addition, the government may raise short-term foreign loans via its Commercial Paper, CP, programmes. This contributes to the central government's liquidity reserves and facilitates quick build-up of the foreign exchange reserve. Issuance in the CP programmes takes place on an ongoing basis in order to maintain easy access to the market.

## FURTHER INFORMATION ON THE CENTRAL GOVERNMENT DEBT

An important element of government debt policy is to give market participants and the public information on the central government borrowing strategy and borrowing requirement, as well as information of a more general nature on the framework for government debt management.

Information about government debt and Government Debt Management is available at <u>www.governmentdebt.dk</u>. In addition, information is regularly published via other sources.

## ASSETS IN THE GOVERNMENT FUNDS

Danmarks Nationalbank administers the assets of the Social Pension Fund, SPF, Innovation Fund Denmark and the Fund for Better Working Environment and Labour Retention on behalf of the central government. The assets of the government funds are included in the total central government debt and are managed on a consolidated basis with other financial assets and liabilities of the central government in the area of government debt.

#### THE SOCIAL PENSION FUND

SPF was established in 1970 by the Social Pension Fund Act, whereby a special pension contribution was introduced. The pension contributions – and thus payments into SPF – ceased in 1982. Since then, the assets of SPF and the interest accrued less pension yield tax have been used for financing pension improvement measures.

SPF is managed by a committee comprising representatives of the Ministry of Finance, the Ministry of Children, Gender Equality, Integration

and Social Affairs and Danmarks Nationalbank. Day-to-day management of the assets is undertaken by Danmarks Nationalbank. The framework for management of the assets is laid down in the Regulations governing the management of the Social Pension Fund.¹ According to these regulations, the assets of SPF can be invested in Danish listed bonds. The assets are managed on a consolidated basis with other central government financial assets and liabilities under the government debt area.

<sup>1</sup> The Regulations are available at <u>www.governmentdebt.dk</u>.

The risk on SPF's assets is assessed separately, but is included in the consolidated risk management of the total central government debt. The market risk of SPF is managed via a band for the average Macaulay duration. In 2014, this band was 4.5 years +/- 0.5 year. Throughout 2014, the duration was within the specified band. In 2015, the duration band for SPF will be maintained at 4.5 years +/- 0.5 year.

Since 1995, the asset portfolio of SPF stated at nominal value has gradually declined as a result of yearly transfers to the Ministry, as stipulated in the annual Finance Act, exceeding interest income on SPF's bond portfolio. In 2014, kr. 13 billion was transferred from SPF to the Ministry of Children, Gender Equality, Integration and Social Affairs. The net expenditure amounted to kr. 10 billion, cf. Table A2.1.

At end-2014, the assets of SPF totalled kr. 75 billion, cf. Table A2.2.

#### **INNOVATION FUND DENMARK**

In March 2014, the Folketing (Danish parliament) passed a law to establish Innovation Fund Denmark by uniting the Advanced Technology Foundation, the Danish Council for Strategic Research and the Danish Council for Technology and Innovation. On 1 April 2014, the law came into force and Innovation Fund Denmark succeeded the rights and obligations previously owned by the Advanced Technology Foundation. In addition, the assets of the Advanced Technology Foundation were transferred to Innovation Fund

Denmark. Danmarks Nationalbank continues to administer these assets.

By agreement with the Danish Ministry of Finance, the assets of the Fund may be invested in Danish government bonds only. The investment strategy for Innovation Fund Denmark is to aim for an equal distribution on short-, medium- and long-term Danish government bonds.

In 2014, Innovation Fund Denmark transferred assets roughly equivalent to the interest income, cf. Table A2.1. At end-2014, the assets of the Fund totalled kr. 14 billion, cf. Table A2.2.

### THE FUND FOR BETTER WORKING ENVIRONMENT AND LABOUR RETENTION

The Fund for Better Working Environment and Labour Retention was established in 2007 with a view to supporting measures to prevent physical and mental impairment, work-related accidents and occupational diseases. A total of kr. 3 billion was transferred to the Fund when it was established, and no further capital injections are planned. It is a statutory provision that the assets of the Fund for Better Working Environment and Labour Retention may be invested in Danish government bonds only.

At end-2014, the assets of the Fund totalled kr. 1 billion, cf. Table A2.2.

Kr. million	SPF	Innovation Fund Denmark	Fund for Better Working Environmen and Labour Retention
Revenue:			
Interest etc. <sup>1</sup>	2,383	363	3:
Expenditure:			
Transfer to relevant ministry	12,510	400	29
Pension yield tax²	-	-	
Net revenue	-10,127	-37	-26

#### Table A2.2 The government funds' assets, end-2014 Fund for Better Working Share of outstanding, Innovation SPF Nominal value, kr. billion Fund Denmark Environment and Labour Retention per cent1 4 per cent bullet loan 2015 4.8 3.9 1.0 12 4 per cent bullet loan 2017 10.8 3.0 26 3.1 4 per cent bullet loan 2019 12.3 15 3 per cent bullet loan 2021 3.0 11 7.3 1.5 per cent bullet loan 2023 0.6 0.5 1 7 per cent bullet loan 2024 0.9 60 13.8 Government bonds, total 49.6 14.3 1.0 Mortgage bonds etc.<sup>2</sup> 20.5 Index-linked bonds<sup>3</sup> 4.8 -Balance of account 0.1 0.1 0.1 Total 74.9 14.4 1.1

<sup>1.</sup> Indicates the funds' ownership share of the total outstanding value in the issue.

<sup>2.</sup> Mortgage, Kommunekredit, Fisheries Bank and nominal Ship Finance bonds.

<sup>3.</sup> Indexed value.

## APPENDIX OF TABLES



### **TABLES**

- 1. CENTRAL-GOVERNMENT DEBT, YEAR-END 2004-14
- 2. SERVICE ON CENTRAL-GOVERNMENT DEBT AS OF END-2014
- 3. CENTRAL-GOVERNMENT'S NET FINANCING REQUIREMENT AND FINANCING REQUIREMENT, 2004-14
- 4. ISSUANCE OF CENTRAL-GOVERNMENT SECURITIES, 2014
- 5. CENTRAL-GOVERNMENT INTEREST-RATE SWAP TRANSACTIONS, 2014
- 6. CENTRAL-GOVERNMENT DEBT AS OF END-2014
- CENTRAL-GOVERNMENT INTEREST-RATE SWAP PORTFOLIO AS OF END-2014
- 8. KINGDOM OF DENMARK'S RATING OF CENTRAL-GOVERNMENT DEBT
- ON-LENDING AND GOVERNMENT GUARANTEES
   ADMINISTERED BY DANMARKS NATIONALBANK, 2010-14

·					
Kr. million	2004	2005	2006	2007	2008
A. Loan					
Domestic debt					
- Fixed-rate bonds, nominal	480,590	440,351	428,796	403,039	451,39
- Inflation-linked bonds <sup>1</sup>	-	-	-	-	
- Fisheries Bank bonds	-	-	-	-	
- Lottery bonds	400	200	200	200	20
- Treasury notes	71,690	33,980	-	-	
- Treasury bills	68,602	60,092	42,660	19,660	
- Index-linked loans and loan package²	-	-	379	277	
- Currency swaps from kroner to euro (net) <sup>3</sup>	-16,200	-15,456	-12,755	-13,262	-11,66
- Currency swaps from kroner to dollars	-524	-2,688	-4,862	-7,873	-10,42
Domestic debt, total	604,558	516,479	454,418	402,040	429,50
Foreign debt <sup>a</sup>					
- in dollars	518	2,810	4,583	6,844	9,94
- in euro	83,370	87,833	75,219	61,738	123,12
- in other currencies and multi-currency	40	38	21	20	1
Foreign debt, total	83,929	90,681	79,823	68,642	133,09
Domestic and foreign debt, total	688,487	607,160	534,241	470,682	562,60
B. Collateral related to swaps <sup>5</sup>	-	-	-	-	
C. Government deposits with the central bank <sup>6</sup>	-57,559	-53,297	-70,958	-86,333	-258,13
The Social Pension Fund, The Fund for Better D. Working Environment and Labour Retention and The Danish National Innovation Fund					
- Government securities	-120,799	-124,635	-125,111	-128,547	-98,60
- Other securities	-16,065	-11,284	-9,535	-8,686	-9,64
The three funds, nominal value, total	-136,864	-135,919	-134,646	-137,223	-108,24
Central-government debt, total (A+B+C+D)	494,064	417,944	328,637	247,116	196,22
Central-government debt, per cent of GDP	32.8	26.3	19.5	14.2	10.

Note: A positive sign indicates a liability, a negative sign an asset.

<sup>1.</sup> Inflation-linked bonds are compiled as indexed value at 31 Januar 2014.

<sup>2.</sup> Loans transferred from the Mortgage Bank of the Kingdom of Denmark.

<sup>3.</sup> Currency swaps from kroner to euro less currency swaps from euro to kroner.

<sup>4.</sup> Foreign loans are compiled after end-exposure.

<sup>5.</sup> Cash-collateral for the market value of the swap portfolio. A positive number means the counterparties net have posted collateral.

<sup>6.</sup> Deposits include deposits of the government funds. For 2014, government deposit are measured as in Danmarks Nationalbank's balance sheet.

Central-Government Debt, year-end 2004-14	4 (continue	ea)				Table :
Kr. million	2009	2010	2011	2012	2013	2014
A. Loan						
Domestic debt						
- Fixed-rate bonds, nominal	505,973	556,900	606,627	620,695	615,907	637,61
- Inflation-linked bonds¹	-	-	-	10,207	23,251	35,53
- Fisheries Bank bonds	995	887	786	684	594	50
- Lottery bonds	100	-	-	-	-	
- Treasury notes	-	-	-	-	-	
- Treasury bills	-	25,460	44,200	44,940	32,300	29,80
- Index-linked loans and loan package²	-	-	-	-	-	
- Currency swaps from kroner to euro (net) <sup>3</sup>	-8,197	2,974	2,974	-1,490	-1,490	
- Currency swaps from kroner to dollars	-10,956	-9,808	-8,660	-7,512	-6,364	-5,21
Domestic debt, total	487,921	576,413	645,927	667,524	664,198	698,24
Foreign debt⁴						
- in dollars	10,218	9,901	8,957	7,662	6,219	5,77
- in euro	129,351	104,811	102,861	82,338	69,689	53,20
- in other currencies and multi-currency	19	18	-	-	-	
Foreign debt, total	139,588	114,731	111,818	90,000	75,908	58,98
Domestic and foreign debt, total	627,509	691,144	757,745	757,524	740,106	757,22
B. Collateral related to swaps <sup>5</sup>	-	-	-	-	3,596	3,80
C. Government deposits with the central bank <sup>6</sup>	-210,932	-177,282	-223,100	-161,991	-161,953	-213,09
The Social Pension Fund, The Fund for Better D. Working Environment and Labour Retention and The Danish National Innovation Fund						
- Government securities	-77,720	-75,511	-69,351	-70,859	-65,550	-64,82
- Other securities	-37,376	-52,075	-51,393	-37,902	-32,352	-25,25
The three funds, nominal value, total	-115,096	-127,587	-120,744	-108,761	-94,902	-90,08
Central-government debt, total (A+B+C+D)	301,481	386,275	413,901	486,771	486,848	457,84
Central-government debt, per cent of GDP	17.6	21.5	22.6	26.1	25.8	24.

Note: A positive sign indicates a liability, a negative sign an asset.

<sup>1.</sup> Inflation-linked bonds are compiled as indexed value at 31 Januar 2014.

<sup>2.</sup> Loans transferred from the Mortgage Bank of the Kingdom of Denmark.

 $_{\mbox{\scriptsize 3.}}$  Currency swaps from kroner to euro less currency swaps from euro to kroner.

<sup>4.</sup> Foreign loans are compiled after end-exposure.

<sup>5.</sup> Cash-collateral for the market value of the swap portfolio. A positive number means the counterparties net have posted collateral.

<sup>6.</sup> Deposits include deposits of the government funds. For 2014, government deposit are measured as in Danmarks Nationalbank's balance sheet.

Service on central-government domestic debt¹ as of end-2014			Table 2.1
Kr. million	Interest	Redemption	Total
2015	22.0	81.0	103.1
2016	18.8	53.3	72.1
2017	17.9	51.9	69.8
2018	15.8	-0.8	15.0
2019	15.9	99.1	115.0
2020	11.9	-0.3	11.6
2021	11.9	92.4	104.3
2022	9.1	0.0	9.1
2023	9.1	110.1	119.3
2024	8.1	24.5	32.5
2025	6.3	41.1	47.5
2026	5.6	0.0	5.6
2027	5.6	0.0	5.6
2028	5.6	0.0	5.6
2029	5.6	0.0	5.6
2030	5.6	0.0	5.6
2031	5.6	0.0	5.6
2032	5.6	0.0	5.6
2033	5.6	0.0	5.6
2034	5.6	0.0	5.6
2035	5.6	0.0	5.6
2036	5.6	0.0	5.6
2037	5.6	0.0	5.6
2038	5.6	0.0	5.6
2039	5.6	122.8	128.3

<sup>1.</sup> Excluding T-bills. Including net interest payments on domestic interest-rate swaps. Krone payments to and from the central government in cross-currency swaps are included in the redemptions. The calculations of interest payments and redemptions on the inflation-linked bond assume annual inflation of 2 per cent until 2023.

Service on central-government foreign debt¹ as of end-2014			Table 2.2
Kr. million	Interest	Redemption	Total
2015	-0.2	22.6	22.4
2016	-0.1	21.3	21.3
2017	-0.3	9.2	9.0
2018	-0.3	1.0	0.7
2019	-0.3	0.7	0.4
2020	-0.2	0.4	0.2
2021	-0.1	0.1	0.0

<sup>1.</sup> Excluding Commercial Papers. Including net interest payments on interest-rate and cross-currency swaps. Other payments related to cross-currency swaps are included in redemptions.

Central-government's net financing requirement (continues next page)	and financir	ng requirem	ent, 2004-14	1	Table 3
Kr. billion	2004	2005	2006	2007	2008
Current, investment and lending budget	27.7	80.6	98,6	106.2	72.3
On-lending of government loans	-5.4	-3.2	-12,4	-8.5	-13.5
Distributed capital losses on issue and due interest <sup>1</sup>	0.5	-0.7	-0,9	0.4	0.3
Other capital items <sup>2</sup>	0.9	-0.9	5,0	-15.3	-10.7
Net cash balance	23.6	75.9	90,2	82.8	48.3
Net financing requirement (=-Net cash balance)	-23.6	-75.9	-90,2	-82.8	-48.3
Redemption on long-term domestic government debt <sup>3</sup>	100.0	118.7	75,6	51.8	37.7
Redemption on T-bills <sup>4</sup>	67.3	68.6	60,1	42.7	19.7
Redemption on long-term foreign government debt <sup>5</sup>	15.5	7.0	10,5	10.4	19.4
Redemption on Commercial Paper <sup>4</sup>	0.0	0.0	0,0	0.0	0.0
Financing requirement	159.2	118.4	56,0	22.1	28.0

Source: Central Government Accounts. 2014 are based on Danmarks Nationalbank's end-year specification, which may differ from accounting figures.

- 1. Including capital losses on buy-backs.
- 2. Including e.g. movements in the central government' holdings, cf. Budget Outlook from the Ministry of Finance.
- 3. Including net purchases of bonds from the Government funds administered by Government Debt Management.
- Corresponds to the outstanding amount at the end of the year before.
   Including net payments on cross-currency swaps.

Central-government's net financing requirement (continued)	t and finar	ncing requ	irement, 2	2004-14		Table 3
Kr. billion	2009	2010	2011	2012	2013	2014
Current, investment and lending budget	-29.8	-88.7	-33.1	-75.7	5.8	na
On-lending of government loans	-82.0	1.1	2.9	-7.7	-9.5	na
Distributed capital losses on issue and due interest <sup>1</sup>	-1.3	-1.2	-1.7	-2.5	-1.7	na
Other capital items <sup>2</sup>	3.1	-4.9	1.7	4.3	4.2	na
Net cash balance	-110.0	-93.7	-30.2	-81.6	-1.2	23.8
Net financing requirement (=-Net cash balance)	110.0	93.7	30.2	81.6	1.2	-23.8
Redemption on long-term domestic government debt <sup>3</sup>	61.2	62.5	63.8	60.2	55.1	55.2
Redemption on T-bills <sup>4</sup>	0.0	0.0	25.5	44.2	44.9	32.3
Redemption on long-term foreign government debt <sup>5</sup>	17.9	36.5	33.2	32.5	22.1	26.8
Redemption on Commercial Paper <sup>4</sup>	60.3	5.1	4.6	2.5	2.8	2.0
Financing requirement	249.4	197.8	157.2	221.0	125.0	93.

Source: Central Government Accounts. 2014 are based on Danmarks Nationalbank's end-year specification, which may differ from accounting figures.

- 1. Including capital losses on buy-backs.
- 2. Including e.g. movements in the central government' holdings, cf. Budget Outlook from the Ministry of Finance.
- 3. Including net purchases of bonds from the Government funds administered by Government Debt Management.
- Corresponds to the outstanding amount at the end of the year before.
   Including net payments on cross-currency swaps.

#### Table 4.1 Issuance of domestic central-government securities, 2014 Issuance, Issuance, kr. Redemption kr. million, million, market Coupon, Name Issued from ISIN code per cent date nominal value **Government bonds** 8 Feb 2011 -DK0009922759 2.5 Bullet loan 2016 15 Nov 2016 19,130 18,050 4 DK0009922403 Bullet loan 2019 20 Jan 2009 -15 Nov 2019 11,625 13,679 DK0009922916 0.1 Index-linked 2023 24 May 2012 -15 Nov 2023 11,975 12,012 DK0009923054 1.5 Bullet loan 2023 4 Sep 2012 -15 Nov 2023 8,035 7,881 DK0009923138 1.75 Bullet loan 2025 20 May 2014 -15 Nov 2025 41,090 42,645 DK0009922320 4.5 Bullet loan 2039 11 Nov 2008 -15 Nov 2039 5,000 7,293 T-bills DK0009814865 0 T-bill 2014 I 30 May 2013 -3 Mar 2014 3,900 3,901 DK0009814949 0 T-bill 2014 II 29 Aug 2013 -2 Jun 2014 15,907 15,900 0 DK0009815086 T-bill 2014 III 27 Feb 2014 -1 Sep 2014 18,160 18,163 DK0009815169 0 T-bill 2014 IV 27 May 2014 -1 Dec 2014 14,840 14,841 DK0009815243 0 28 Aug 2014 -T-bill 2015 I 2 Mar 2015 17,482 17,480 DK0009815326 0 T-bill 2015 II 27 Nov 2014 -1 Jun 2015 12,320 12,322

ISIN code	Coupon, per cent	Name	Issued	Redemption date	Issuance, kr million, nominal
	per cent	Ivaille	133000	date	Tillillott, Hottillia
Loan					
XS1046173529	0.875	1.500 million dollar-loan	11 March 2014	20 March 2017	8,075

The issuance at nominal value excludes indexation, while issuance at market value includes indexation at the time of issuance.

Note:

#### Table 5.1 Concluded Interest-Rate Swaps, 2014 Principal amount, Issued Redemption date Loan number Currency kr. million 29 Jan 2014 20 Dec 2020 744 1733 Euro 6 Feb 2014 1 Jul 2021 744 1736 Euro 13 Jun 2014 8 Apr 2021 744 1750 Euro 1755 23 Jun 2014 10 Dec 2020 Euro 744 1761 8 Jul 2014 28 Mar 2021 Euro 744 1766 28 Jul 2014 26 Jan 2021 Euro 744 1774 18 Aug 2014 16 Dec 2020 Euro 744 1779 29 Aug 2014 23 Feb 2020 Euro 1,117 1783 9 Sep 2014 19 Nov 2020 Euro 744 1799 2 Dec 2014 15 Feb 2020 Euro 744

On all concluded interest-rate swaps the central-government pays a fixed rate and receives 6-month Euribor.

Note:

Loan number	Termination date	Currency	Principal amount kr. millior
1421	3 Feb 2014	Euro	744
1467	3 Mar 2014	Euro	744
1464	23 Apr 2014	Euro	744
1347	17 Jul 2014	Euro	744
1419	1 Aug 2014	Euro	744
1324	4 Sep 2014	Euro	744
1326	26 Sep 2014	Euro	744
1296	15 Dec 2014	Euro	1,117

DANMARKS NATIONALBANK DANISH GOVERNMENT BORROWING AND DEBT 2014

	Outstanding			Outstanding		
		Issuance	Redemp-	amount	Redemption	
Kr. million, nominal value	end-2013	2014	tions 2014	end-2014	date	ISIN cod
Government bonds, fixed interest-rate						
Bullet loans						
5 per cent bullet loan 2014	59,500	-	59,500	-	15 Nov 2014	DK000991183
4 per cent bullet loan 2015	84,696	-	2,586	82,110	15 Nov 2015	DK000992143
2.5 per cent bullet loan 2016	36,270	18,050	-	54,320	15 Nov 2016	DK000992275
4 per cent bullet loan 2017	52,870	-	-	52,870	15 Nov 2017	DK000992194
4 per cent bullet loan 2019	88,050	11,625	-	99,675	15 Nov 2019	DK000992240
3 per cent bullet loan 2021	92,495	-	-	92,495	15 Nov 2021	DK000992267
1,5 per cent bullet loan 2023	59,810	8,035	-	67,845	15 Nov 2023	DK000992305
7 per cent bullet loan 2024	24,431	-	-	24,431	10 Nov 2024	DK000991813
1.75 per cent bullet loan 2025	-	41,090		41,090	15 Nov 2025	DK000992313
4.5 per cent bullet loan 2039	117,765	5,000	-	122,765	15 Nov 2039	DK000992232
nflation-linked bonds						
0.1 per cent DGBi 2023 <sup>2</sup>	23,251	12,280	-	35,531	15 Nov 2023	DK000992291
Amortised loans						
4 per cent amortised loan 2017	19	-	5	14	15 Jun 2017 <sup>2</sup>	DK000990272
Perpetual						
5 per cent Dansk-Islandsk Fond 1918	1	-	-	1	Perpetual	
Government bonds, fixed interest rate, total	639,158	96,080	62,090	673,148		
T-bills						
T-bill 2014 I	21,040	3,900	24,940	-	3 Mar 2014	DK000981486
T-bill 2014 II	11,260	15,900	27,160	-	2 Jun 2014	DK000981494
T-bill 2014 III	-	18,160	18,160	-	1 Sep 2014	DK000981508
T-bill 2014 IV	-	14,840	14,840	-	1 Dec 2014	DK000981516
F-bill 2015 I	-	17,480	-	17,480	2 Mar 2015	DK000981524
T-bill 2015 II	-	12,320	-	12,320	1 Jun 2015	DK000981532
Γ-bills, total	32,300	82,600	85,100	29,800		

<sup>1</sup> Issuance in the inflation-linked bond includes the index revaluation. Outstanding amount in the inflation-linked bond is measured at indexed nominal value af of year-end.

<sup>2.</sup> May be reddemed by the central government with three month's notice.

#### Central-government domestic debt as of end-2014 (continued)

Table 6.1

Kr. million, nominal value	Outstanding amount end-2013	Issuance 2014	Redemp- tions 2014	Outstanding amount end-2014	Redemption date	ISIN code
Fisheries Bank of Denmark Bonds						
8 per cent 2014	5	-	5	-	1 May 2014	DK0009603573
6 per cent 2016	8	-	3	4	1 May 2016	DK0009604035
7 per cent 2016	13	-	5	8	1 May 2016	DK0009603656
5 per cent 2019	306	-	51	255	1 Nov 2019	DK0009604621
5 per cent 2025	262	-	22	240	1 Nov 2025	DK0009604894
Fisheries Bank Bonds, total	594	-	86	507		
Domestic government securities, total	672,051	178,680	147,276	703,455		
Swaps from kroner to euro	-1,490	-	-1,490	-		
Swaps from kroner to dollar	-6,364	-	-1,148	-5,215		
Central-government domestic debt, total	664,198	178,680	144,638	698,240		

<sup>1.</sup> Issuance in the inflation-linked bond includes the index revaluation. Outstanding amount in the inflation-linked bond is measured at indexed nominal value af of year-end.

<sup>2.</sup> May be reddemed by the central government with three month's notice.

Central-government forei	gn debt as o	f end-2014		Table 6.2
ISIN code/loan no¹	Coupon, per cent	Name	Redemption	Nominal value kr. million
Loan				
XS0784646829	0.625	2012/15 dollar loan	22 May 2015	10,712.5
1563	0.625	2012/15 swap from dollar		-10,712.5
•	0.148	2012/15 swap to euro		10,176.8
XS0546424077	1.75	2010/15 euro loan	5 Oct 2015	11,165.4
XS0605536613	2.75	2011/16 euro loan	16 Mar 2016	9,304.5
XS0921252465	0.375	2013/16 dollar loan	25 Apr 2016	9,182.1
1641	0.375	2013/16 swap from dollar		-9,182.
•	0.006	2013/16 swap to euro		8,555.9
XS0642551773	3.125	2011/16 Swedish kronor loan	12 Jul 2016	2,160.
1485	3.125	2011/16 swap from Swedish kronor		-2,160.
•	var.	2011/16 swap to euro		2,237.
XS1046173529	0.875	2014/17 dollar loan	20 Mar 2017	9,182.
1741		2014/17 swap from dollar		-9,182.
•	0.417	2014/17 swap to euro		8,054.2
Loan, total				49,494.0
Commercial Paper				
ECP-issuances <sup>3</sup>				2,545.3
USCP-issuances in dollar³				1,168.1
CP-issuances, total				3,713.4
Debt in euro, total				53,207.3

<sup>1.</sup> ISIN codes are used for loans and loan numbers are used for swaps and Commercial-Paper issuances.

<sup>2.</sup> The outstanding amount as of 31 December 2014 is calculated to kroner on the basis of the following exchange rates as of 30 December 2014: euro = 744.36, Swedish kronor = 78.56 and dollar = 612.14.

<sup>3.</sup> A Forward Contract in Foreign-Exchange with Danmarks Nationalbank is attached to issues in dollars. At maturity the Kingdom of Denmark receives an amount in dollars, equivalent to the underlying loan, and pays the agreed amount in euro. The central government's final exposure is therefore in euro.

#### Central-government foreign debt as of end-2014

Table 6.2

ISIN code/loan no¹	Coupon, per cent	Name	Redemption	Nominal value, kr. million²
Currency swaps in dollars				
20001	4.164	2004/16 swap from kroner	30 Jun 2016	37.8
20002	4.164	2004/16 swap from kroner	30 Jun 2016	37.9
20003	4.355	2005/17 swap from kroner	28 Jan 2017	60.5
20004	4.4875	2005/17 swap from kroner	10 Feb 2017	102.1
20005	4.497	2005/17 swap from kroner	11 Aug 2017	117.6
20006	4.66	2005/17 swap from kroner	20 Oct 2017	117.6
20007	4.7925	2005/17 swap from kroner	15 Dec 2017	125.4
20008	4.855	2006/17 swap from kroner	16 Nov 2017	130.9
20009	5.06	2006/18 swap from kroner	12 Apr 2018	146.3
20012	5.27	2006/18 swap from kroner	28 Aug 2018	251.7
20013	4.755	2006/18 swap from kroner	10 Nov 2018	251.7
20014	4.73875	2007/19 swap from kroner	10 Jan 2019	283.2
20015	4.671	2007/19 swap from kroner	26 Mar 2019	283.2
20016	5.1225	2007/19 swap from kroner	15 Jun 2019	297.5
20017	5.164	2007/19 swap from kroner	5 Sep 2019	330.6
20018	5.3875	2007/19 swap from kroner	14 Nov 2019	330.6
20020	5.315	2008/20 swap from kroner	29 Jan 2020	363.6
20021	3.745	2008/20 swap from kroner	25 Mar 2020	362.3
20022	3.78	2008/20 swap from kroner	5 May 2020	362.3
20023	4.18	2008/20 swap from kroner	22 Jul 2020	428.5
20024	4.144	2008/20 swap from kroner	14 Oct 2020	428.5
20028	2.539	2009/21 swap from kroner	23 Jan 2021	464.2
20029	3.585	2009/21 swap from kroner	17 Mar 2021	464.2
Debt in dollar, total				5,778.3
Central-government foreign	debt, total			58,985.7

<sup>1.</sup> ISIN codes are used for loans and loan numbers are used for swaps and Commercial-Paper issuances.

<sup>2.</sup> The outstanding amount as of 31 December 2014 is calculated to kroner on the basis of the following exchange rates as of 30 December 2014: euro = 744.36, Swedish kronor = 78.56 and dollar = 612.14.

s. A Forward Contract in Foreign-Exchange with Danmarks Nationalbank is attached to issues in dollars. At maturity the Kingdom of Denmark receives an amount in dollars, equivalent to the underlying loan, and pays the agreed amount in euro. The central government's final exposure is therefore in euro.

#### Central-government portfolio swaps as of end-2014

Table 7

	Krone interest-rate swaps		Euro interest-rate swaps
Expiry year	Net exposure, kr. million	Net exposure, million euro	Net exposure, kr. million¹
2015	1,800	1,500	11,165
2016	10,600	475	3,536
2017	-	175	1,303
2018	-	-	-
2019	-50	500	3,722
2020	-	-	-
2021	-	-6	-45
Interest rate swaps, total	12,350	2,644	19,680

Note: Net exposure is calculated as the difference in principal between interest-rate swaps in which the central-government receives a fixed rate and interest-rate swaps in which the central-government pays a fixed interest rate. In all krone interest-rate swaps the variable payments are calculated on basis of Cibor rates. In all euro interest-rate swaps the variable payments are calculated on basis of Euribor rates.

<sup>1.</sup> Converted to kroner on the basis of the following exchange rate as of 30 December 2014: euro = 744.36.

Kiiiguo	Kingdom of Denmark's rating in domestic currency						
	Moody's	Fitch Ratings	Standard & Poor's				
1986, July	у Аа						
1986, Aug	gust Aa1						
1986, No	ovember Aaa	Aaa					
1992, July	У		AAA				
1995, Oct	tober	AAA					
Current r	rating Aaa	AAA	AAA				
M F F F S	Moody's Investors Service, Fitch Ratings and Standard & Poor's use the following ratings:  Moody's: Aaa, Aa, A, Baa, Ba, B, Caa, Ca and C.  For the categories Aa to Caa 1, 2 or 3 are used to indicate a status slightly better or worse within the category.  Fitch Ratings: AAA, AA, A, BBB, BB, B, CCC, CC, C, RD, and D.  For the categories AA to B a + or - are used to indicate a status slightly better or worse within the category.  Standard & Poor's: AAA, AA, A, BBB, BB, B, CCC, CC, C and D.  For the categories AA to CCC a + or - are used to indicate a status slightly better or worse within the category.						

	Moody's	Fitch Ratings	Standard & Poor's
1967, September	Aa		
1981, March			AAA
1983, January			AA+
1986, August	Aa1		
1987, March			AA
1991, October			AA+
1994, August		AA+	
1999, August	Aaa		
2001, February			AAA
2003, November		AAA	
Current rating	Aaa	AAA	AAA

Kr. million	2010	2011	2012	2013	2014
On-lending					
CPH City & Port Development	9	10,05	11,575	11,775	11,775
Danish Ship Finance	10,209	9,573	8,863	7,304	6,748
DR (Danish Broadcasting Corporation)	3,578	3,578	3,522	3,322	3,242
EKF (Danish Export Credit Agency)	2,918	5,297	10,453	14,839	16,67
Energinet.dk	5,475	6,475	11,875	12,572	16,319
Femern	500	500	800	1,1	1,5
Femern Landworks	-	100	200	400	500
Iceland	1,789	3,568	1,485	1,485	
Ireland	-	-	1,492	2,984	2,97
SSI (Statens Serum Institut)	300	387	387	387	38
Sund & Bælt Holding	350	350	350	450	40
The Danish North Sea Fund	344	344	-	-	
The Financial Stability Company	24,545	13,902	13,532	12,862	5,32
The Great Belt Bridge	13,94	13,115	13,365	13,765	15,71
The Metro Company	-	1,75	2,94	5,24	7,0
Øresund Landworks	7,012	7,362	8,712	9,762	10,26
Total	79,96	76,351	89,551	98,247	98,95
Guarantees					
DR (Danish Broadcasting Corporation)	916	896	876	856	83
Femern	0	-1	-	-	
Femern Landworks	85	-	-	-	
Sund & Bælt Holding	42	47	31	23	2
The Danish State Railways	7,964	7,117	5,889	6,223	5,40
The Great Belt Bridge	14,785	14,403	12,993	11,249	8,90
The Øresund Bridge	20,223	17,753	18,183	16,425	15,90
Øresund Landworks	3,552	3,561	2,556	1,63	51
Total	47,566	43,775	40,528	36,406	31,58