Danmarks Nationalbank

Danish Government Borrowing and Debt

2009

DANISH GOVERNMENT BORROWING AND DEBT 2009
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Explanation of symbols
- \- Magnitude nil
- 0 Less than one half of unit employed
- • Category not applicable

In tables figures may not add because of rounding.

This publication is based on information available up to 31 January 2010.

This publication is a translation of "Statens låntagning og gæld 2009".

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Highlights of Government Debt Policy

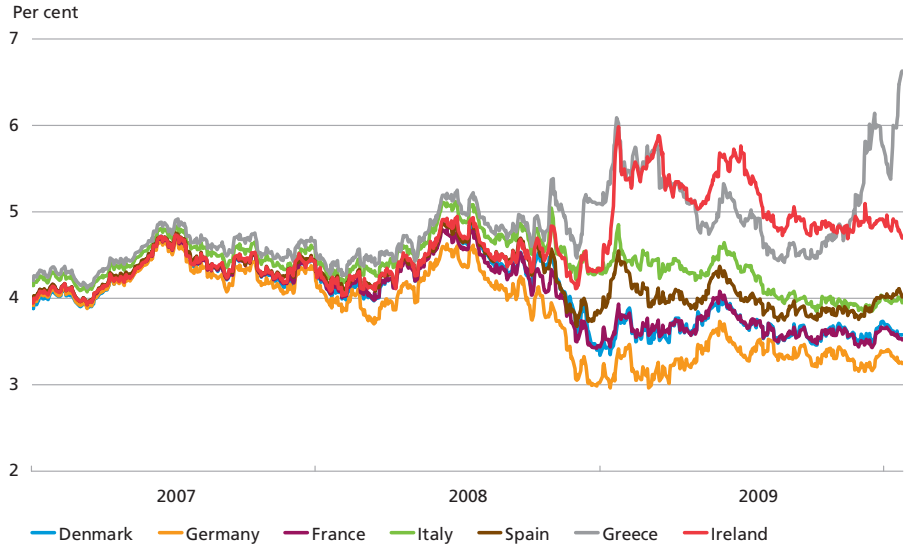
GOVERNMENT DEBT POLICY TRENDS IN 2009

The slowdown in the world economy combined with the financial rescue packages led to a surge in government borrowing requirements. At the beginning of 2009 considerable uncertainty still characterised the financial system, causing concern as to whether the market would be able to absorb the increased supply of government bonds without yields rising strongly. Against that background, government debt management offices increased the flexibility of their issuance strategies. Issuance was concentrated in short-term government securities, and various issuance methods were used.

The uncertainty in the financial markets and increased risk aversion among investors meant that government bonds were still in demand. However, investors took a more selective approach to investment, which widened spreads between government issuers, cf. Chart 1.

Conditions in the financial markets improved during the 2nd quarter, reflecting accommodative monetary and fiscal policies. Although government borrowing requirements were adjusted further upwards, government debt management offices had easier access to the financial markets,

10-YEAR GOVERNMENT YIELDS — Chart 1



Note: Yields adjusted for maturity differences.
Source: Bloomberg.

and issuance was once again distributed more evenly across maturity segments. Higher risk appetite among investors and lower volatility in the financial markets meant that most yield spreads to Germany narrowed.

Outlook for 2010

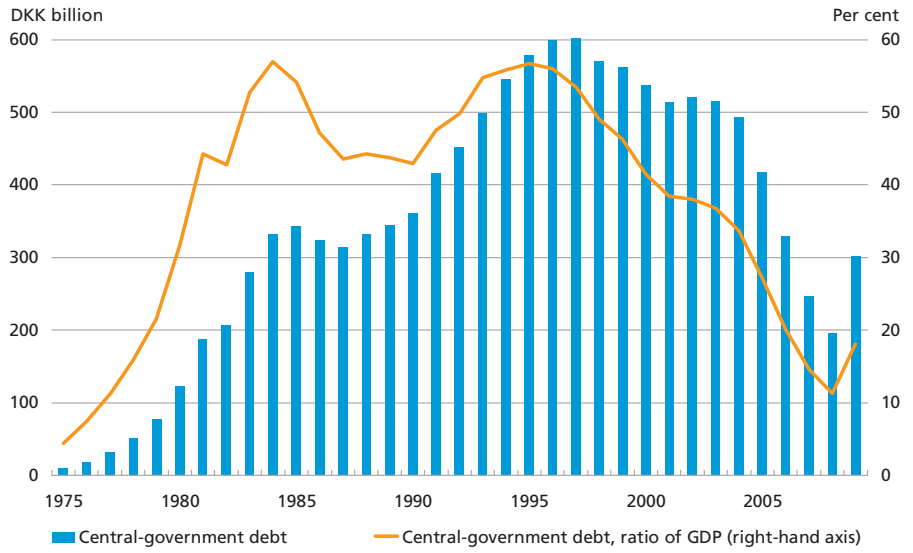
At the global level, large government budget deficits are anticipated in 2010, which will increase competition among government issuers. Investor focus on creditworthiness entails that financing costs will still vary greatly from country to country. The financial markets have improved since last year, but there is considerable uncertainty linked to a roll-back of the expansionary monetary and fiscal policies.

CENTRAL-GOVERNMENT DEBT IN 2009

Danish central-government debt rose in 2009 after a number of years with large government surpluses, cf. Chart 2. At year-end, the central-government debt amounted to DKK 302 billion, corresponding to 18 per cent of GDP. On a per-capita basis, government debt had risen from approximately DKK 35,000 in 2008 to approximately DKK 55,000 in 2009.

Most of the increase can be attributed to central-government re-lending to the Financial Stability Company and capital injections into banks and mortgage-credit institutes. Adjusted for capital injections into banks and mortgage-credit institutes and government re-lending, the debt amounted to DKK 173 billion, corresponding to 10 per cent of GDP, cf. Table 1.

CENTRAL-GOVERNMENT DEBT, 1975-2009 — Chart 2



CENTRAL-GOVERNMENT DEBT, END-2009 Table 1

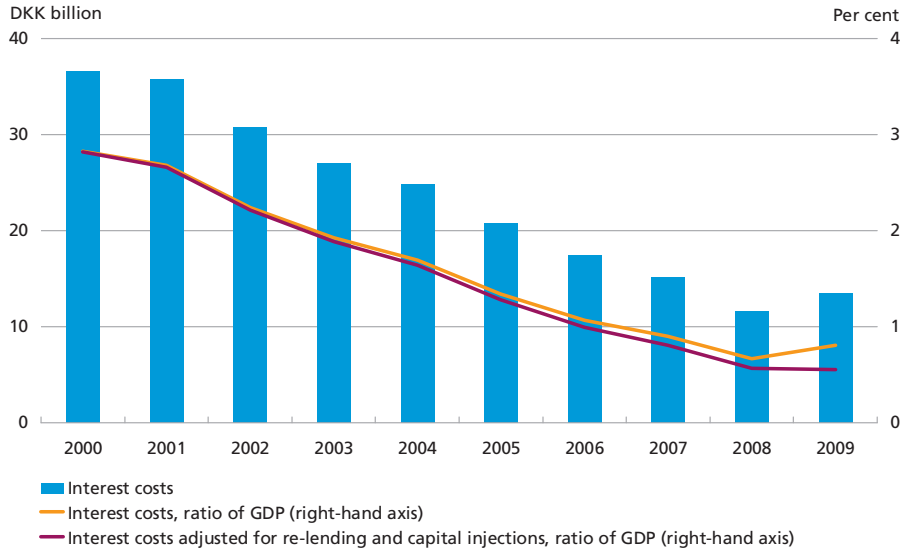
	DKK billion	Per cent of GDP
Domestic debt	488	29
Foreign debt	140	8
Government funds	-115	-7
Central government's account at Danmarks Nationalbank	-211	-13
Central-government debt	302	18
Capital injections into banks and mortgage-credit institutes	-46	-3
Re-lending to the Financial Stability Company	-29	-2
Other re-lending	-53	-3
Central-government debt adjusted for lending	173	10

Note: A positive figure indicates a liability; a negative figure indicates an asset.

Interest costs

The increase in the central-government debt in 2009 implied that interest costs rose by DKK 1.8 billion to DKK 13.5 billion, cf. Chart 3. The central government's costs for financing of re-lending and capital injections into banks and mortgage-credit institutes are offset by interest payments from the companies. The interest payable on the capital injections averages 10.1 per cent, reflecting the risk incurred by the central government in this context. Adjusted for interest income from re-lending and capital injections, interest costs on the central-government debt declined by DKK 0.6 billion in 2009.

THE CENTRAL GOVERNMENT'S INTEREST COSTS Chart 3



GOVERNMENT BORROWING

Domestic borrowing

At the beginning of 2009, domestic central-government borrowing focused on building up the 10-year on-the-run issue. In view of the upward adjustment of the borrowing requirement, the issuance strategy was changed in the 2nd half of the year, with an equal distribution on the 2- and 10-year maturity segments, cf. Chart 4. In addition, issuance in the 5-year segment was resumed.

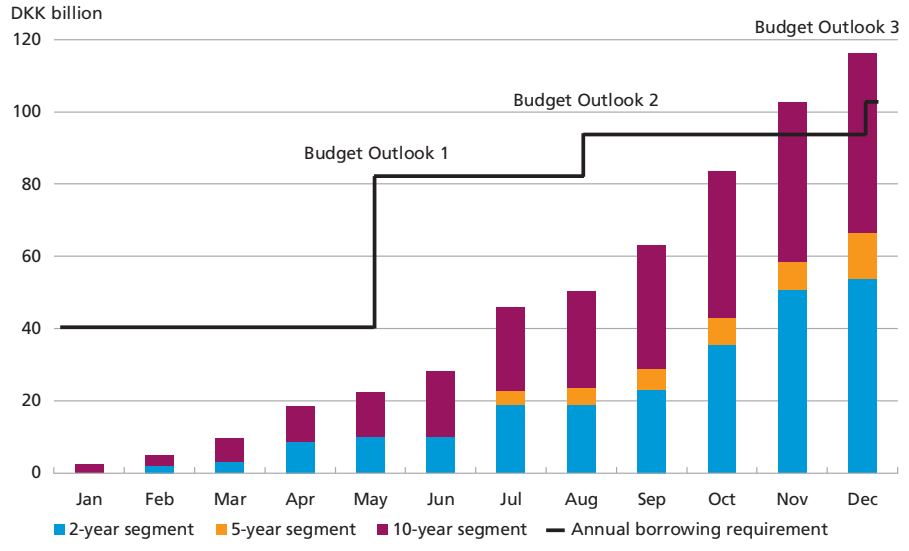
Domestic borrowing totalled DKK 117 billion, DKK 14 billion higher than the borrowing requirement. This reflects that Government Debt Management began to finance the 2010 borrowing requirement towards the end of the year.

Foreign borrowing

In the context of the financial turmoil, it was found to be appropriate to increase the central government's contribution to the foreign-exchange reserve at the beginning of 2009. Against that background, the central government raised medium- and long-term foreign debt totalling DKK 82 billion in the 1st half of the year, primarily in 3-year dollar loans and a 5-year euro loan. At the same time, the central government's short-term foreign debt by way of Commercial Paper was reduced.

In the 2nd half of the year, the foreign-exchange reserve increased following intervention purchases by Danmarks Nationalbank in the market.

ACCUMULATED SALES AND BORROWING REQUIREMENT, 2009 — Chart 4



Note: In addition DKK 0.9 billion was sold in the 30-year bond.

Against that background, it was decided not to refinance foreign debt maturing in the 2nd half of the year. The central government's foreign debt increased by DKK 6 billion net in 2009.

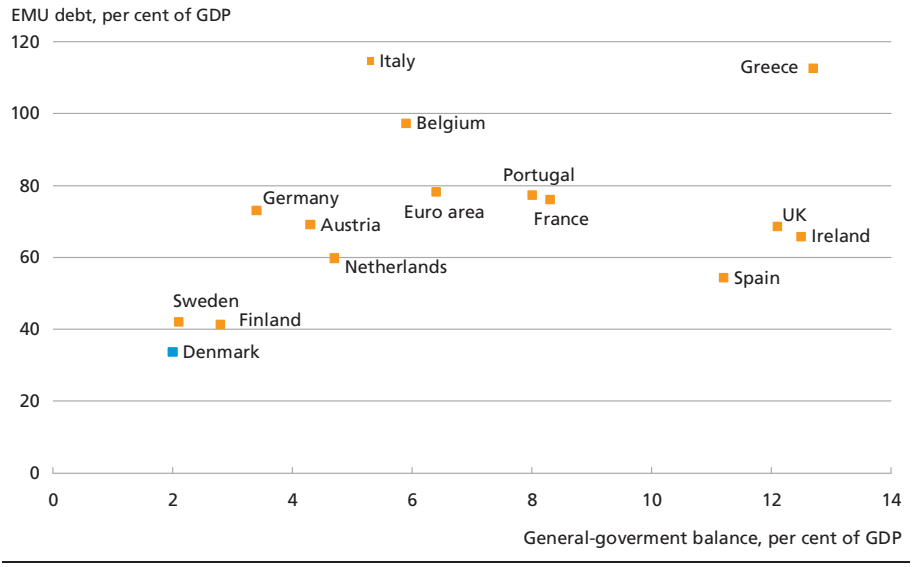
A LOW LEVEL OF DEBT IN AN INTERNATIONAL CONTEXT

Both the domestic and the foreign debt have been given the highest credit rating, AAA, by the rating agencies Fitch Ratings, Moody's and Standard & Poor's. Denmark's credit rating reflects that the level of debt is low in an international context, among other things, cf. Chart 5.

Ownership distribution of domestic government securities

Denmark's high credit standing contributes to sustaining foreign interest in Danish government securities. The non-resident ownership share was around one third of krone-denominated Danish government bonds. Non-residents primarily own short-term government bonds, cf. Chart 6. The insurance and pension sector owns 50 per cent of the central government's domestic bonds, primarily in the longer maturity segments. This is attributable to the long-term commitments of the Danish pension companies. The ownership distribution for domestic government bonds remained broadly unchanged throughout 2009.

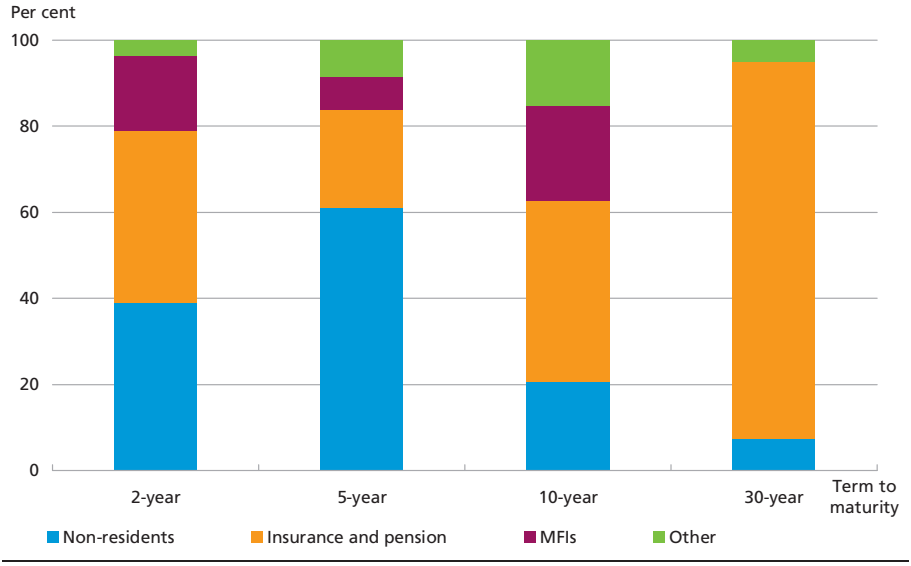
GENERAL-GOVERNMENT BALANCE AND EMU DEBT, 2009 Chart 5



Note: EMU debt includes the general government's gross debt. Since the European Commission's autumn forecast a majority of general-government budget balances have deteriorated further. The European Commission will publish a new forecast in the spring of 2010.

Source: European Commission's autumn forecast, August 2009.

OWNERSHIP SHARES OF DOMESTIC SECURITIES, END-2009 Chart 6



Note: Ownership shares exclude the government bond portfolios of the government funds.
Source: Danmarks Nationalbank, *Securities Statistics*.

ISSUANCE STRATEGY IN THE COMING YEARS

The large government surpluses in the period 2005-08 meant that central-government issuance focused on the 10-year maturity segment, cf. *Government Debt Policy in the Light of Falling Debt*[1]. As government budget deficits are expected in the coming years, it has been necessary to reassess the issuance strategy only two years after publishing the above report. In future, it will be necessary to build up liquid bond series in other maturity segments besides the 10-year segment. The strategy is to issue bonds in the 2-, 5- and 10-year segments on the basis of a 40-20-40 percentage distribution. In addition, issuance of T-bills will be resumed.

Issuance strategy in 2010

The central government's domestic issuance requirement in 2010 is DKK 107 billion. Issuance in the existing 2-, 5- and 10-year on-the-run issues will continue in the 1st half of 2010, cf. Table 2. In the 2nd half of the year, a new 5-year on-the-run issue will be opened, maturing in 2016 to fill a gap in the central government's redemption profile. In addition, a new 10-year on-the-run issue will be opened, maturing in 2020 or 2021. The bond

[1] *Danish Government Borrowing and Debt 2007.*

KEY ON-THE-RUN ISSUES, 1ST HALF 2010 — Table 2

Maturity < 1 year	Treasury bills
2-year segment	4 per cent bullet loans 2012
5-year segment	4 per cent bullet loans 2015
10-year segment	4 per cent bullet loans 2019
30-year segment	4.5 per cent bullet loans 2039

issuance strategy will be to aim for a 40-20-40 percentage distribution. The outstanding volume in the 30-year bond can be built up to around DKK 90 billion. In addition, a T-bill programme will be opened on 25 February and is expected to cover around DKK 40 billion of the issuance requirement, cf. Box 1.

Government Debt Management resumed foreign borrowing at the end of 2008 after some years' absence. The absence from the international borrowing markets entailed that a number of investors had to reopen lines to invest in Danish securities. It was also necessary for Government Debt Management to re-establish broader contacts with investors and international banks.

To ensure access to foreign capital markets, the future strategy will be to issue an annual 5-year euro loan of EUR 1-2 billion.

ISSUANCE AND TRADING IN GOVERNMENT SECURITIES

Primary dealers

Danish government bonds are issued to and bought back from banks that have entered into primary dealer contracts with the central government.

ISSUANCE STRATEGY 2010 — Box 1

Domestic strategy

- Government bonds are issued on the basis of a 40-20-40 percentage distribution on the 2-, 5- and 10-year maturity segments.
- In the 2nd half of 2010, a new 5-year on-the-run issue maturing in 2016 will be opened. This series will be built up towards a final outstanding volume of around DKK 40 billion over a 2-year period.
- In the 2nd half of 2010, a new 10-year on-the-run issue maturing in 2020 or 2021 will be opened. This series will be built up towards a final outstanding volume of around DKK 80 billion over a 2-year period.
- T-bills will account for around DKK 40 billion of the domestic issuance requirement.
- 4.5 per cent bullet loans 2039 can be built up to a final outstanding volume of around DKK 90 billion.
- Issuance in the other bullet loans is possible.

Foreign strategy

- In 2010, a 5-year euro loan of EUR 1-2 billion is issued.

PRIMARY DEALERS AND MARKET TAKERS, 2010 Table 3

Primary dealers in government bonds	Primary dealers in T-bills	Market takers in government securities
Barclays Bank	Arbejdernes Landsbank	Bank of America Merrill Lynch
BNP Paribas	Danske Bank	Citigroup
Danske Bank	JP Morgan	Commerzbank
JP Morgan	Jyske Bank	Deutsche Bank
Morgan Stanley	Nordea	DZ Bank
Nordea	Nykredit Bank	Nomura
Nykredit Bank	SEB	Royal Bank of Scotland
SEB	Sydbank	
Spar Nord Bank		
Sydbank		

Note: A market taker can trade at prices quoted by the primary dealers, but cannot quote prices. Banks, who are primary dealers in either government bonds or T-bills, can be a market taker in the government security segment, where they do not act as a primary dealer.

The central government's primary dealers in government bonds are 10 regional and international banks, cf. Table 3. A primary dealer system for T-bills with 8 participants has been established in connection with the re-opening of the T-bill programme. A broad group of primary dealers enhances interest in Danish government securities and supports competition in connection with issuance and buy-backs by the central government.

Issuance via auctions supplemented with tap sales

Government Debt Management introduced regular auctions in 2009. Experience from issuance via auctions has been positive. Issuance of government bonds via regular auctions will therefore continue, supplemented with tap sales. Issuance on tap provides a regular supply of government securities in the on-the-run issues, making it easier for the banks to accommodate demand from investors on non-auction days.

Main Principles

CHAPTER 1

Main Principles of Government Debt Management

The central-government debt comprises domestic and foreign debt, the assets of three government funds and the balance of the central government's account. Management of government debt is carried out by Government Debt Management at Danmarks Nationalbank, which borrows in the financial markets on behalf of the Ministry of Finance to cover the central government's financing requirement.

The overall objective of the government debt policy is to cover the central government's 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 financial crisis has highlighted the need to facilitate the central government's access to the financial markets in the longer term and to support the domestic financial market.

GOVERNMENT DEBT MANAGEMENT PORTFOLIOS 1.1

The central-government debt is compiled as the nominal value of domestic and foreign debt less the balance of the central government's account at Danmarks Nationalbank and the assets of three government funds[1].

Domestic and foreign debt is defined by the currency exposure. Domestic debt is exposed in kroner, while foreign debt is exposed in foreign exchange, predominantly euro.

The assets of the three government funds administered by Government Debt Management are invested in Danish government securities and other listed bonds denominated in kroner. The central government holds liquid funds in an account at Danmarks Nationalbank, where the central government's large receipts and payments are settled.

At end-2009, the central-government debt amounted to DKK 302 billion, equivalent to 18 per cent of GDP, cf. Table 1.1.1. Government debt adjusted for re-lending and capital injections into banks and mortgage-credit institutes amounted to DKK 173 billion, equivalent to 10 per cent of GDP.

[1] The Social Pension Fund, the Preventive Measures Fund and the Advanced Technology Foundation.

CENTRAL-GOVERNMENT DEBT — Table 1.1.1

DKK billion	End-2009
Domestic debt	488
Foreign debt	140
Government funds	-115
Central government's account at Danmarks Nationalbank	-211
Central-government debt	302
Re-lending	-82
Capital injections into banks and mortgage-credit institutes	-46
Central-government debt adjusted for lending	173

Note: A positive figure indicates a liability; a negative figure indicates an asset.

GOVERNMENT DEBT MANAGEMENT OBJECTIVES 1.2

The overall objective of Government Debt Management is to cover the central government's 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 financial crisis has highlighted the need to facilitate the central government's access to the financial markets in the longer term and to support the domestic financial market.

RESPONSIBILITIES OF GOVERNMENT DEBT MANAGEMENT 1.3

Government Debt Management manages central-government borrowing and debt within the following areas:

Calculation of financing requirement and issuance of government securities

- Calculation of the central government's financing requirement on the basis of the government budget forecast from the Ministry of Finance
- Issuance of domestic government securities to cover the central government's financing requirement
- Issuance of foreign loans in order to maintain an adequate foreign-exchange reserve
- Establishment of a framework to support a well-functioning market for government securities, e.g. through agreements with primary dealers in Danish government securities for ongoing price quotation (market making).

Risk management

- Analysis and management of risk on the central-government debt portfolio. The risk on central-government financial assets and liabilities is managed on a consolidated basis
- Credit risk management of currency and interest-rate swaps.

Management of government funds, re-lending and government guarantees

- Management of the assets of the three government funds
- Management of access to re-lending and government guarantees for a number of companies.

Advisory services and international cooperation

- Advising the Ministry of Finance on issues concerning the central government's other financial risks, e.g. interest-rate risk in relation to the financing of subsidised housing
- Advising other government debt management offices
- Participation in international cooperation in the area of government debt management, including the OECD's Working Party on Government Debt Management and the Economic and Financial Committee on EU Government Bonds and Bills Markets.

Contacts with credit rating agencies and investors

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

GOVERNMENT DEBT MANAGEMENT STRATEGY 1.4

The strategy for management of central-government debt is agreed at quarterly meetings between the Ministry of Finance and Government Debt Management on the basis of a strategy proposal prepared by Government Debt Management. The Ministry of Finance authorises Government Debt Management to implement the agreed strategy, including the central government's issuance strategy and risk management.

In December, the overall strategy for the following year is agreed upon, and at the subsequent three quarterly meetings any adjustments of the overall strategy for the year are adopted. Government Debt Management reports on the implementation of the strategy and also reports on general matters at the quarterly meetings. In addition, Government Debt Management is regularly in contact with the Ministry of Finance concerning current aspects of government debt management.

The government debt strategy is announced to the market immediately after the government debt meetings in June and December This supports openness and credibility. 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 e.g. the IMF, the World Bank and the OECD.

DOMESTIC AND FOREIGN FUNDING RULES 1.5

The Danish government and Danmarks Nationalbank have agreed on the framework for the distribution of the central government's domestic and foreign borrowing. The domestic and foreign funding rules support the separation of fiscal and monetary policy. The funding rules are formulated in the *Agreement on the division of work in the area of government debt between Danmarks Nationalbank and the Ministry of Finance*[1].

Domestic borrowing

Under the domestic funding rule, the central government issues debt denominated in kroner to cover its current deficit and redemptions on the domestic debt. This means that the central government's payments as a general rule have no impact on domestic liquidity, and the distribution of responsibilities for fiscal and monetary policy is supported.

The central government may continue to issue government securities even though the borrowing requirement for the year has been financed. In that case, these issuances will cover part of the borrowing requirement for the following year.

Under the EU Treaty, the central government's account at Danmarks Nationalbank must never show a deficit. Borrowing is planned to ensure an appropriate balance on the central government's account in order to absorb fluctuations in central-government receipts and payments.

Foreign borrowing

The foreign debt is issued in order to maintain an adequate foreign-exchange reserve. The foreign funding rule determines that, as a general rule, the central government issues debt denominated in foreign currency equivalent to the redemptions on the foreign debt. If the foreign-exchange reserve decreases by more than what is deemed appropriate, it may be necessary for the central government – out of concern for the

[1] See www.governmentdebt.dk.

ACT ON THE AUTHORITY TO RAISE LOANS ON BEHALF OF THE CENTRAL GOVERNMENT Box 1.1

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*"[1] of 1993, which authorises the Minister of Finance to raise loans on behalf of the central government for a maximum amount of DKK 950 billion[2]. This amount is the upper limit for domestic and foreign debt. In connection with current debt management, the Minister of Finance is moreover 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 22/12/1993 as amended. The Act (in Danish only) can be found at www.governmentdebt.dk.
[2] A draft bill on increase of the maximum from DKK 950 billion to DKK 2,000 billion has been tabled, cf. consultation on the Bill to amend the Act on the authority to raise loans on behalf of the central government.

exchange-rate policy – to raise extraordinary loans abroad in order to strengthen the foreign-exchange reserve. On the other hand, it is possible to reduce the government's foreign debt in situations where the foreign-exchange reserve increases by more than necessary. Borrowing in foreign currency does not influence domestic liquidity, but is included directly in the foreign-exchange reserve.

The central government may raise short-term foreign loans via its Commercial Paper programmes, which allows rapid build-up of the foreign-exchange reserve or the balance of the central government's account.

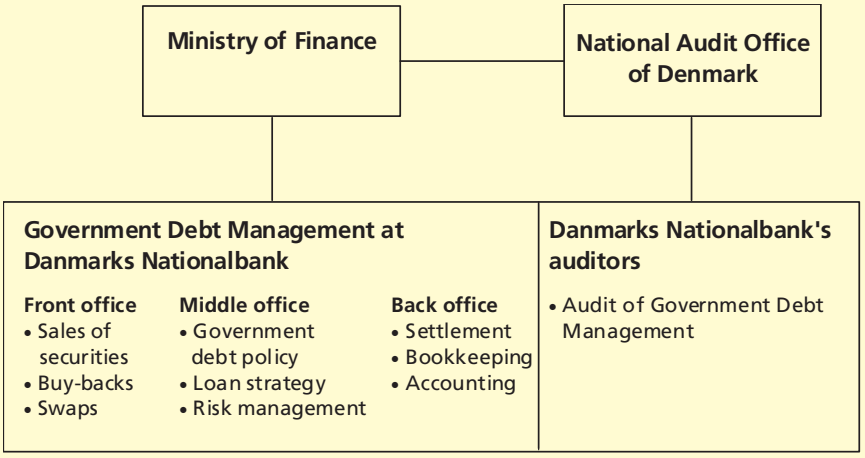
STRUCTURE OF GOVERNMENT DEBT MANAGEMENT 1.6

The Minister of Finance is authorised by law to raise government loans, cf. Box 1.1. In addition, the Minister of Finance holds the overall political responsibility for central-government borrowing and debt, including relations with the Folketing (Parliament). The day-to-day management of the central-government debt is conducted by Government Debt Management on behalf of the Ministry of Finance, and in accordance with the government debt strategy agreed with the Ministry of Finance.

In most countries, management of the central-government debt is undertaken by the ministry of finance or a separate government debt management office. In Denmark, Government Debt Management is located in Danmarks Nationalbank, but its 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*

STRUCTURE OF GOVERNMENT DEBT MANAGEMENT Box 1.2



Nationalbank and the Ministry of Finance[1]. The framework for management of the assets of the Social Pension Fund is laid down in the *Regulations governing the management of the Social Pension Fund*[2]. Tasks undertaken by Government Debt Management in relation to the management of the assets of the other two government funds and the management of re-lending and government guarantees are specified in separate agreements.

The internal structure of Government Debt Management reflects international standards and recommendations. Government Debt Management is divided into front, middle and back offices with separate functions, cf. Box 1.2.

A division of functions and clear procedures reduce operational risks and ensure a clear division of responsibilities, which in turn facilitates internal control. A well-defined division of responsibilities also ensures that tasks related to the management of government debt are undertaken independently of other activities at Danmarks Nationalbank.

The middle office formulates the general principles concerning government debt policy and prepares proposals for borrowing strategies and risk management prior to the quarterly government debt meetings. With due consideration of current market conditions the middle office lays down monthly guidelines for the front office with regard to issuance, buy-backs and swap transactions in accordance with the overall objectives for government debt and the agreed strategies. In addition,

1 See www.governmentdebt.dk.
2 The regulations can be found at www.governmentdebt.dk.

the middle office undertakes the overall management of re-lending and government guarantees, represents Danmarks Nationalbank on the Committee of the Social Pension Fund and has an advisory role regarding the financing of subsidised housing.

The front office is responsible for the operational element of the government debt policy, including sales of government securities, buybacks and execution of swap transactions, within the framework of the monthly guidelines. In addition, it determines market terms for re-lending and manages government guarantees.

The back office settles payments concerning central-government debt, including servicing of debt and swaps, and prepares the central-government accounts together with the Danish Agency for Governmental Management.

Government Debt Management is audited by Danmarks Nationalbank's auditors on behalf of Rigsrevisionen (the national audit office of Denmark). Danmarks Nationalbank's auditors ascertain that the accounts of Government Debt Management give a true and fair view, i.e. that they are without significant errors and omissions. Rigsrevisionen may assess whether the funds received by Government Debt Management are applied in the best possible way. The results of its investigations are published at www.rigsrevisionen.dk.

INFORMATION ON THE CENTRAL-GOVERNMENT DEBT 1.7

An important element of government debt policy is to give market participants and the public access to information on the central-government borrowing strategies, borrowing requirement, as well as information of a more general nature on the framework for government debt management. Government Debt Management aims to be clear and unambiguous in its communication of the government debt strategy to market participants.

Information about government debt and Government Debt Management is available at www.governmentdebt.dk. In addition, information is published via other sources on an ongoing basis, cf. Box 1.3.

An overview of the information regularly published on central-government borrowing and debt is presented in the Appendix *Information on Government Borrowing and Debt*.

SOURCES OF INFORMATION ON DANISH GOVERNMENT BORROWING AND DEBT — Box 1.3

Strategy announcements and publications

- The annual publication *Danish Government Borrowing and Debt* (February)
- The semi-annual announcement *Danish Government Debt Management Strategy* (June and December)

News and announcements

- Danmarks Nationalbank's news service (DN News)
- Danish and international trading platforms and news agencies, e.g. Bloomberg, ICAP/BrokerTec, MTS Denmark, Nasdaq OMX, Reuters, Ritzau, etc.

Websites

- Government Debt Management's website, www.governmentdebt.dk[1]
- The Ministry of Finance's Budget Outlook, www.fm.dk

Contacts

- For information, please e-mail Government Debt Management at: governmentdebt@nationalbanken.dk

[1] Subscribers to the news service automatically receive e-mail notifications of news concerning Danish government borrowing and debt.

Report Section

CHAPTER 2

Government Debt Policy Trends in 2009

The slowdown in the world economy combined with the financial rescue packages led to a surge in government borrowing requirements. At the beginning of 2009 considerable uncertainty still characterised the financial system, causing concern as to whether the market would be able to absorb the increased supply of government bonds without yields rising strongly. Against that background, government debt management offices increased the flexibility of their issuance strategies.

The uncertainty in the financial markets and increased risk aversion among investors meant that government bonds were still in demand. However, investors took a more selective approach to investment, which widened spreads between government issuers. Risk aversion among investors led to concentration of issuance in short-term government securities.

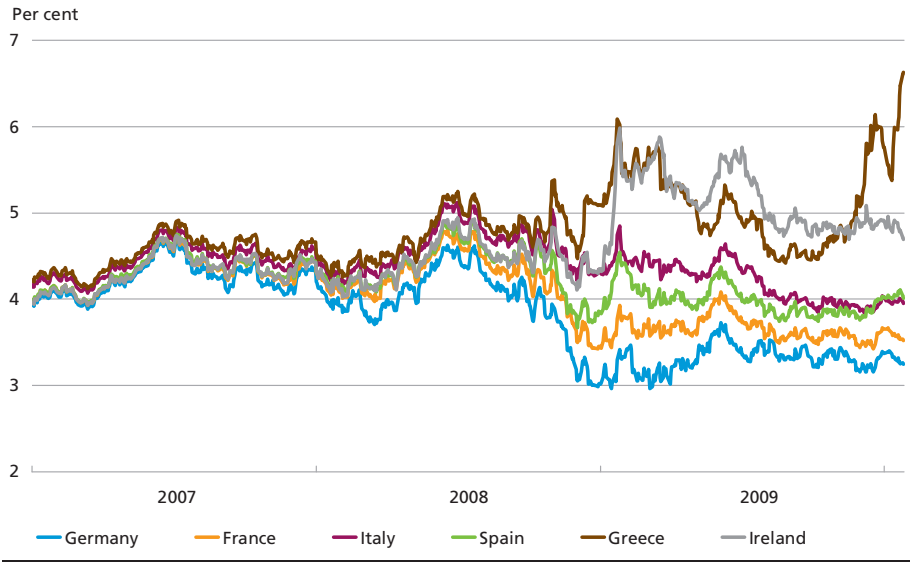
Conditions in the financial markets improved during the spring, reflecting accommodative monetary and fiscal policies. Although government borrowing requirements were adjusted further upwards, government debt management offices no longer paid a premium when opening new series, and issuance was once again distributed more evenly across maturity segments. However, liquidity and price transparency in the secondary markets remained low.

CONTINUED FINANCIAL TURMOIL IN EARLY 2009 2.1

The turmoil in the global financial markets culminated after the collapse of Lehman Brothers in September 2008. Governments in most countries introduced financial rescue packages in order to restore confidence in the financial system. The measures had an impact, but at the beginning of 2009 the financial system was still characterised by great uncertainty, leading to high volatility in the money and credit markets.

The financial rescue packages entailed a higher government issuance requirement, partly as a result of government capital injections into banks. Moreover, banks in many countries were given the opportunity to issue bonds with government guarantees, which led to increased competition to attract investors among high-rated issuers. The financial rescue packages gave rise to concern as to whether the market would be able to absorb the increased supply of bonds without yields rising strongly.

10-YEAR GOVERNMENT YIELDS Chart 2.1.1



Note: Yields adjusted for maturity differences.
Source: Bloomberg.

Uncertainty in the financial markets and increased risk aversion among investors meant that government bonds were still in demand as they are associated with low risk. This was one of the reasons why government bond yields for most euro area member states remained low in early 2009, cf. Chart 2.1.1.

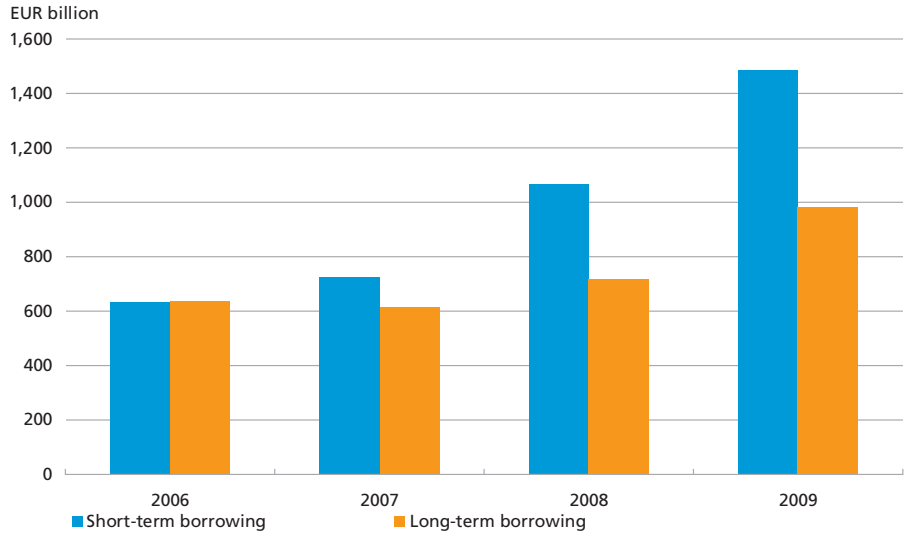
Larger country differences in financing conditions

Owing to the widespread uncertainty, international investors took a more selective approach to investment, and yield spreads between government issuers widened. Investors focused more on the creditworthiness of countries, including their levels of indebtedness and future budget deficits. In addition, investors were particularly interested in liquid government securities, cf. Box 2.1.

More flexible issuance strategies

In early 2009, investors focused on reducing the risk on their portfolios. This meant that demand was concentrated on government bonds with short maturities. Against that background, borrowing requirements were to a large extent financed by issuing T-bills and short-term bonds, cf. Chart 2.1.2. The more flexible issuance strategies also meant that more government securities were issued outside the key on-the-run issues, and various issuance methods were used. In addition, auctions were held more frequently and adapted to market conditions.

ISSUANCES IN THE EURO AREA OF GOVERNMENT SECURITIES — Chart 2.1.2

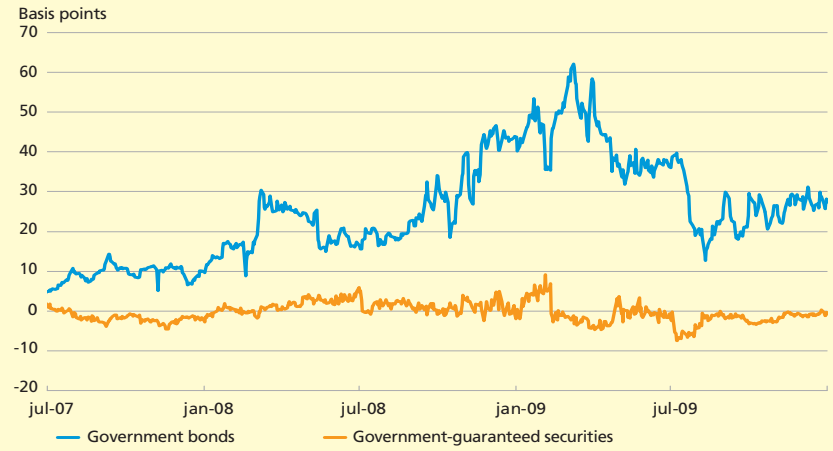


Note: Short-term borrowing primarily covers issuances with maturity up to one year.
Source: ECB Statistical Data Warehouse (sdw.ecb.europa.eu).

WIDENING OF YIELD SPREADS TO GERMANY — Box 2.1

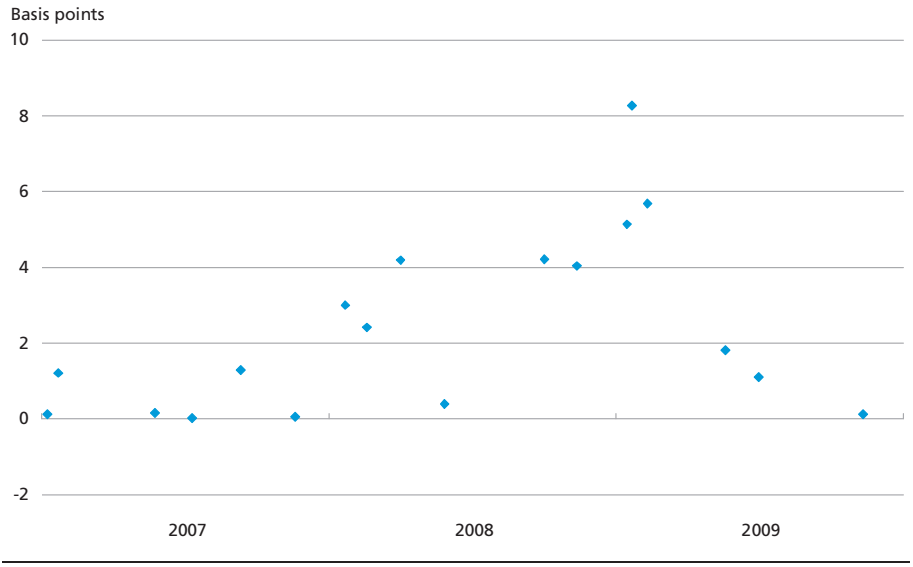
The special status of German government bonds as a result of their high liquidity is illustrated in the Chart below. The Chart shows that in the period when the financial turmoil peaked, the yield spread between German and French government bonds widened considerably. This is primarily attributable to liquidity differences between French and German government bonds. If the widening of the yield spread had been attributable to a change in credit risk, the spread between German and French government-guaranteed bonds would have increased correspondingly. However, this spread remained more or less constant during the peak turmoil.

10-YEAR YIELD SPREADS BETWEEN FRENCH AND GERMAN BONDS



Note: Average for 31 days. Government-guaranteed securities are illustrated by the spread between Cades and KfW.
Source: Bloomberg.

OPENING PREMIUMS ON 10-YEAR GOVERNMENT BONDS Chart 2.1.3



Note: Opening premiums are calculated as differences in asset swaps between existing and new securities. Observations from Belgium, Denmark, France, Germany and The Netherlands are included.
Source: Bloomberg.

Due to accommodative monetary policies and focus on government issues in the short-term maturity segment, borrowing requirements were met at low rates of interest. However, issuance in bonds with short maturities meant that the refinancing risk increased. Refinancing risk was in focus among rating agencies due to the turmoil in the financial markets and prospects of large budget deficits.

Issuance premiums to attract investors

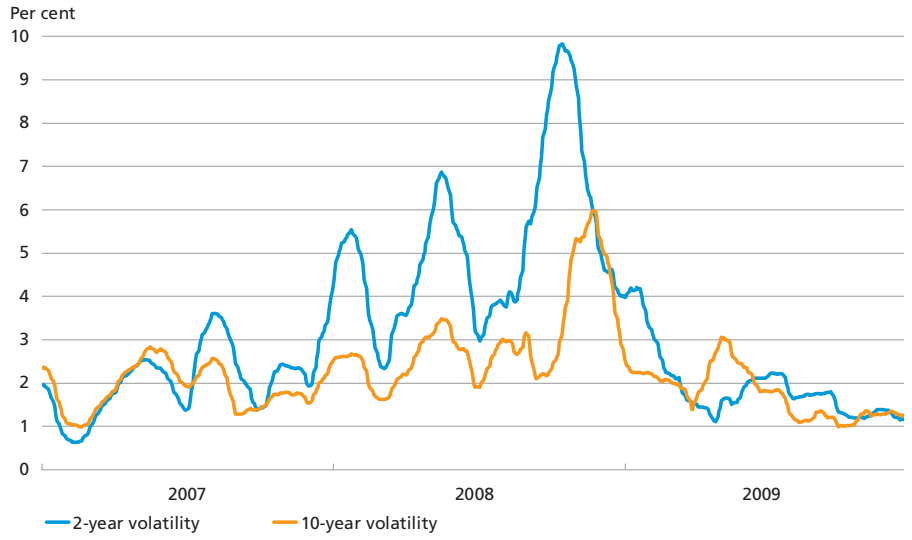
The concentration of demand on government securities with short maturities entailed that government debt management offices paid an issuance premium for long-term government securities around the turn of the year in order to attract investors, cf. Chart 2.1.3.

In addition, increased volatility in the market for government securities meant that in a few instances at the beginning of the year it was difficult to obtain sufficient demand at auctions and when issuing syndicated loans. As market conditions improved from the 2nd quarter onwards, issuance premiums normalised and volatility in government bond yields stabilised at a lower level, cf. Chart 2.1.4.

IMPROVEMENT OF FINANCIAL MARKETS FROM THE 2ND QUARTER 2.2

Higher risk appetite among investors and lower volatility in the financial markets meant that the markets for government securities improved in

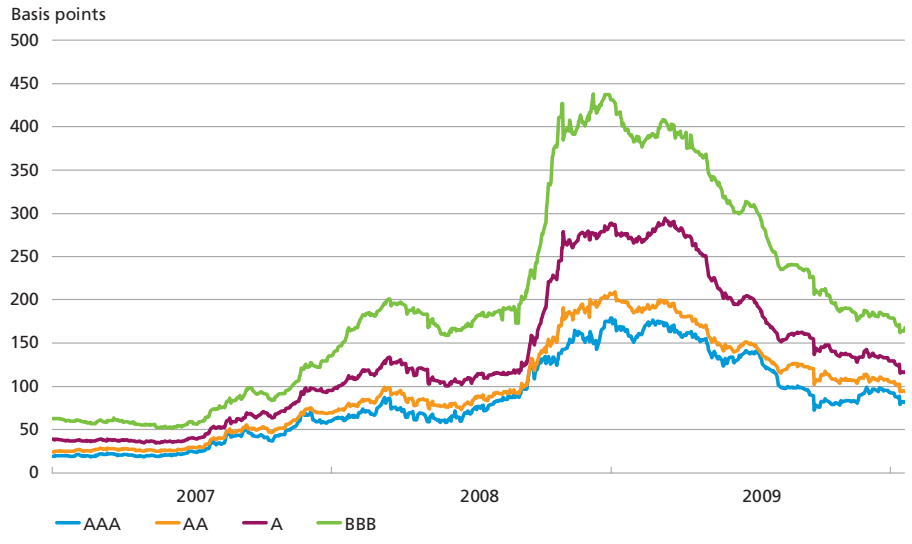
VOLATILITIES IN GERMAN 2- AND 10-YEAR GOVERNMENT YIELDS Chart 2.1.4



Note: Annualised volatility. Standard deviation for a 60-day period.
Source: Bloomberg.

the 2nd quarter. As the markets picked up, most yield spreads to Germany narrowed. The improved sentiment in the government bond market spread to other bond markets, such as mortgage bonds and corporate bonds. The increased risk appetite caused the spread between government bonds and corporate bonds to narrow, cf. Chart 2.2.1.

YIELD SPREAD BETWEEN EUROPEAN CORPORATE AND GOVERNMENT BONDS Chart 2.2.1



Note: Spreads indicate the difference between the yield of European corporate bonds with various credit standing and the yield of European government bonds.
Source: Bloomberg.

UPWARD ADJUSTMENT OF BORROWING REQUIREMENTS 2.3

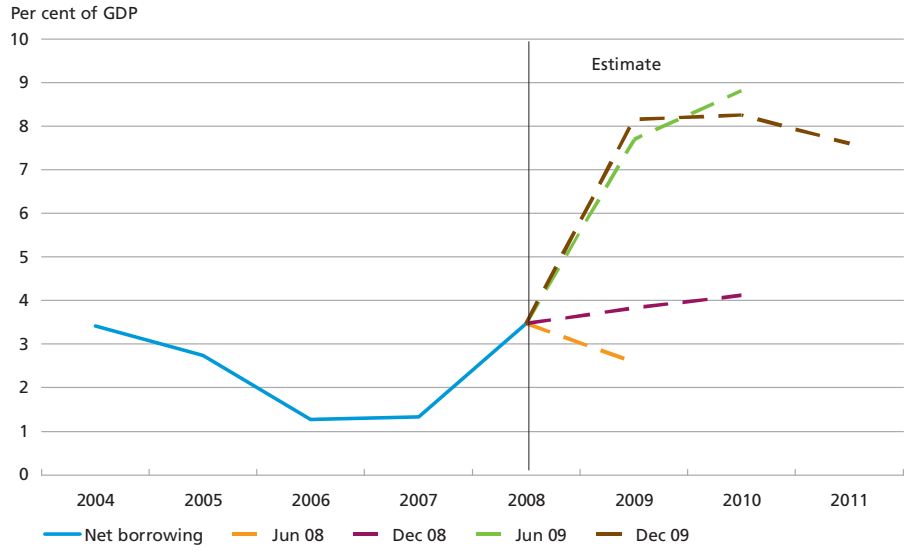
A stronger-than-expected contraction of the global economy led to the introduction of not only financial rescue packages, but also fiscal stimulus packages in a number of countries in the 1st half of 2009. Against that background, borrowing requirements were adjusted upwards in mid-2009, cf. Chart 2.3.1.

The estimated borrowing requirements for 2009 and the coming years were adjusted upwards, but nevertheless the improved conditions in the markets for government securities meant that government debt management offices became less concerned about whether they would be able to cover their borrowing requirements than they had been at the beginning of the year.

Lower risk aversion among investors led to a broader distribution of demand for government securities across maturities. Against that background, government debt management offices returned to more transparent and normal issuance strategies focusing on building up issues in key benchmark segments.

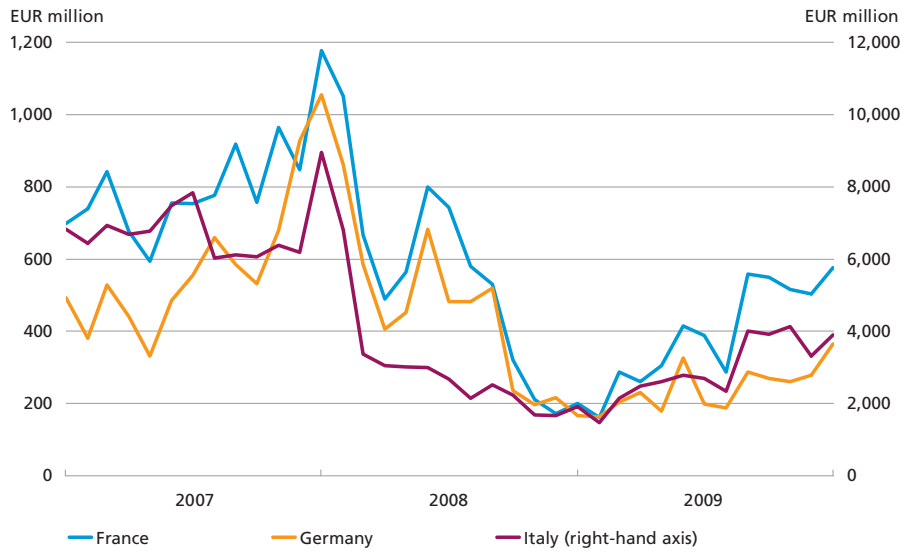
In spite of the increasing borrowing requirement, central-government financing costs remained low, also reflecting central banks' extraordinary monetary-policy measures.

NET GOVERNMENT BORROWING IN OECD COUNTRIES Chart 2.3.1



Source: OECD statistics, *SourceOECD* (www.stats.oecd.org).

AVERAGE DAILY TURNOVER ON THREE EUROPEAN MTS PLATFORMS Chart 2.3.2



Source: www.MTSData.com.

Focusing on secondary markets

The improvements in the primary markets in the 1st half of 2009 were not reflected in the secondary market to the same extent. Liquidity in the secondary market was still considerably lower than before the financial turmoil, and consequently activity on electronic trading platforms was also lower, cf. Chart 2.3.2.

To support liquidity in the secondary markets, a number of countries have introduced new market-making requirements that automatically adapt to changing market conditions, cf. Chapter 12. These requirements are based on market making by primary dealers relative to each other.

Outlook for 2010

At the beginning of 2010, conditions in the markets for government securities are significantly better than one year ago. This is to a large extent attributable to monetary- and fiscal-policy initiatives. However, there is considerable uncertainty linked to a roll-back of the expansionary monetary and fiscal policies. If these policies are rolled back too late, fear of a debt spiral and inflation may push up interest rates. On the other hand, if they are rolled back too early, the economy and the financial markets may, once again, come under pressure.

CHAPTER 3

Borrowing in 2009

At the beginning of the year, domestic central-government borrowing focused on building up the 10-year on-the-run issue. In view of the upward adjustment of the borrowing requirement, the issuance strategy was changed in the 2nd half of the year, with an equal distribution on the 2- and 10-year maturity segments. In addition, issuance in the 5-year segment was resumed. Domestic borrowing totalled DKK 117 billion, DKK 14 billion higher than the borrowing requirement. This reflects that Government Debt Management began to finance the 2010 borrowing requirement towards the end of the year.

In response to interest from market participants and against the backdrop of lower liquidity in the secondary market, Government Debt Management introduced regular auctions, supplemented with tap sales.

In the 1st half of the year, the central government raised medium-term and long-term foreign debt in order to increase the foreign-exchange reserve. At the same time, the central government's short-term foreign debt was reduced. The central government's foreign debt increased by DKK 6 billion in 2009.

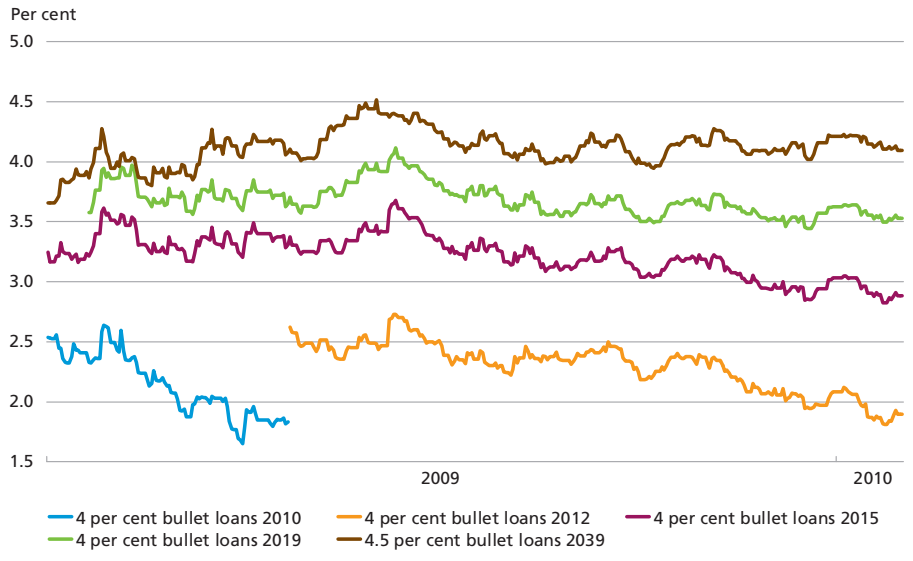
DEVELOPMENT IN DANISH GOVERNMENT YIELDS 3.1

Danish government bond yields remained low in 2009, reflecting factors such as expansionary monetary policies and sustained demand for low-risk bonds among investors.

Reductions in the key interest rate of the European Central Bank, ECB, and narrowing of the Danish monetary-policy interest-rate spread to the euro area meant that short-term government bond yields fell in 2009, cf. Chart 3.1.1. Long-term yields remained broadly unchanged throughout the year.

Expectations that the Danish monetary-policy interest-rate spread to the euro area would narrow implied that at the beginning of 2009 the yield curve was inverted until the 2-year segment, cf. Chart 3.1.2. Interest-rate reductions caused the yield curve to steepen in 2009.

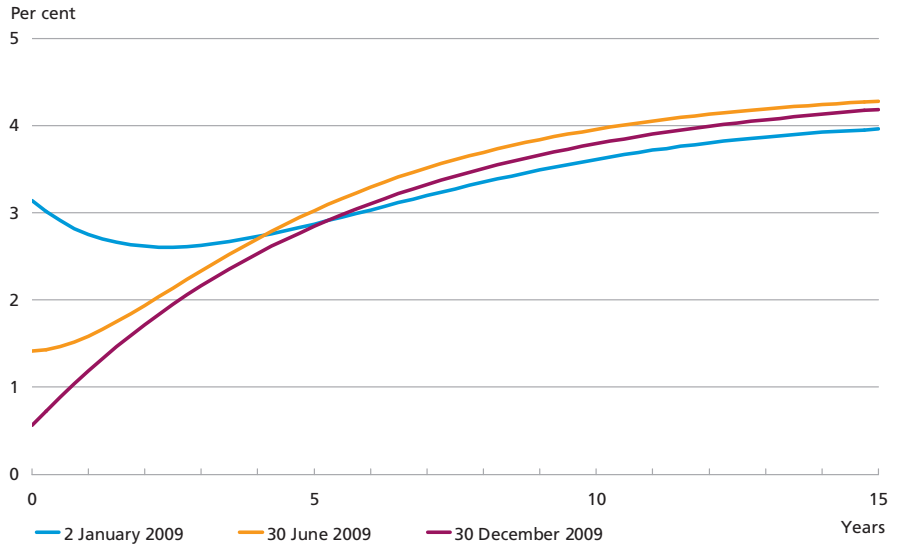
YIELDS TO MATURITY OF BENCHMARK SECURITIES Chart 3.1.1



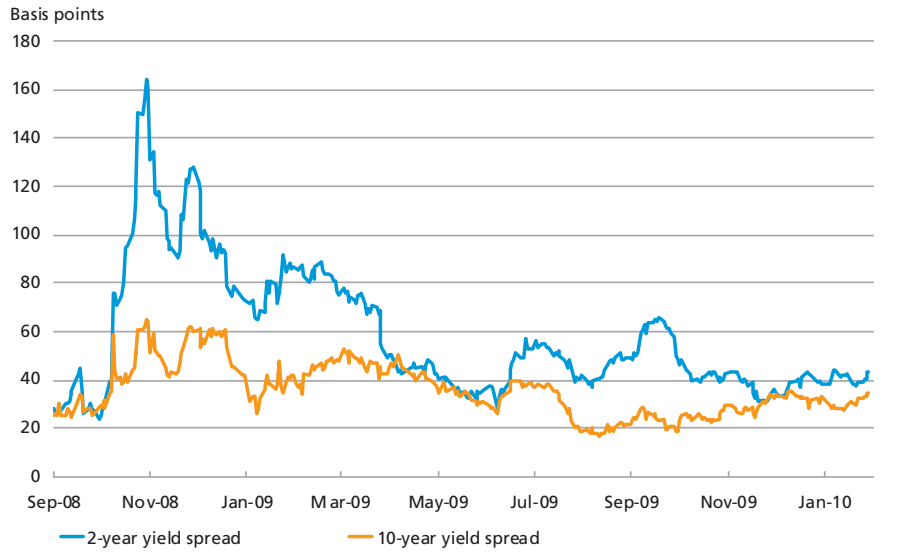
YIELD SPREADS TO GERMANY 3.2

The Danish yield spread to Germany widened at the end of 2008, as did those of other countries, cf. Chart 3.2.1. This was attributable to the special status of German government bonds in periods of financial turmoil as these bonds have high liquidity and credit ratings. As the financial markets gradually stabilised in 2009, yield spreads narrowed.

ZERO-COUPON YIELD CURVES Chart 3.1.2



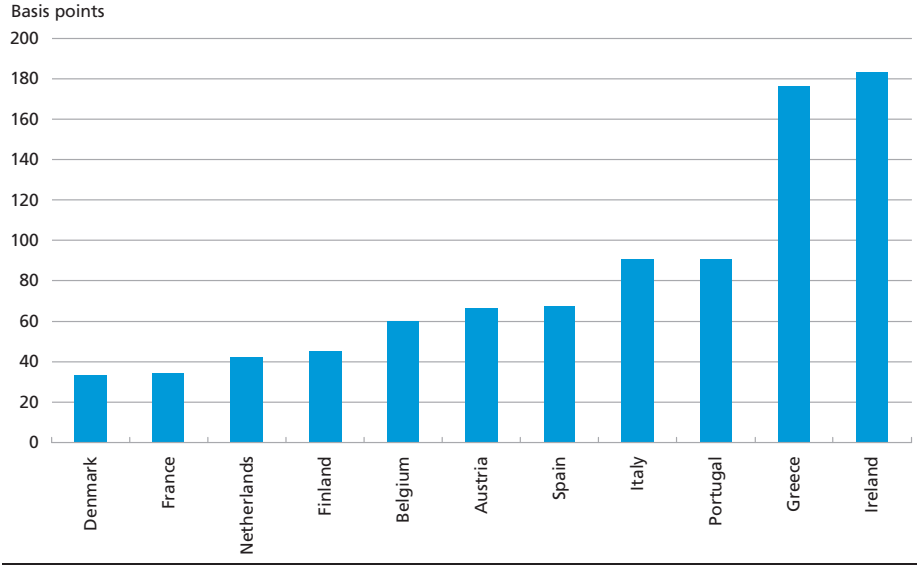
2- AND 10-YEAR YIELD SPREADS TO GERMANY Chart 3.2.1



Source: Bloomberg

The 2-year yield spread was relatively high in 2009 compared with those of euro area member states, reflecting the monetary-policy interest-rate spread to the euro area. In addition, the ECB's unlimited 1-year credit facility entailed strong demand for short-term bonds denominated in

AVERAGE 10-YEAR YIELD SPREADS TO GERMANY, 2009 Chart 3.2.2



Note: Yield spreads adjusted for maturity differences. The yield spread for Denmark is based on bonds in kroner.
Source: Bloomberg.

euro. Unlike short-term krone-denominated bonds, these can be pledged as collateral for liquidity from the ECB.

Denmark's high credit standing contributed to a narrow 10-year yield spread to Germany in 2009 compared with those of the euro area member states, cf. Chart 3.2.2.

DOMESTIC BORROWING 3.3

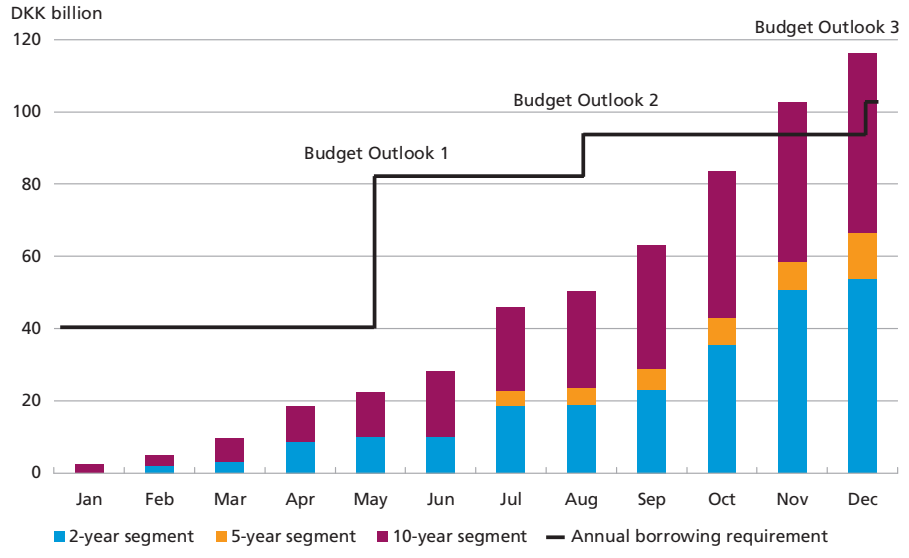
In December 2008 the strategy for issuance of domestic government bonds in 2009 was laid down on the basis of an expected domestic borrowing requirement of DKK 40 billion. The issuance strategy focused primarily on building up the new 10-year series, 4 per cent bullet loans 2019, which was opened in January 2009. This series replaced 4 per cent bullet loans 2017 as the 10-year on-the-run issue.

In response to expectations of a greater issuance requirement and considerable demand in the short-term maturity segment, Government Debt Management in April opened a new 2-year on-the-run issue, 4 per cent bullet loans 2012. This series replaced 4 per cent bullet loans 2010, which had been built up to its benchmark volume and had a remaining term to maturity of less than two years.

Adaptation of issuance strategy to increased borrowing requirement

In *Budget Outlook 1*, May 2009 the borrowing requirement was adjusted upwards to DKK 82 billion, cf. Chart 3.3.1. This was mainly attributable to

ACCUMULATED SALES AND BORROWING REQUIREMENT, 2009 Chart 3.3.1



Note: In addition DKK 0.9 billion was sold in the 30-year bond.

DOMESTIC GOVERNMENT ISSUES IN 2009 Table 3.3.1

DKK million	Sales, market value	Nominal outstanding end-2009
4 per cent bullet loans 2010	3,194	54,280
4 per cent bullet loans 2012	50,668	48,280
4 per cent bullet loans 2015	12,504	69,200
4 per cent bullet loans 2017	315	52,870
4 per cent bullet loans 2019	49,450	48,235
4.5 per cent bullet loans 2039	879	88,440
Total issuance	117,010	

the weaker economic situation. Consequently, issuance was stepped up in the 2nd half of the year, and the strategy was adjusted, with an equal distribution on the 2- and 10-year segments. In addition, issuance in the 5-year maturity segment was resumed.

Domestic government bonds issued in 2009 totalled DKK 117.0 billion, cf. Table 3.3.1, DKK 13.7 billion higher than the borrowing requirement. This reflects that Government Debt Management began to finance the 2010 borrowing requirement.

Issuance primarily took place in the 2-year and 10-year maturity segments. The distribution on 4 per cent bullet loans 2012 and 4 per cent bullet loans 2019 was almost equal. In addition, issuance of DKK 12.5 billion took place in the 5-year segment, as well as a small volume of issuance in the 30-year segment.

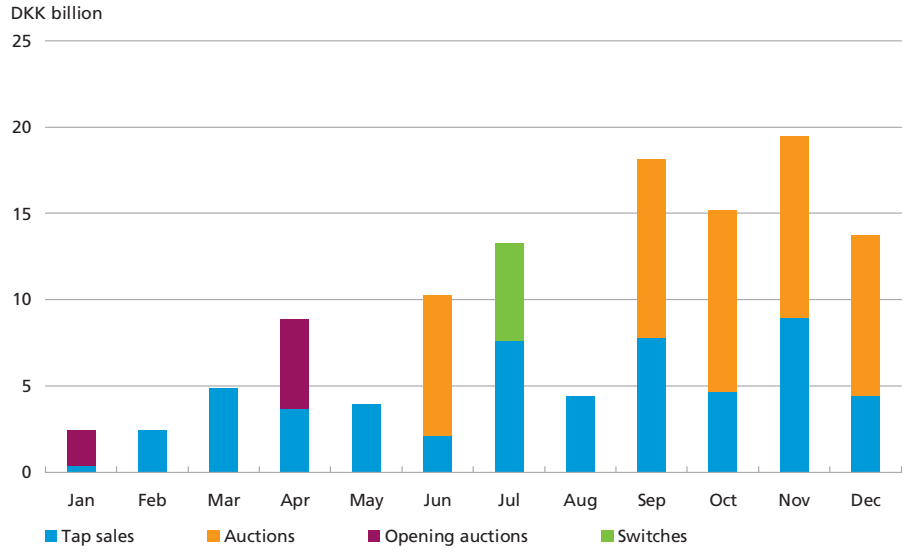
Issuance via auctions

In response to interest from market participants and against the backdrop of lower liquidity in the secondary market, Government Debt Management in June supplemented its issuance on tap with two auctions, cf. Chapter 6. In the auctions, sales reached the announced maximum of DKK 4 billion, with bids exceeding DKK 8 billion at both auctions.

Market participants indicated that the auctions generated increased awareness of and interest in government bond issuance, particularly among large investors. The auctions encouraged banks to intensify their marketing of Danish government securities. In addition, the auctions provided an updated price picture, which was at times difficult to obtain in the secondary market. On account of this positive experience, Government Debt Management introduced regular auctions from September, cf. Chart 3.3.2.

Overall, auctions accounted for half of the domestic sales of government securities. At the same time, issuance of government bonds on tap continued.

ISSUANCE DISTRIBUTED BY SALES METHOD, 2009 Chart 3.3.2



Note: For auctions, the chart shows issuance at trading days.

BUY-BACKS 3.4

Buy-backs of government bonds in the market were not extensive in 2009. Focus was on meeting the financing requirement.

Buy-backs of government bonds in the market totalled DKK 9.1 billion, cf. Table 3.4.1. Buy-backs primarily took place in connection with two

BUY-BACKS BY THE CENTRAL GOVERNMENT AND NET BUY-BACKS BY THE GOVERNMENT FUNDS IN 2009 Table 3.4.1

DKK million, market value	Central government	SPF	Preventive Measures Fund	Advanced Technology Foundation	Total buy-backs from the market
6 per cent bullet loans 2009	12,545	-12,104	-210	-101	131
Maturing in 2009	12,545	-12,104	-210	-101	131
4 per cent bullet loans 2010	7	4,541	125	901	5,573
6 per cent bullet loans 2011	12,968	-13,518	-	549	-
5 per cent bullet loans 2013	2,740	-4,263	101	1,422	-
4 per cent bullet loans 2015	-	-166	101	1,345	1,280
4 per cent bullet loans 2017	-	1,243	-	210	1,453
7 per cent bullet loans 2024	-	671	-	-	671
Serial loans and perpetuals	1	-	-	-	1
Maturing after 2009	15,716	-11,492	327	4,426	8,978
Government securities, total	28,261	-23,595	118	4,325	9,108

Note: A negative figure indicates net sales.

switch auctions between 4 per cent bullet loans 2012 and 4 per cent bullet loans 2010. In addition, buy-backs took place in 4 per cent bullet loans 2015 and 4 per cent bullet loans 2017, reflecting the investment needs of the government funds.

FOREIGN BORROWING 3.5

The foreign debt is issued in order to maintain an adequate foreign-exchange reserve. In the 2nd half of 2008, the central government's Commercial Paper, CP, programmes were used to rapidly increase the foreign-exchange reserve, cf. Box 3.1. In the context of the financial turmoil, it was found to be appropriate to increase the central government's contribution to the foreign-exchange reserve at the beginning of 2009. In addition, the strategy entailed shift of the outstanding volume in the central government's CP programmes to medium-term and long-term borrowing.

COMMERCIAL PAPER, CP Box 3.1

The objective of the CP programmes is to ensure a liquidity buffer for rapid adjustment of the level of the foreign-exchange reserve or the central government's account. CP is a short-term non-standardised instrument with a maturity of up to one year. CP is issued as zero-coupon bonds directly to investors via a number of banks acting as market makers for the central government, cf. the Table. CP is not admitted for trading, but investors may trade CP bilaterally.

The central government's two CP programmes are aimed at the European market (ECP programme) and the US market (USCP programme), respectively. Under the USCP programme, all issuance is in dollars, while it is possible to issue in a number of currencies, including dollars and euro, under the ECP programme. The USCP programme has a maximum outstanding volume of USD 6 billion, while the ECP programme has a maximum outstanding volume of USD 12 billion. When issuing CP in USD, the central government simultaneously carries out forward agreements between dollars and euro with Danmarks Nationalbank.

MARKET MAKERS IN THE DANISH GOVERNMENT'S TWO CP PROGRAMMES, BEGINNING OF 2010

ECP	USCP
Bank of America Merrill Lynch	Bank of America Merrill Lynch
Barclays Bank	Barclays Bank
Citigroup	JP Morgan
Credit Suisse	
Deutsche Bank	
UBS	

MEDIUM- AND LONG-TERM FOREIGN BORROWING IN 2009 Table 3.5.1

	Issuance method	Cur-rency	Proceeds, DKK billion	Term to maturity	Fixed EUR yield	Spread to 6-month Euribor
Foreign loans						
8 January	Syndication	USD	16.3	3 years	**2.85**	+30
4 February	Specific	NOK	0.4	5 years		**0**
11 February	Specific	USD	11.5	14 mth.		**-34 (3-mth.)**
10 March	Syndication	EUR	9.3	5 years	**3.22**	+45
18 March	Syndication	SEK	2.8	5 years		**+32**
23 March	Tap	EUR	1.9	5 years	**3.20**	+43
7 April	Tap	EUR	4.4	5 years	**3.31**	+45
17 April	Tap	EUR	5.2	5 years	**3.26**	+45
21 April	Tap	USD	8.6	3 years		**+7**
5 May	Syndication	USD	19.5	3 years	**2.24**	+3
Currency swaps		EUR	2.2			
Total			82.2			

Note: Dates are trading day. Bold states final interest rate on the loan. Specific issues are undertaken directly to a single investor or a small group of investors.

Concentration of issuance in the 1st half of the year

Considerable uncertainty in the international borrowing markets and a higher issuance requirement called for flexibility in the issuance strategy, in terms of both maturity segments and currencies.

In the 1st half of 2009, the central government raised medium- and long-term foreign debt totalling DKK 82.2 billion (EUR 11.0 billion), cf. Table 3.5.1, primarily in 3-year dollar loans and a 5-year euro loan. Most of the loans were syndicated, cf. Box 3.2. The dollar loans ensured a broader investor base, and combined with currency swaps into euro this

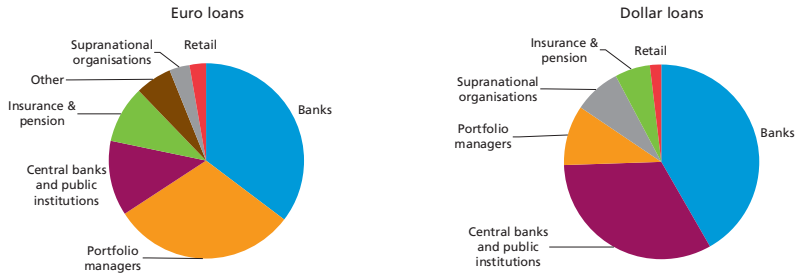
SYNDICATING FOREIGN LOANS Box 3.2

When syndication is used for issuance of government securities, Government Debt Management receives investor bids via a group of banks (the syndicate) undertaking "book-building". The final price is determined on the basis of demand. Syndication ensures increased awareness of the issuance and targeted sales to investors. Syndication is typically used when opening new series and when issuing index-linked and ultra-long bonds, for which the pricing is more uncertain than usual.

In order to target sales at investors, the syndicate markets the product to a broad range of investors at different geographical locations and in different sectors. If a large part of the outstanding volume is placed with investors that are less inclined to buy and sell the securities, this may cause a certain sluggishness in the subsequent secondary trading. In order to reach the broadest possible investor group, it is sought to compose the syndicate of a group of banks complementing each other's investor relations.

The banks participate in syndication against remuneration. The advantages of syndication should therefore be seen in relation to the fact that the total (direct) issuance costs are higher than for other methods of issuance.

INVESTOR DISTRIBUTION OF EURO AND DOLLAR LOANS ISSUED IN 2009 Chart 3.5.1



was cheaper than borrowing directly in euro. In addition, there was fierce competition for euro loans from issuers with the euro as their domestic currency.

Syndication of the euro and dollar loans ensured a broad distribution of the investor base in terms of both the number of investors and investor types, cf. Chart 3.5.1. Banks, central banks and portfolio managers acquired approximately 80 per cent of the loans. Central banks were particularly represented in the dollar loans, while portfolio managers acquired a larger share of the euro loan.

While the central government raised medium- and long-term foreign debt, its short-term foreign debt was reduced in the 1st half of the year, so that the CP programmes once again functioned as a contingency measure for quick procurement of foreign exchange.

In the 2nd half of the year, the foreign-exchange reserve increased following intervention purchases by Danmarks Nationalbank in the market, cf. Chart 3.5.2. Against that background, it was decided not to refinance foreign debt maturing in the 2nd half of the year. The central government's foreign debt increased by DKK 6.3 billion net in 2009, cf. Table 3.5.2.

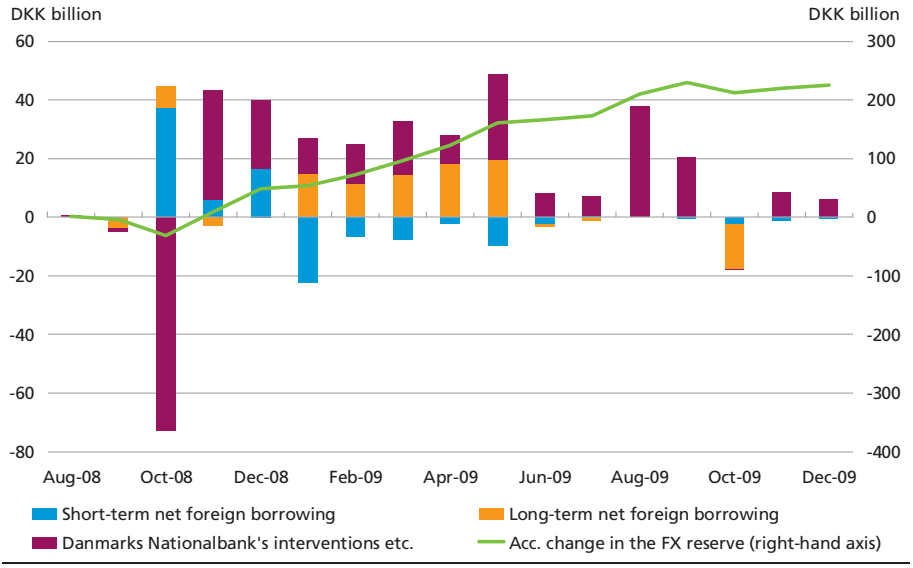
Increased focus on investor relations

The combination of higher domestic and foreign borrowing requirements, absence of the central government in the foreign borrowing markets in recent years, increased competition due to a larger supply of bonds, and a wish for more information about the Danish economy

CENTRAL GOVERNMENT'S FOREIGN DEBT ISSUANCE, 2009 Table 3.5.2

DKK billion	
Medium and long-term foreign debt issuance	82.2
Redemptions on medium and long-term foreign debt	-20.7
Short-term foreign debt issuance, net	-55.2
Foreign debt issuance, net	6.3

DECOMPOSITION OF CHANGES IN THE FOREIGN EXCHANGE RESERVE Chart 3.5.2



Note: The central government's contribution to the foreign exchange reserve is the sum of short and long-term net foreign borrowing. The foreign exchange reserve was DKK 164.0 billion at the end of July 2008 and DKK 394.6 billion at the end of 2009.

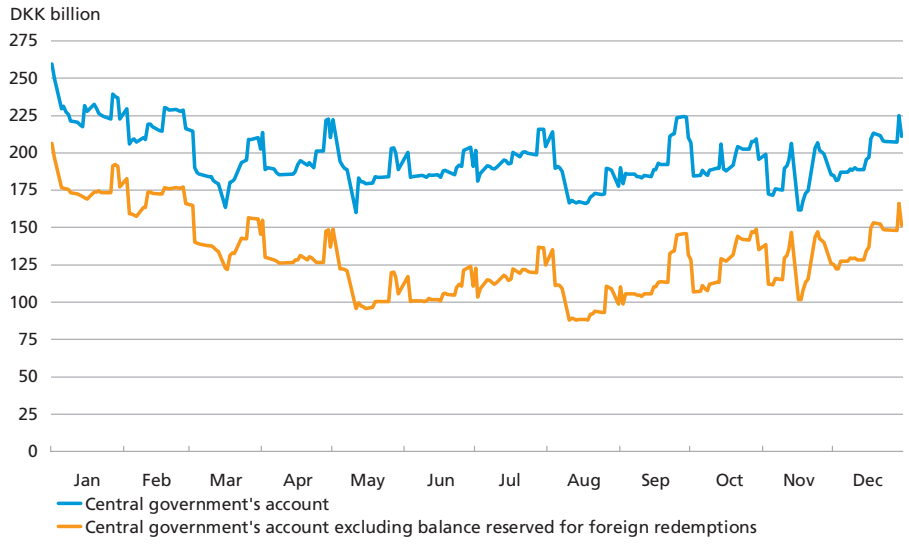
among some investors makes it appropriate to maintain closer contact with investors. This strategy involves more regular contacts with large institutional investors outside Denmark. The aim is to ensure investor interest in domestic and foreign issuance by the Danish government, both in the short term and in the long term.

THE CENTRAL GOVERNMENT'S ACCOUNT 3.6

The central government holds liquid funds in its account at Danmarks Nationalbank. The balance of the central government's account has increased in recent years, reflecting continued issuance of government bonds during a period in which the central government had practically no borrowing requirement. In addition, the balance of the central government's account rose sharply towards the end of 2008 due to the 30-year issuance as well as an increase of the foreign debt. The proceeds from the increase in the central government's foreign debt have been set aside in the account for foreign redemptions, cf. Chart 3.6.1.

Government capital injections into banks and mortgage-credit institutes and most re-lending to the Financial Stability Company were financed by drawing on the central government's account. While other countries were dependent on raising loans in order to finance their financial rescue packages, Denmark had greater flexibility, owing to the large balance of the central government's account.

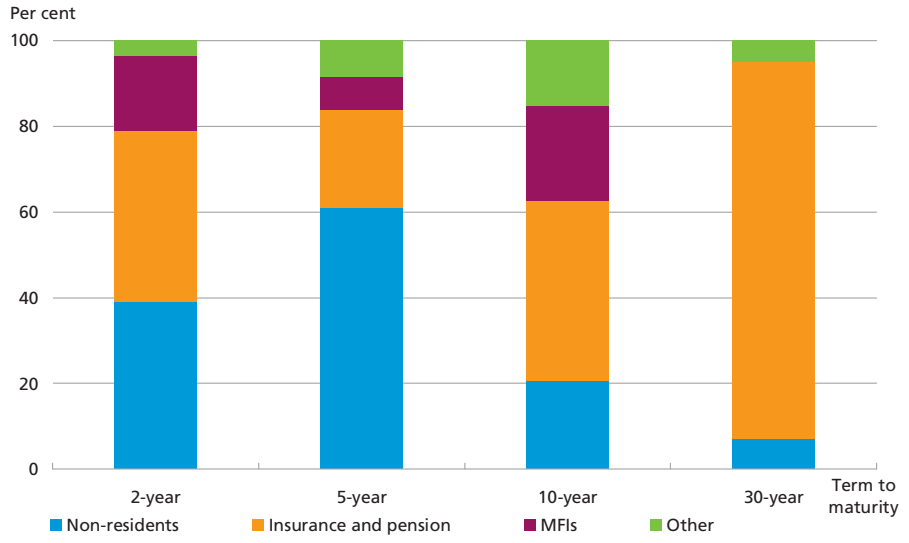
THE CENTRAL GOVERNMENT'S ACCOUNT, 2009 Chart 3.6.1



OWNERSHIP DISTRIBUTION OF DOMESTIC GOVERNMENT SECURITIES 3.7

At the end of 2009, the non-resident ownership share was around one third of krone-denominated Danish government bonds. Non-residents primarily own short-term government bonds, cf. Chart 3.7.1.

OWNERSHIP SHARES OF DOMESTIC SECURITIES, END-2009 Chart 3.7.1



Note: Ownership shares exclude the government bond portfolios of the government funds. The 2-year segment comprises government bonds with term to maturity of up to 3.5 years, the 5-year segment comprises government bonds with term to maturity from 3.5 to 6.5 years, the 10-year segment comprises government bonds with term to maturity from 6.5 years to 15 years, and the 30-year segment comprises 4.5 per cent bullet loans 2039.

Source: Danmarks Nationalbank, *Securities Statistics.*

The insurance and pension sector is the largest investor group with an ownership share of just under 50 per cent, primarily in the longer maturity segments. The Danish pension companies have long-term commitments and therefore have a natural interest in long-term issues. The ownership distribution for domestic government bonds remained broadly unchanged throughout 2009.

CHAPTER 4

Strategy 2010

The central government's domestic borrowing requirement in 2010 is DKK 120.6 billion (EUR 16.2 billion). Excess funding by the central government in 2009 amounted to DKK 13.7 billion, entailing a domestic issuance requirement of DKK 106.9 billion in 2010. Buy-backs of domestic debt maturing after 2010 increase the domestic issuance requirement.

The issuance strategy for government bonds is to build up liquid series on the basis of a 40-20-40 percentage distribution on the 2-, 5- and 10-year maturity segments. In addition, the T-bill programme will be reopened. Issuance of T-bills will cover around DKK 40 billion of the central government's domestic issuance requirement in 2010.

In view of the positive experience from the auctions in 2009, issuance of government bonds via regular auctions will continue, supplemented with tap sales.

The central government raises foreign debt in order to maintain an adequate foreign-exchange reserve. The strategy for 2010 is to issue a 5-year euro loan of EUR 1-2 billion.

ISSUANCE STRATEGY IN THE COMING YEARS 4.1

The large government surpluses in the period 2005-08 meant that central-government issuance focused on the 10-year maturity segment, cf. *Government Debt Policy in the Light of Falling Debt*[1].

In 2009, the borrowing requirement rose substantially, mainly on account of the financial crisis and the economic slowdown. Consequently, issuance in the 10-year segment was supplemented with issuance in the 2- and 5-year maturity segments, cf. Chapter 3.

As government budget deficits are expected in the coming years, it is necessary to build up liquid bond series in other maturity segments besides the 10-year segment. The strategy is to issue bonds in the 2-, 5- and 10-year segments on the basis of a 40-20-40 percentage distribution, cf. Chapter 11. The strategy for opening new bond series is:

- Opening of a 2-year on-the-run issue every year
- Opening of 5- and 10-year on-the-run issues every other year.

In addition, issuance of T-bills will be resumed in 2010.

[1] *Danish Government Borrowing and Debt 2007*.

ISSUANCE STRATEGY IN 2010 4.2

In 2010, the government budget is expected to show a deficit of 4.5 per cent of GDP, primarily reflecting lower tax revenues and higher expenditure for transfer payments as a result of the economic situation and the Spring Package 2.0 tax reform, which is underfinanced in 2010.

The central government's domestic borrowing requirement in 2010 is DKK 120.6 billion (EUR 16.2 billion), cf. *Budget Outlook 3*, December 2009. Excess funding by the central government in 2009 amounted to DKK 13.7 billion, entailing a domestic issuance requirement of DKK 106.9 billion in 2010, cf. Table 4.2.1. Buy-backs of domestic debt maturing after 2010 increases the domestic issuance requirement for government bonds.

Domestic borrowing

The strategy in 2010 is to issue liquid bonds in the 2-, 5- and 10-year segments on the basis of a 40-20-40 percentage distribution. In addition, a T-bill programme will be built up to cover around DKK 40 billion of the central government's domestic issuance requirement.

Issuance in the existing on-the-run issues will continue in the 1st half of 2010, cf. Table 4.2.2. In the 2nd half of the year, a new 5-year on-the-run issue will be opened, maturing in 2016 to fill a gap in the central government's redemption profile. The new 5-year series will be built up to a final outstanding volume of around DKK 40 billion over a 2-year period. In addition, a new 10-year on-the-run issue will be opened, maturing in 2020 or 2021. This series will be built up to a final outstanding volume of around DKK 80 billion over a 2-year period.

The outstanding volume in the 30-year bond, 4.5 per cent bullet loans 2039, can be built up to around DKK 90 billion. Issuance in the other bullet loans is also possible.

DOMESTIC ISSUANCE REQUIREMENT IN 2010 Table 4.2.1

DKK billion	
Domestic borrowing requirement, cf. *Budget Outlook 3,* Dec. 2009	120.6
Buy-back of domestic debt maturing after 2010[1]	0
Excess funding in 2009[2]	-13.7
Domestic issuance requirement	106.9
Financing of domestic issuance requirement:	
Domestic government bonds	66.9
Treasury bills, net	40.0
Drawing on the central government's account	0

[1] Buy-back of domestic debt maturing after 2010 increases the government's issuance requirement in domestic bonds. The government's domestic issuance requirement, sales and buy-backs are updated daily at www.governmentdebt.dk.

[2] Excess funding in 2009 follows from issuance of domestic government bonds of DKK 117.0 billion and a domestic borrowing requirement of DKK 103.3 billion, cf. *Budget Outlook 3*, December 2009.

KEY ON-THE-RUN ISSUES, 1ST HALF 2010 Table 4.2.2

Maturity < 1 year	Treasury bills
2-year segment	4 per cent bullet loans 2012
5-year segment	4 per cent bullet loans 2015
10-year segment	4 per cent bullet loans 2019
30-year segment	4.5 per cent bullet loans 2039

Auctions and tap sales

Experience from issuance via auctions in 2009 has been positive, cf. Chapter 6. In 2010, issuance of government bonds via regular auctions will continue, supplemented with tap sales. Auction dates for each month will be announced at the start of the month. The government bond(s) to be auctioned will be announced no later than three trading days prior to each auction. The auctions depend on stable market conditions.

Terms of borrowing for government bonds and T-bills can be viewed at www.governmentdebt.dk under Investor Relations.

Opening of a Treasury bill programme in 2010

The T-bill programme was phased out in the period 2005-08 to support the build-up of liquid 10-year government series at a time when the borrowing requirement was low. In view of the considerable borrowing requirements anticipated for 2010 and the coming years, the T-bill programme will be re-opened. T-bills contribute to widening the central government's investor base and reduce the need to issue government bonds in 2010.

The T-bill programme will be opened at an auction on 25 February 2010 with 1 March as the value date. Subsequently, monthly auctions will be held. At the first auction, 6- and 9-month bills will be opened, to be followed by new 9-month bills every three months. Primary dealer contracts for T-bills have been concluded with eight counterparties.

Foreign borrowing

The foreign debt is raised in order to maintain an adequate foreign-exchange reserve. The financial turmoil has highlighted the importance of being present in the foreign borrowing markets on a regular basis.

Government Debt Management resumed foreign borrowing at the end of 2008 after some years' absence. The absence from the international borrowing markets entailed low familiarity with and awareness of Danish issues denominated in foreign currency. At the same time, a number of investors had to reopen lines to invest in Danish securities. It was also necessary for Government Debt Management to re-establish broader contacts with investors and international banks.

CURRENCY SWAPS Box 4.1

Currency swaps are used to shift debt exposure between various currencies. Currency swaps are standardised financial contracts concluded between the central government and a financial counterparty. Principals are exchanged at the beginning and end of the contract. In a currency swap from kroner to euro, the central government receives interest in kroner at a floating rate and pays interest in euro at a floating rate.

When the central government concludes a currency swap from euro to kroner, the domestic financing requirement is reduced, and the foreign financing requirement increases correspondingly. If the central government concludes a currency swap from kroner to euro, the domestic financing requirement increases and the foreign financing requirement is reduced. Government Debt Management may conclude currency swaps, provided that the swap market is well-functioning.

To ensure access to foreign capital markets, the future strategy will be to issue an annual 5-year euro loan of EUR 1-2 billion. If the foreign borrowing requirement is lower, currency swaps from foreign exchange to kroner may be concluded, cf. Box 4.1.

The central government's foreign redemptions total EUR 4.3 billion and EUR 5.6 billion in 2011 and 2012, respectively, cf. Chart 4.2.1. If necessary, the 5-year euro loan will be supplemented with further loans, e.g. by way of euro or dollar loans in the 3- and 5-year maturity segments.

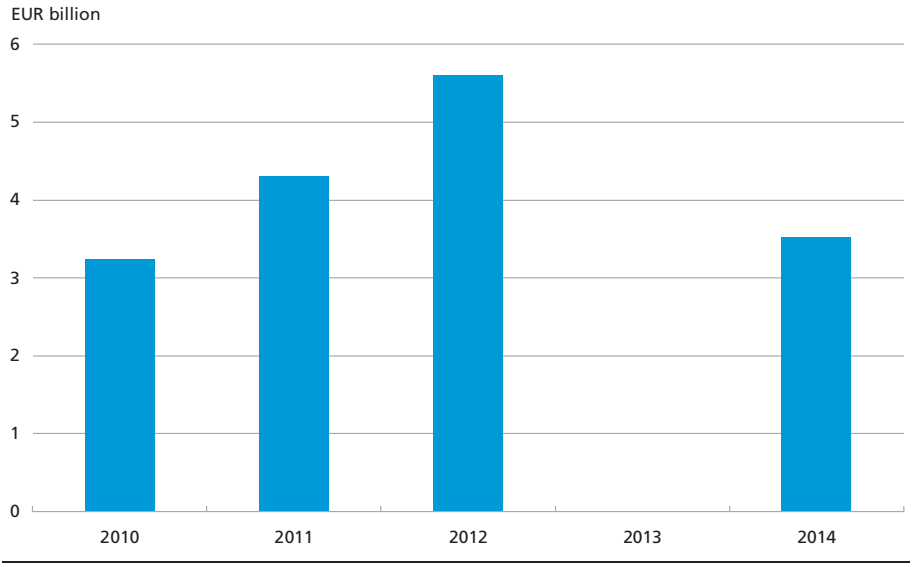
The central government's foreign redemptions in 2010 amount to EUR 3.2 billion. The strategy in 2010 is to issue a 5-year euro loan at EUR 1-2 billion. The outstanding volume in the central government's Commercial Paper, CP, programmes is maintained in order to preserve liquidity in the programmes.

Buy-backs and switches

The central government can buy back domestic and foreign government securities in the market, but as a main rule not in the key on-the-run issues. In this context, it is assessed whether buy-back is advantageous on the basis of an overall evaluation of government debt policy. Buy-back may also take place with a view to ensuring a well-functioning market for government bonds.

Market participants have expressed a wish for regular buy-back auctions in government securities maturing within the year, which would allow investors to spread their reinvestments over the year. Furthermore, the market has shown an interest in regular opportunities to switch from old to new on-the-run issues. Consequently, the following will be held in 2010:

THE CENTRAL GOVERNMENT'S FOREIGN REDEMPTION PROFILE Chart 4.2.1



Note: Redemption profile at end-2009 excluding Commercial Paper and currency swaps related to re-lending to Danish Ship Finance.

- Regular buy-back auctions in 4 per cent bullet loans 2010
- Switch auctions, mainly from 4 per cent bullet loans 2010 to 4 per cent bullet loans 2012.

Government Debt Management's issuance strategy for 2010 has been summarised in Box 4.2.

ISSUANCE STRATEGY 2010 Box 4.2

Domestic strategy

- Government bonds are issued on the basis of a 40-20-40 percentage distribution on the 2-, 5- and 10-year maturity segments.
- In the 2nd half of 2010, a new 5-year on-the-run issue maturing in 2016 will be opened. This series will be built up towards a final outstanding volume of around DKK 40 billion over a 2-year period.
- In the 2nd half of 2010, a new 10-year on-the-run issue maturing in 2020 or 2021 will be opened. This series will be built up towards a final outstanding volume of around DKK 80 billion over a 2-year period.
- T-bills will account for around DKK 40 billion of the domestic issuance requirement.
- 4.5 per cent bullet loans 2039 can be built up to a final outstanding volume of around DKK 90 billion.
- Issuance in the other bullet loans is possible.

Foreign strategy

- In 2010, a 5-year euro loan of EUR 1-2 billion is issued.

CHAPTER 5

Government Debt and Interest Costs

In 2009, the central-government debt increased by DKK 105 billion after a number of years with large government surpluses and declining debt. At year-end, the central-government debt amounted to DKK 302 billion, corresponding to 18 per cent of GDP.

Most of the increase in 2009 can be attributed to central-government lending to support financial stability. Adjusted for capital injections into banks and mortgage-credit institutes and re-lending, the central-government debt rose by DKK 27 billion, to DKK 173 billion at year-end, equivalent to a debt of 10 per cent of GDP. Despite the rise in 2009, the debt remains low in an international context.

In 2009, interest costs on the central-government debt increased by DKK 1.8 billion to DKK 13.5 billion. Adjusted for interest income from re-lending and capital injections into banks and mortgage-credit institutes, the central government's interest costs declined by DKK 0.6 billion.

GOVERNMENT DEBT ROSE IN 2009 5.1

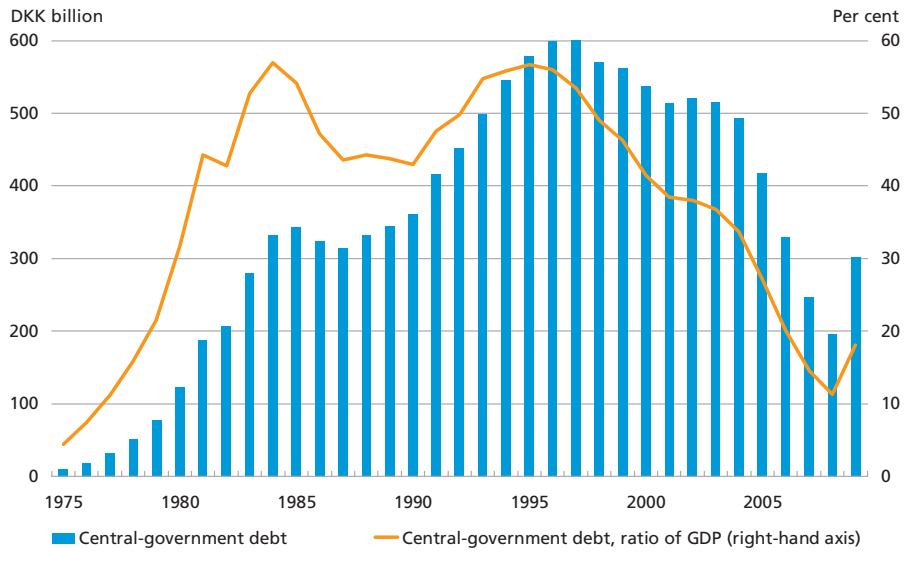
The central-government debt is compiled as the nominal value of domestic and foreign debt less the balance of the central government's account at Danmarks Nationalbank and the assets of three government funds.

In 2009, the central-government debt increased by DKK 105 billion. At year-end, the central-government debt amounted to DKK 302 billion, corresponding to 18 per cent of GDP, cf. Chart 5.1.1. At end-2009, the central-government debt was approximately DKK 55,000 per capita, compared with approximately DKK 35,000 per capita in 2008.

Most of the increase in 2009 can be attributed to central-government lending to support financial stability, cf. Table 5.1.1. Adjusted for capital injections into banks and mortgage-credit institutes and re-lending, the debt rose by DKK 27 billion to DKK 173 billion, corresponding to a debt of 10 per cent of GDP.

The central-government debt at market value was DKK 326 billion at end-2009, i.e. an increase of DKK 97 billion on the previous year, cf. Table 5.1.2. Central-government debt at market value rose less than that compiled at nominal value. This can be attributed to the price of the 30-year government bond being lower at end-2009 than at end-2008.

CENTRAL-GOVERNMENT DEBT, 1975-2009 Chart 5.1.1



Compilation at market value is especially relevant if asset portfolios are being built up on a large scale, debt is bought back before maturity, or derivatives are used in government debt management.

CENTRAL-GOVERNMENT DEBT AT NOMINAL VALUE Table 5.1.1

DKK billion, end of year	2007	2008	2009
Domestic debt	402.0	429.5	487.9
Foreign debt	68.6	133.1	139.6
Central government's account[1]	-86.3	-258.1	-210.9
Social Pension Fund[2]	-126.9	-97.4	-102.6
Advanced Technology Foundation	-6.2	-8.3	-10.4
Financing Fund	-1.4	•	•
Preventive Measures Fund	-2.7	-2.5	-2.2
Central-government debt at nominal value	247.1	196.2	301.5
Capital injections into credit institutes	•	•	-46.2
Re-lending to the Financial Stability Company	•	-4.4	-29.0
Other re-lending	-37.6	-46.1	-53.3
Central-government debt adjusted for lending	209.5	145.7	173.1

Note: For 2009, the account is compiled in accordance with Danmarks Nationalbank's monthly balance sheet. In 2009, the liabilities of the Fisheries Bank of Denmark were transferred to the central-government debt.

Source: Central-government accounts 2007 and 2008. For 2009, figures are provisional.

[1] At end-2008 and end-2009, the balance of the account with Danmarks Nationalbank included DKK 26 billion and DKK 16 billion due to a majority of the SPF's purchase of mortgage bonds in December has settlement in the beginning of January.

[2] The nominal value of SPF's portfolio at end-2008 and end-2009, including mortgage bonds with settlement in January 2009 and 2010, was DKK 124 billion and DKK 118 billion, respectively.

CENTRAL-GOVERNMENT DEBT AT MARKET VALUE — Table 5.1.2

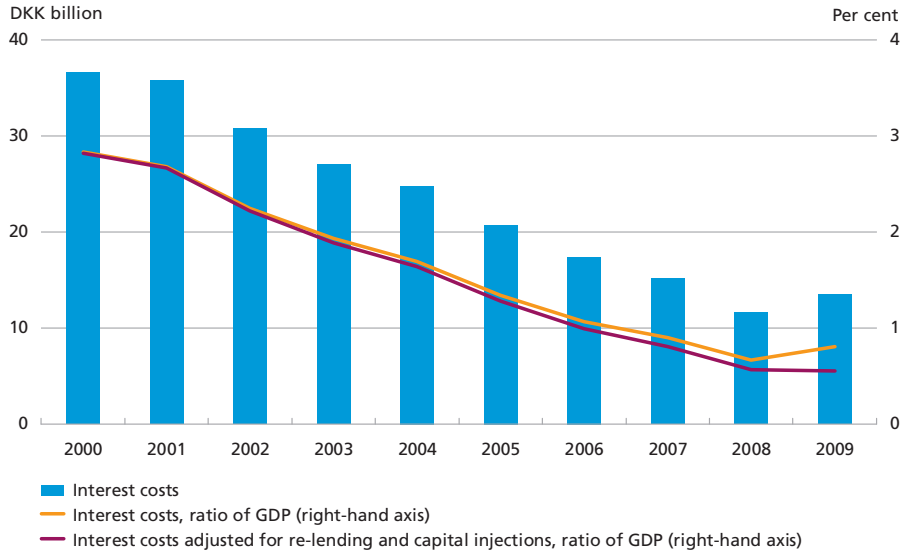
DKK billion, end of year	2007	2008	2009
Domestic debt	416.4	473.9	521.9
Foreign debt	68.6	132.4	139.0
Central government's account	-86.3	-258.1	-210.9
Social Pension Fund[1]	-133.5	-107.8	-111.1
Advanced Technology Foundation	-6.4	-8.9	-11.1
Financing Fund	-1.5	•	•
Preventive Measures Fund	-2.8	-2.6	-2.3
Central-government debt at market value	254.5	228.9	325.5
Capital injections into credit institutes	•	•	-46.2
Re-lending to the Financial Stability Company	•	-4.5	-30.3
Other re-lending	-38.8	-50.7	-57.3
Central-government debt adjusted for lending	215.7	173.7	191.8

Note: Market value is calculated on the basis of the official stock-exchange prices at year-end. Unlisted instruments, e.g. swaps, are priced at market value in accordance with current market interest rates.
Source: Central-government accounts 2007 and 2008. For 2009, figures are provisional.
[1] The market value of SPF's portfolio at end-2008 and end-2009, including mortgage bonds with settlement in January 2009 and 2010, was DKK 134 billion and DKK 127 billion respectively.

RISING GOVERNMENT DEBT HAS LED TO HIGHER INTEREST COSTS 5.2

In 2009, interest costs on the central-government debt rose by DKK 1.8 billion. The interest costs were DKK 13.5 billion, equivalent to 0.8 per cent of GDP. The increase in interest costs came after more than 10 years of declining interest costs due to debt reduction and falling market interest rates, cf. Chart 5.2.1.

INTEREST COSTS — Chart 5.2.1



INTEREST COSTS ON THE CENTRAL-GOVERNMENT DEBT — Table 5.2.1

DKK billion	2007	2008	2009
Interest costs including interest rate swaps			
Domestic debt	21.0	19.1	20.2
Foreign debt	2.6	2.9	2.1
Interest income			
Central government's account[1]	-2.3	-4.2	-1.9
Social Pension Fund	-5.8	-5.8	-6.4
Advanced Technology Foundation	-0.2	-0.3	-0.4
Financing Fund	-0.1	-0.0	•
Preventive Measures Fund	-0.1	-0.1	-0.1
Interest costs on the central-government debt	15.2	11.6	13.5
Interest income from re-lending	-1.6	-1.8	-1.9
Interest income from capital injections[2]	•	•	-2.4
Interest costs adjusted for lending	13.6	9.8	9.2

Note: A positive figure indicates interest costs, a negative figure interest income.
Source: *Central-government accounts* 2007 and 2008. For 2009, figures are provisional.
[1] Up to 11 May 2009, the central government's account carried an interest rate equivalent to the discount rate. Hereafter the interest rate was equivalent to the discount rate less one percentage point.
[2] Calculated by the Ministry of Finance. The calculation is based on accrual accounting.

The central government's costs for financing of re-lending and capital injections into banks and mortgage-credit institutes are offset by interest payments from the companies. The interest payable on the capital injections averages 10.1 per cent, reflecting the risk incurred by the central government in this context. Adjusted for interest income from re-lending and capital injections, interest costs on the central-government debt declined by DKK 0.6 billion in 2009, cf. Table 5.2.1.

PUBLIC DEBT MEASURES 5.3

EMU debt remains low in an international context

The European Commission and the Ecofin Council monitor the development in the budgetary situation of the EU member states in order to assess whether budgetary discipline is maintained. This assessment is based on the criteria set out in the EU Treaty and in the Stability and Growth Pact. As a general rule, the general-government deficit may not exceed 3 per cent of GDP, and the EMU debt may not exceed 60 per cent of GDP.

EMU debt is a gross debt measure comprising major debt items for general government compiled on a consolidated basis, cf. Box 5.1.

The EMU debt was approximately DKK 643 billion at end-2009, corresponding to 39 per cent of GDP, compared to 33 per cent of GDP in 2008, cf. *Budget Outlook 3*, December 2009. The increase in the EMU debt is mainly attributable to the general-government deficit and the restructuring

DEBT MEASURES Box 5.1

Central-government debt: Compiled as the nominal value of domestic and foreign debt less the balance of the central government's account with Danmarks Nationalbank and the assets of the Social Pension Fund (SPF), the Danish National Advanced Technology Foundation and the Preventive Measures Fund. The distribution of domestic and foreign debt is based on currency denomination. In relation to re-lending, the compilation of central-government debt only includes liabilities, i.e. government issues to finance re-lending.

EMU debt: The EMU debt is compiled in accordance with the EU Treaty. The EMU debt is compiled at nominal value and comprises the debt of the central, regional and local governments as well as social security funds. The debt is compiled on a gross basis, but the general-government sector may consolidate the debt with claims on itself. This means that the government securities portfolios of the government funds are deducted from the debt. On the other hand, SPF's portfolio of mortgage and index-linked bonds and the balance of the central government's account at Danmarks Nationalbank are not deducted.

Net general-government debt: Comprises all financial assets and liabilities of the central, regional and local governments as well as social security funds. The net general-government debt is compiled at market value and is thus affected by value adjustments of general-government assets and liabilities. The central government's asset side includes the account at Danmarks Nationalbank, all assets in government funds, re-lending to government-guaranteed companies, capital injections into banks and mortgage-credit institutes and the central government's equity portfolio, e.g. shareholdings in DONG Energy, Copenhagen Airports, Post Danmark (the Danish postal service) and Scandinavian Airlines (SAS).

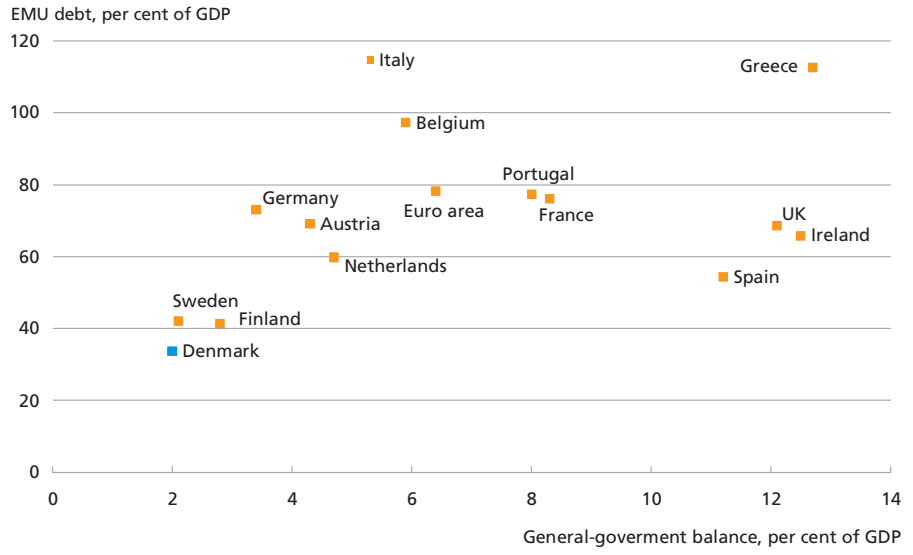
of the Social Pension Fund's portfolio from government bonds to mortgage-credit bonds, which are not offset in the EMU debt. The central government's capital injections and most of the re-lending to the Financial Stability Company have been financed by drawings on the central government's account and therefore do not influence the EMU debt.

Despite increasing EMU debt, Denmark's debt remains low compared with that of other EU member states, cf. Chart 5.3.1.

The general government's net worth remains positive

The general government's net debt became net worth at the end of 2007, cf. Chart 5.3.2. The net worth is expected to be close to zero at the end of 2009 as a result of the general-government deficit. The central government's re-lending and capital injections into banks and mortgage-credit institutes have no immediate impact on the net debt due to the parallel increase in the central government's assets and liabilities.

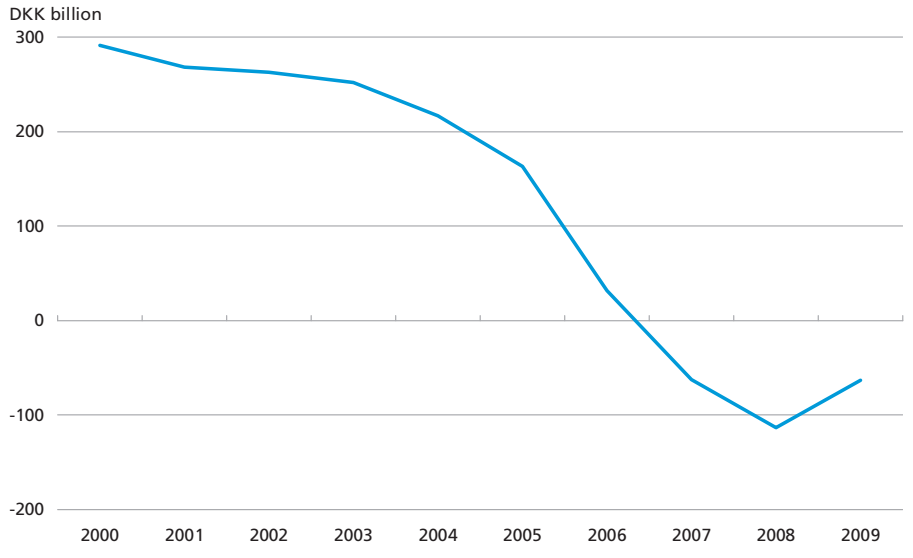
GENERAL-GOVERNMENT BALANCE AND EMU DEBT, 2009 Chart 5.3.1



Note: EMU debt includes the general government's gross debt. Since the European Commission's autumn forecast a majority of general-government budget balances have deteriorated further. The European Commission will publish a new forecast in the spring of 2010.
Source: European Commission's autumn forecast, August 2009.

The capital injections do, however, influence the expected return on the total portfolio of assets and liabilities in favour of the central government, reflecting the higher risk on the portfolio.

NET GENERAL-GOVERNMENT DEBT Chart 5.3.2



Note: The 2009 figure is an estimate from *Budget Outlook 3*, December 2009.
Source: Statistics Denmark and Ministry of Finance.

CHAPTER 6

Issuance and Trading in Government Securities

The central government's primary dealers in government bonds are 10 regional and international banks. A primary dealer system with 8 participants will be established in connection with the reopening of the T-bill programme in February 2010.

In response to interest from market participants and lower liquidity in the secondary markets, Government Debt Management held two auctions in June. Against the background of positive experience from the first auctions, issuance of government securities took place at regular auctions combined with tap sales as from September 2009.

From the beginning of 2010, Government Debt Management has implemented new market making requirements based on the average bid-ask spread for all primary dealers. Hence, the market-making requirements are automatically adjusted to changing market conditions.

PRIMARY DEALER SYSTEM FOR DANISH GOVERNMENT SECURITIES 6.1

Danish government bonds are issued to and bought back from banks that have entered into primary dealer contracts with the central government. Primary dealer contracts are concluded with banks that intend to enter into long-term cooperation to trade and resell Danish government bonds to a broad range of investors.

Banks that have concluded primary dealer contracts can act as counterparties in the central government's issuance and buy-back transactions. The key obligation of the primary dealers is to ensure efficient market making, i.e. they must quote current bid and ask prices within the framework set out by Government Debt Management in agreement with the primary dealer group, cf. Box 6.1.

Ongoing price quotation on electronic trading platforms enable the market participants to monitor market developments and conduct transactions at prices and volumes known in advance. This pre-trade information fosters transparency and supports efficient price formation in the market for government securities. It increases investor interest in government securities and provides the basis for reduction of the central government's financing costs.

PRIMARY DEALER CONTRACTS Box 6.1

Government Debt Management has concluded primary dealer contracts for government bonds and T-bills, respectively. The rights and obligations of primary dealers are specified in the primary dealer contracts, which can be found at www.governmentdebt.dk. Basically, the primary dealer contracts for Danish government securities contain the same elements as equivalent contracts in other EU member states.

The principal rights of primary dealers are:

- To use the title Primary Dealer in Danish government bonds/T-bills
- To be a counterparty to the central government's issuance and buy-back transactions
- To use the securities lending facilities of the central government and the Social Pension Fund.

The principal obligations of primary dealers are:

- Current quotation of prices for five hours of the trading day between 9:00 a.m. and 4:30 p.m. within the applicable framework, cf. Chapter 12
- To be an active counterparty in issuance and buy-back transactions
- Promotion of Danish government securities
- To support a well-functioning market for Danish government securities.

Primary dealers in T-bills must quote prices within predefined spreads for all T-bills with a remaining term to maturity of more than 1 month.

Efficient price discovery in government securities supports tradability elsewhere in the financial market. On the basis of the prices for government securities, it is possible to estimate a government yield curve that can be used for pricing other types of securities or financial instruments.

Primary dealer systems for Danish government securities

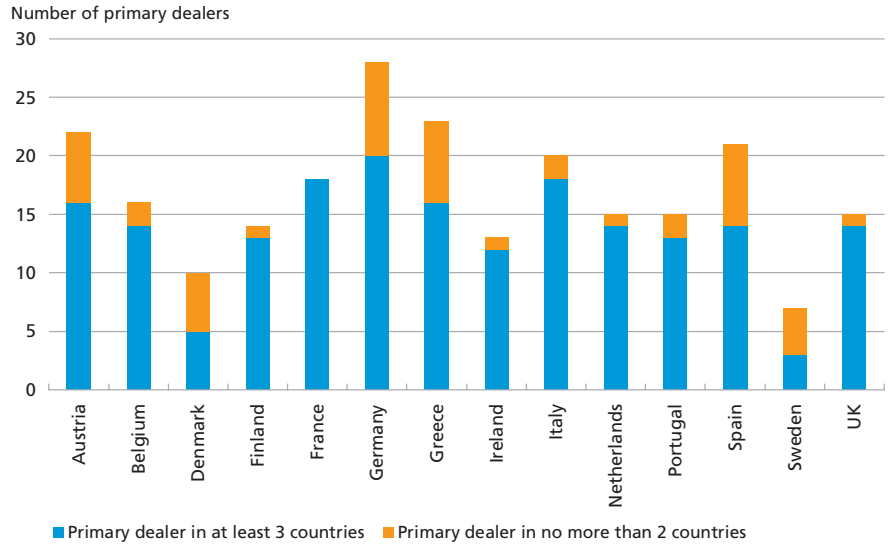
Government Debt Management has concluded primary dealer contracts in Danish government bonds with 10 banks, cf. Table 6.1.1. BNP Paribas

PRIMARY DEALERS AND MARKET TAKERS, 2010 Table 6.1.1

Primary dealers in government bonds	Primary dealers in T-bills	Market takers in government securities
Barclays Bank	Arbejdernes Landsbank	Bank of America Merrill Lynch
BNP Paribas	Danske Bank	Citigroup
Danske Bank	JP Morgan	Commerzbank
JP Morgan	Jyske Bank	Deutsche Bank
Morgan Stanley	Nordea	DZ Bank
Nordea	Nykredit Bank	Nomura
Nykredit Bank	SEB	Royal Bank of Scotland
SEB	Sydbank	
Spar Nord Bank		
Sydbank		

Note: A market taker can trade at prices quoted by the primary dealers, but cannot quote prices. Banks, who are primary dealers in either government bonds or T-bills, can be a market taker in the government security segment, where they do not act as a primary dealer.

NUMBER OF PRIMARY DEALERS IN BONDS IN SELECTED COUNTRIES Chart 6.1.1



Note: In Germany primary dealer contracts are not applied. The account for Germany covers market participants that can place bids at the Bunds auctions.
Source: Websites of the respective government debt management offices and the *European Primary Dealers Handbook*, January 2010.

went from market maker to primary dealer in the autumn of 2009. In addition, Spar Nord Bank became a primary dealer in 2010, while Fionia Bank withdrew from the system at the turn of the year.

A primary dealer system for T-bills will be established in 2010. At the start of the year, 8 banks were comprised by the new system, which will take effect in connection with the reopening of the T-bill programme in February.

Besides the primary dealers, 7 banks participate in the market for government securities as market takers. A market taker can trade at prices quoted by primary dealers, but cannot itself quote prices.

Most euro area member states have established primary dealer contracts in government securities. As a result of the single currency and financial integration, most of the primary dealers are international banks.

In an international context, the Danish market for government securities is small due to the low debt and the size of the economy. Compared with most other European countries, the Danish primary dealer group is characterised by a relatively large share of regional banks specialising in the Danish market, cf. Chart 6.1.1.

Banks have easy access to the Danish market for government securities

A broad group of primary dealers enhances interest in Danish government securities and supports competition in connection with issuance and buy-

backs by the central government. Government Debt Management therefore focuses on keeping access to the market-maker system as simple as possible.

Market participants can become primary dealers if they intend to enter into long-term cooperation and meet the primary dealer contract requirements. Government Debt Management finds it particularly important that the market-making activities of the primary dealers foster price transparency in the market. There are no minimum requirements for participation in auctions or requirements for detailed reporting on turnover. Government Debt Management has not rejected any banks that have expressed an interest in becoming primary dealers.

MARKET MAKING PLATFORMS IN 2010 6.2

Interdealer price-quoting system

Every year, the primary dealers prepare a report on the infrastructure of the Danish market for government securities. This report forms the basis for an evaluation of the structure of the market for government securities, including the chosen platforms for ongoing market making. Against this background, the primary dealers decide on the market-making platforms in the coming year. The 2009 primary dealer report contains the following conclusions[1]:

- The expected costs of spreading market making on more platforms in 2010 will exceed any benefits
- There is a risk that some primary dealers will leave the system if market making is spread on more platforms
- The competition between platforms will intensify due to the annual evaluation and because market-making platforms are selected for only one year at a time
- The primary dealers were satisfied with the market making on MTS Denmark in 2009.

Against this background, the primary dealers chose MTS Denmark as their market-making platform in 2010. Moreover, no other electronic platforms had expressed a wish to become part of the market maker system for primary dealers.

[1] The key elements and conclusions are published in *Infrastructure in Danish government securities market in 2010*, www.governmentdebt.dk.

Price-quoting system aimed at the retail market

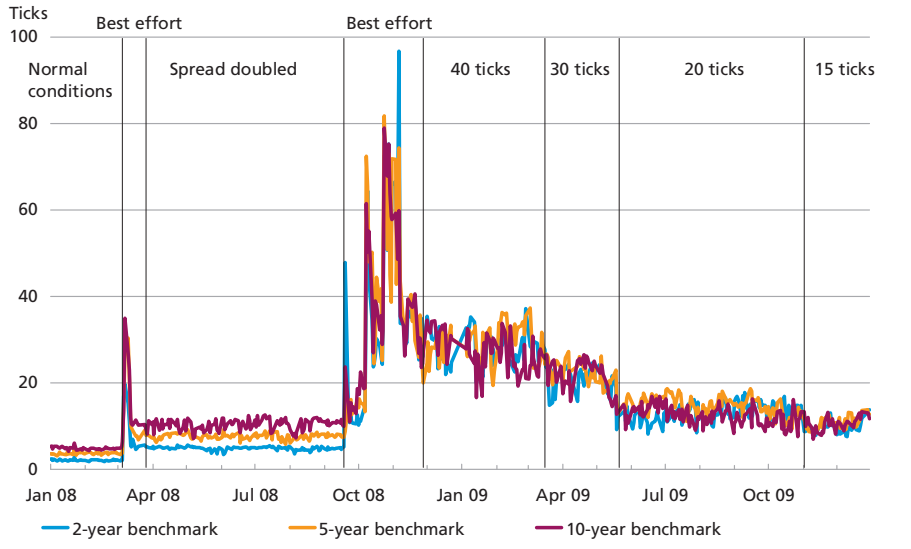
Government Debt Management has a price-quoting system on NASDAQ OMX with five banks (Danske Bank, Nordea, Nykredit Bank, Spar Nord Bank and Sydbank). The participants commit to quoting bid and ask prices within predefined spreads and for minimum amounts for 90 per cent of the time between 9:00 a.m. and 4:30 p.m.

Through the price-quoting system, investors have ongoing access to pre-trade information for Danish government bonds. Members of the bond sub-segment on NASDAQ OMX can trade directly with the price quoters. In addition, investors have access to submitting orders in the trading system via their banks. This enables retail investors to trade directly in a transparent market.

MARKET MAKING IN 2009 6.3

Government Debt Management eased the market-making requirements in connection with the financial crisis. In step with the stabilisation of the financial markets, the market-making requirements have gradually been tightened with a view to improving liquidity and price transparency in the market for government securities. At the end of the year, the maximum bid-ask spread for 2-, 5- and 10-year benchmark securities had been reduced to 15 ticks, cf. Chart 6.3.1. The development in the spread between

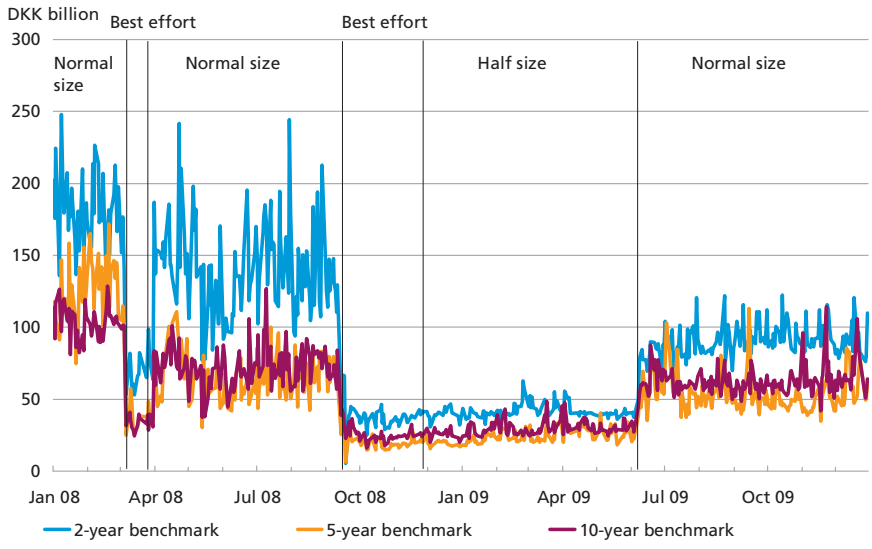
BID-ASK SPREADS FOR THE 2-, 5- AND 10-YEAR BENCHMARK SECURITIES Chart 6.3.1



Note: Bid-ask spreads are stated as averages of the best bid and ask prices. Normal market-making conditions are equivalent to maximum spreads of 3, 5 and 7 ticks in the 2-, 5- and 10-year benchmark bonds, respectively. Market making on best effort basis implies that the primary dealers quote prices and sizes to the best of their ability.

Source: MTS Denmark.

DEPTHS IN 2-, 5- AND 10-YEAR BENCHMARK SECURITIES Chart 6.3.2



Note: The depth is calculated as the daily average of the volume entered at the best bid and ask prices. Normal market-making conditions are equivalent to a minimum size of DKK 80, 40 and 50 million in the 2-, 5- and 10-year benchmark bonds, respectively. Market making on best effort basis imply that the primary dealers quote prices and sizes to the best of their ability.
Source: MTS Denmark.

the best bid and ask prices in the Danish market was similar to that in other European markets for government securities.

Besides adjustment of the framework for bid-ask spreads, the depth requirements were raised to the pre-crisis level. The market depth reflects the volume that can be traded at the best price, and thereby the volume of Danish government securities that can be traded without affecting the price.

Despite the normalisation of the requirements, the actual market depth in the benchmark securities at end-2009 was approximately half of the level before the collapse of Lehman Brothers, when the bids submitted were considerably above the minimum of DKK 80, 40 and 50 million in the 2-, 5- and 10-year segments, respectively, cf. Chart 6.3.2.

New market-making framework in 2010

The gradual tightening of the market-making requirements in 2009 has had a limited impact on liquidity in most European markets for government securities. Several countries have adjusted their market-making frameworks in order to improve liquidity.

In 2010, new market-making requirements were introduced in the Danish market for government bonds, based on experience from elsewhere in Europe, cf. Chapter 12. The market-making requirements are no

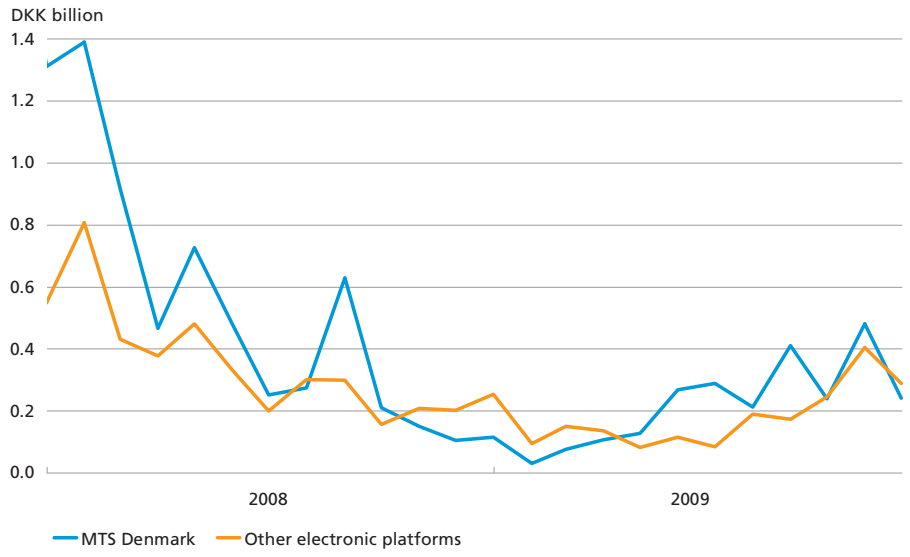
longer fixed, but depend on the average bid-ask spread for all primary dealers. Hence, the market-making obligations are adjusted to changes in market conditions on an ongoing basis. The new set-up supports price quotation in both benchmark bonds and other government securities.

TURNOVER IN DANISH GOVERNMENT SECURITIES 6.4

Turnover in the European markets for government bonds was low in 2009. Since the banks sought to reduce the risk on their balance sheets, they mainly traded government bonds where an underlying investor interest existed. Moreover, the lower price transparency contributed to shifting part of the turnover from the electronic trading platforms to the OTC market.

The average daily turnover on MTS Denmark, less government issuance on tap, was approximately DKK 200 million in 2009, corresponding to one third of the turnover in 2008, cf. Chart 6.4.1. Turnover increased in step with the improvement of the financial markets and the narrowing of the bid-ask spreads. Turnover on the other electronic platforms has broadly mirrored turnover on MTS Denmark.

AVERAGE DAILY TURNOVER IN DANISH GOVERNMENT SECURITIES Chart 6.4.1



Note: Turnover on MTS Denmark does not include issuance on tap. Other electronic trading platforms are BondVision, NASDAQ OMX and TradeWeb.
Source: Reports from the respective trading platforms.

SECURITIES LENDING, 2007-09 Table 6.4.1

DKK billion	2007	2008	2009
Central government	34.2	25.0	53.2
SPF	89.8	143.5	38.4
Securities lending, total	124.0	168.5	91.6

Primary dealers have borrowed fewer securities from the central government and SPF

The central government's primary dealers have access to the securities lending facilities of the central government and the Social Pension Fund, SPF. The government's lending facility comprises on-the-run issues and benchmark securities. Other government securities with a remaining term to maturity of more than one month are available via the SPF lending facility.

The securities lending facilities support an efficient market for trading in Danish government securities as primary dealers can borrow government securities in the event of a shortfall in the market. Lending of securities is collateralised by other Danish government securities. Securities lending runs for up to 5 banking days. In 2009 the average maturity was 1.9 days. The terms and conditions for use of the facilities are presented in the Appendix *Terms for the Securities Lending Facilities of the Central Government and the Social Pension Fund*.

The demand for securities lending declined in 2009, reflecting lower turnover in the secondary market. In 2009, total securities lending decreased by 45 per cent compared with the preceding year, cf. Table 6.4.1.

ISSUANCE OF GOVERNMENT BONDS 6.5

The start of 2009 saw significantly deteriorated conditions for government issuers. The higher government-borrowing requirement and increased issuance of government-guaranteed bonds intensified competition for investors among high-rated issuers. At the same time the stronger volatility in the financial markets at the beginning of the year caused demand to fluctuate. Finally, the banks' need to reduce their own risk diminished their capacity to trade and resell bonds, entailing a decline in liquidity and price transparency in the markets for government securities.

Hence, a number of government debt management offices embarked on more flexible issuance strategies. As a result, auction calendars with fixed dates of issue were to some extent replaced by more frequent auctions announced at shorter notice. In several cases, the interval for the amount offered at the auctions was extended in order to reduce the risk of unsuccessful auctions with sales below the announced volume.

Auctions were still the primary issuance channel for government debt management offices, but to a higher degree than previously they were supplemented with other channels, including syndicated loans and tap sales.

Introduction of auctions in Denmark

As in other countries, liquidity was lower than previously in the secondary market in Denmark. In response to interest from primary dealers, Government Debt Management introduced issuance via auctions in June. This enabled investors to buy a larger amount of government bonds directly from the central government by bidding at the auction via a primary dealer. At the same time, it enabled the banks to steer clear of the risk linked to holding bonds on their balance sheets.

Demand was substantial at the auctions, and Government Debt Management sold the maximum amount of government securities announced. The primary dealers reported that the auctions attracted several major investors to the Danish market for government securities. The auctions

AUCTION METHOD FOR DANISH GOVERNMENT BONDS — Box 6.2

The central government's auctions take place via MTS Denmark's TradeImpact auction system with the primary dealers of government bonds as counterparties. Investors can submit bids for the auctions via the primary dealers. Auction stages are:

Announcement:

The auctions are announced via DN News[1], which ensures that announcements are sent to news agencies such as Bloomberg and Reuters at the same time. The auctions are subject to stable market conditions.

Bids and allocation:

The auction principle is uniform pricing, i.e. bids at the cut-off price or above are met at the cut-off price. Securities can be allotted pro rata to bids at the cut-off price. The pro rata method implies that all investors with bids at the cut-off price are allotted the same share of their bids. An auction can be completed without allotment.

At the auction, the primary dealers state amount and price. Each primary dealer may submit a broad range of bids. The deadline for submitting bids on the auction day is typically 10:30 a.m. A cut-off price is then fixed as quickly as possible, within 10 minutes after the deadline. At the auctions in 2009, the cut-off price and allotment were fixed within less than three minutes on average.

Publication of the auction result and settlement:

The auction result is published via DN News and at www.governmentdebt.dk under "Investor relations". Settlement takes place three days after the auction. The primary dealers can settle auction trades in Danish government bonds via VP Securities, Euroclear or Clearstream.

[1] Danmarks Nationalbank's system for transmission of information to connected news agencies.

encouraged banks to intensify their marketing of Danish government securities, thereby boosting investor interest in Danish government bonds. Moreover, the auctions provided an updated price picture of the on-the-run issues. The positive experience prompted Government Debt Management to introduce regular auctions as from September 2009.

Auctions in Danish government bonds

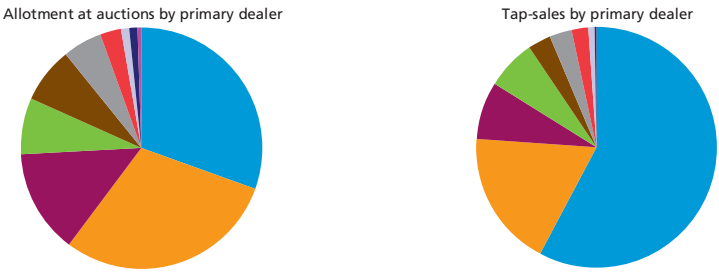
Auctions are announced well in advance in order to create awareness of and increase interest in the issuance. Prior to the auction, Government Debt Management announces the maximum issuance volume. Selling the maximum announced volume at each auction is not an objective. The allotted volume and price are published shortly after the deadline for submission of bids, cf. Box 6.2.

A total of 10 auctions (excluding opening auctions) were held for the key on-the-run issues in the 2-, 5- and 10-year maturity segments. All primary dealers received allotment over the 10 auctions. Auction issuance was concentrated on three primary dealers that received approximately 75 per cent of the allotted volume. The concentration was higher for issuance on tap, as two primary dealers received more than 75 per cent of the allotted volume, cf. Chart 6.5.1.

Issuance methods in 2010

Against the background of the positive experience, Government Debt Management will continue to issue government bonds via regular auctions. Issuance via auctions will be supplemented with tap sales. Issuance on tap provides a regular supply of government securities in the on-the-run issues, making it easier for the banks to accommodate demand from investors on non-auction days. This supports liquidity in the secondary market.

ISSUANCE BY AUCTIONS AND ON TAP-SALES BY PRIMARY DEALERS, 2009 Chart 6.5.1



Note: Exclusive opening auctions. Primary dealers have been made anonymous.
Source: MTS Denmark.

CHAPTER 7

Assets in the Government Funds

The assets of the Social Pension Fund (SPF), the Advanced Technology Foundation and the Preventive Measures Fund are included in the central-government debt and are managed on a consolidated basis.

SPF invested DKK 45 billion in non-callable mortgage bonds at the auctions in 2009. This purchase hedged the interest-rate risk in connection with the refinancing of subsidised housing.

THE SOCIAL PENSION FUND 7.1

The Social Pension Fund, SPF, was established in 1970, when a special national retirement pension contribution was introduced. Payments to the Fund ceased in 1982, cf. Box 7.1.

SPF is managed by a committee with representatives from the Ministry of Finance, the Ministry of Employment and Government Debt Management. The day-to-day management of the assets is undertaken by Government Debt Management according to principles set out in a set of regulations. SPF's assets may be invested in Danish listed bonds – including index-linked bonds and mortgage bonds – taking the government debt policy into account.

The Finance Act stipulates the amount to be transferred to the Ministry of Employment on an annual basis to cover the costs of pension improvement measures. If the sum of the amount transferred to the Ministry and payments of pension-yield tax exceed SPF's interest income, the core capital is reduced.

The risk on SPF's assets is managed separately, but is included in the consolidated risk management of the central-government debt. At the beginning of 2010, the duration of the SPF portfolio was 4.0 years, cf. Table 7.1.1.

DURATION OF SPF's PORTFOLIO, BEGINNING OF YEAR Table 7.1.1

Years	2008	2009	2010
Government bonds	3.9	4.6	4.7
Mortgage-credit bonds, etc.	2.0	1.1	2.5
Index-linked bonds	10.2	10.1	10.3
Total portfolio	4.1	4.0	4.0

Note: For callable mortgage-credit bonds an option-adjusted duration is applied. The balance of SPF's account is included in the duration for the total portfolio.

THE GOVERNMENT FUNDS' REVENUES AND EXPENDITURES IN 2009 Table 7.1.2

DKK million	SPF	Advanced Technology Foundation	Preventive Measures Fund
Revenue			
Interest, etc.[1]	6,438	377	104
Injection of capital	-	2,000	-
Expenditure			
Transfer to the relevant ministry	10,150	280	350
Pension-yield tax	984	•	•
Net	-4,696	2,097	-246

[1] Net statement of interest received, interest receivable, and distributed capital losses on buy-backs.

In 2009, DKK 10.2 billion was transferred from SPF to the Ministry of Employment, cf. Table 7.1.2. SPF paid pension-yield tax of DKK 1.0 billion and had interest income of DKK 6.4 billion, leading to a DKK 4.7 billion reduction in the core capital. At end-2009, SPF's assets totalled DKK 120 billion, cf. Table 7.1.3.

SPF invested DKK 45 billion in non-callable mortgage bonds at the auctions in 2009. This purchase hedged the interest-rate risk in connection with the refinancing of subsidised housing loan portfolios of 1-, 3- and 5-year non-callable mortgage bonds.

THE GOVERNMENT FUNDS' BALANCE SHEETS, END-2009 Table 7.1.3

DKK billion, nominal value	SPF	Advanced Technology Foundation	Preventive Measures Fund	Share of total outstanding, per cent
4 per cent bullet loans 2010	4.4	0.9	0.1	10
6 per cent bullet loans 2011	9.1	2.5	0.6	25
5 per cent bullet loans 2013	31.8	3.4	0.7	50
4 per cent bullet loans 2015	8.9	3.4	0.7	19
4 per cent bullet loans 2017	1.2	0.2	-	3
7 per cent bullet loans 2024	9.9	-	-	40
Government bonds, total	65.2	10.4	2.2	
Mortgage-credit bonds etc.[1]	31.2	•	•	
Index-linked bonds[2]	6.2	•	•	
Balance of account[3]	17.4	0.0	0.2	
Total	120.0	10.4	2.3	

[1] Mortgage-credit bonds, etc. comprise mortgage-credit, municipal, and Fisheries Bank bonds other than index-linked bonds. The holding totalled DKK 46.4 billion at beginning-2010 since SPF's redemptions and purchase of non-callable mortgage-credit bonds were settled 4 January 2010.

[2] Indexed value.

[3] The high balance of SPF's account and the low holding of mortgage-credit bonds reflect that SPF's purchase of non-callable mortgage-credit bonds was settled 4 January 2010.

THE ADVANCED TECHNOLOGY FOUNDATION 7.2

The Advanced Technology Foundation was established by Act of Parliament in December 2004. The objective of the Foundation is to strengthen growth and employment by supporting Denmark's further development as an advanced technological society. The aim is to build up the Foundation's capital to at least DKK 16 billion by 2012. In accordance with the 2010 Finance Act, DKK 2 billion was transferred to the Advanced Technology Foundation in January 2010.

In 2009, the interest income of the Advanced Technology Foundation was DKK 377 million, while DKK 280 million was transferred from the Foundation to the Ministry of Science, Technology and Innovation, cf. Table 7.1.2. At end-2009, the assets of the Foundation totalled DKK 10.4 billion, cf. Table 7.1.3.

The capital of the Foundation may be invested in Danish government bonds only. The investment strategy for the Advanced Technology Foundation is to seek to achieve an equal distribution on short-, medium- and long-term Danish government bonds.

THE PREVENTIVE MEASURES FUND 7.3

The Preventive Measures Fund was established in 2007 for the purpose of supporting projects to forestall and prevent physical and mental impairment. A contribution of DKK 3 billion was made to the Fund when it was established. There are no plans to build up further capital in the Fund.

Every year, DKK 350 million is paid by the Fund to the Ministry of Employment. In 2009, the Fund's interest income amounted to DKK 104 million, resulting in a net reduction of DKK 246 million in the Fund's assets, cf. Table 7.1.2. At end-2009, the assets of the Preventive Measures Fund totalled DKK 2.3 billion, cf. Table 7.1.3.

It is a statutory provision that the assets of the Fund may be invested in Danish government bonds only. The investment strategy of the Preventive Measures Fund will be aimed at achieving revenue from interest and redemptions to match future transfers to the Ministry of Employment.

THE SOCIAL PENSION FUND Box 7.1

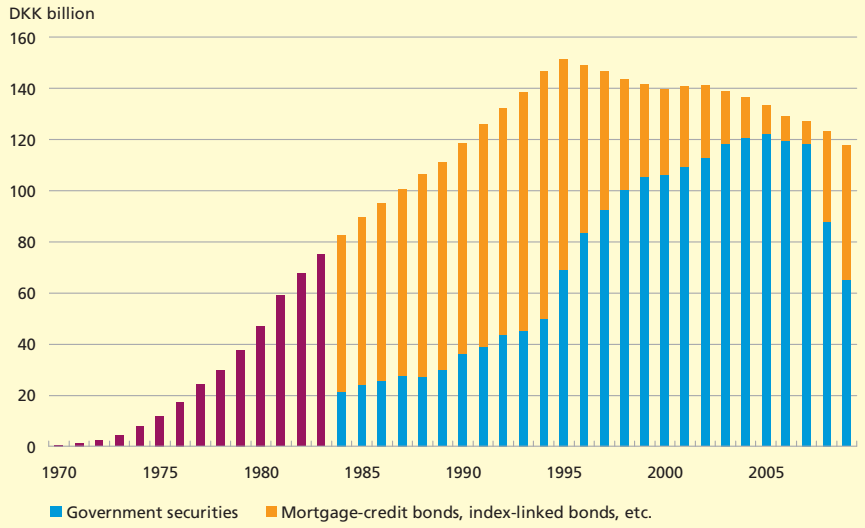
The Social Pension Fund, SPF, was established by Act of Parliament in 1970. The Act introduced a special national retirement pension contribution of 1 per cent in 1971-73 and 2 per cent in the following years. The proceeds were allocated to SPF and invested in bonds for disbursement of supplementary pensions from 1976. In 1975, it was decided by Act of Parliament to postpone all disbursements from SPF until 1979.

With effect from 1 January 1982, the Act was amended so that the pension contributions – and thus payments into SPF – ceased. It was decided that the interest earned on SPF's portfolio of bonds was to be used for pension improvement measures.

The years 1986-95 saw annual transfers from SPF corresponding to 1.5 per cent of its assets. In 1996, the principles were amended to the effect that the core capital may also be used for pension improvement measures.

The amount to be transferred from SPF to the Ministry of Employment is stipulated in the annual Finance Acts. Since 1996 the core capital has gradually been reduced as the annual transfers have exceeded interest income from the SPF bond portfolio, cf. the Chart.

SPF's PORTFOLIO OF BONDS



Note: For 2008 and 2009, the chart includes non-callable mortgage bonds with value date the first business day in the new year. For the years 1970 to 1983 a breakdown between government securities and mortgage bonds etc. is not possible.

Chapter 8

Re-Lending and Government Loan Guarantees

Government Debt Management is responsible for re-lending and loan guarantees to a number of companies. Government re-lending and guarantees enable the companies to achieve favourable borrowing terms since they can benefit from the central government's high credit standing.

In the context of the financial crisis, the central government has expanded its volume of re-lending and guarantees. Re-lending facilities have been established for the Financial Stability Company and Eksport Kredit Fonden, and government capital injections into banks and mortgage-credit institutes have been introduced. In addition, rescue packages have provided for government-guaranteed bond issues.

PURPOSE AND FRAMEWORK 8.1

Re-lending and government loan guarantees derive from the political intention to support certain projects. The majority are issued to government-owned companies involved in large infrastructure projects, whose purposes and borrowing frameworks are laid down by law.

Government Debt Management manages re-lending and loan guarantees for 13 government-owned companies, cf. Table 8.1.1. Furthermore, Danish Ship Finance has access to a special re-lending facility.

PUBLIC COMPANIES WITH ACCESS TO RE-LENDING OR LOAN GUARANTEES Table 8.1.1

	Re-lending	Guaranteed loans
CPH City & Port Development	X	-
The Danish Broadcasting Corporation	X	-
The Danish North Sea Fund	X	-
The Danish State Railways	-	X
Eksport Kredit Fonden	X	-
Energinet.dk	X	-
The Financial Stability Company	X	-
The Great Belt Bridge	X	X
The Metro Company	X	-
Statens Serum Institut	X	-
Sund & Bælt Holding A/S	X	X
The Øresund Bridge	-	X
Øresund Landworks	X	X

Note: Administered by Government Debt Management. (X) indicates that the company has access while (-) indicates that the company does not have access.

LIST OF ELIGIBLE LOAN TYPES Box 8.1

The list of eligible loan types sets out the general guidelines for borrowing by the companies that have access to re-lending or government-guaranteed loans.

The guidelines are based on the companies' consolidated approach to risk management of their assets and liabilities. Besides the guidelines for borrowing, recommenddations have been issued for the management of credit risk on investments, borrowing by affiliated companies and consolidation of credit risk across instruments. It is the responsibility of the companies and their boards to lay down a financing strategy that contains rules for all financial transactions in relation to borrowing by the company. The list of eligible loan types is based on the following criteria:

Government loan guarantees:

- Loan types must be customary, i.e. known and used in the market by reputed borrowers
- Loans must be built up from simple elements that make them transparent.

Re-lending:

- Companies have access to re-lending on the basis of the re-lending list. As a starting point, the re-lending list comprises all fixed-interest government bonds denominated in Danish kroner in the maturity segments between 2 and 10 years, as well as synthetic loans maturing in 2014 and 2016
- Other types of re-lending, including forward-rate agreements, may be granted, subject to a motivated request.

Risk-management requirements:

- The counterparties are subject to minimum rating requirements
- Swaps are only transacted with counterparties who have concluded collateral agreements (CSA)
- The currency exposure of the loan portfolio should, as a general rule, be limited to euro (or Swedish kronor in the case of the Øresund Bridge).

Guidelines for borrowing by the companies

Government Debt Management formulates the general guidelines for borrowing by the companies that have access to loan guarantees or re-lending. The aim is to ensure that the companies do not assume financial risks that the central government itself will not assume. The guidelines for borrowing by the companies are stated in a set of agreements comprising two main elements[1]:

- An agreement between the ministry in question, the Ministry of Finance, Danmarks Nationalbank and the individual company
- A list of eligible loan types, which is specified and updated by Government Debt Management, cf. Box 8.1.

[1] As far as the Øresund Bridge is concerned, a tripartite agreement has also been concluded between the Øresund Bridge, Riksgäldskontoret (the Swedish National Debt Office) and Government Debt Management.

Access to re-lending and loan guarantees

Re-lending means that loans are raised directly from the central government. When a company requests re-lending, Government Debt Management sets the price of the loan on the basis of the current market conditions. The proceeds of the loan are paid from the central government's account. The resulting financing requirement is met via the key on-the-run issues. No specific issuance takes place to hedge the risk on individual re-lending transactions. Re-lending is an element of the consolidated risk management of the central-government debt, cf. Chapter 9.

By issuing a loan guarantee, the central government assures that the loans raised in the private market will be repaid. This reduces the costs of financing since the central government assumes the credit risk for which the companies would otherwise have to pay in the market.

CREDIT FACILITIES RESULTING FROM THE FINANCIAL CRISIS 8.2

In connection with the financial crisis, two financial rescue packages were adopted (Bank Rescue Package I and the Credit Package)[1], under which the Financial Stability Company and Eksport Kredit Fonden (EKF) were given access to government re-lending, cf. Box 8.2. The same guidelines apply as for other government-owned companies with access to re-lending.

The Financial Stability Company

The Financial Stability Company has access to re-lending in bullet loans with maturities ranging from 1 month to 10 years. Loans in short-term government bonds contribute to simplifying the management of interest-rate risk as the Financial Stability Company holds assets that are exposed to short-term interest rates.

In order to facilitate liquidity management by the Financial Stability Company, the Company has been granted access to re-lending of up to one month's duration for a maximum of DKK 625 million, corresponding to the monthly contributions by the Danish Contingency Association. In addition, the Financial Stability Company has access to re-lending in foreign currency.

[1] Bank Rescue Package I was adopted in October 2008 and the Credit Package (Bank Rescue Package II) in February 2009. The rescue packages are described in Danmarks Nationalbank, *Financial stability, 1st half 2009*.

RE-LENDING TO THE FINANCIAL STABILITY COMPANY AND EKSPORT KREDIT FONDEN Box 8.2

The Financial Stability Company

The Financial Stability Company was established in October 2008 as part of an agreement between the Danish government and the financial sector in Denmark (the Danish Contingency Association). It is a government-owned company whose object is to ensure that the claims of unsecured creditors of the banks that have entered into an agreement with the Private Contingency Association are covered. The guarantee scheme runs until 30 September 2010. The Financial Stability Company covers its ongoing financing requirements by borrowing under the re-lending facility.

The Private Contingency Association pays guarantee commission to the Financial Stability Company of DKK 7.5 billion annually for two years, i.e. DKK 15 billion in total. In addition, the Private Contingency Association will pay own risk to cover the first DKK 10 billion of a government loss under the scheme. If the estimated losses, including the return on contributed capital in the Financial Stability Company, exceed the guarantee commission of DKK 15 billion plus the DKK 10 billion loss guarantee, the Private Contingency Association must cover losses in the Financial Stability Company up to a further DKK 10 billion. Overall, the central government is thus only exposed to losses exceeding DKK 35 billion in total.

One year after the establishment of the guarantee scheme, the Financial Stability Company had drawn DKK 5.7 billion on the loss guarantee, cf. the Company's quarterly statement as at 30 September 2009 (in Danish only). Until now, the Company has made a profit of DKK 7.6 billion, reflecting that half of the guarantee provision has been paid up and earned interest. If the total loss does not exceed the loss guarantee of DKK 10 billion, the full amount of the guarantee commission, DKK 15 billion, will accrue to the Danish government.

Eksport Kredit Fonden, EKF

The object of EKF is to ensure competitive financing conditions for Danish exporters in international markets. EKF may provide a government guarantee, thereby contributing to reducing exporters' borrowing costs in the private market.

In spite of the government guarantees offered by EKF, corporate financial conditions deteriorated strongly in connection with the financial crisis, reflecting the inability of banks to provide loans. Consequently, the Credit Package includes a facility under which EKF can provide loans directly to the exporters. To finance the loans, EKF was granted access to government re-lending up to a limit of DKK 20 billion.

Source: www.finansielstabilitet.dk and www.ekf.dk.

Eksport Kredit Fonden

EKF has access to re-lending on the basis of bullet loans with maturities of 2 to 10 years, as well as re-lending with a serial redemption profile of up to 15 years. Access to serial loans reflects the fact that according to international agreements EKF may provide export credits by way of serial loans. EKF has access to re-lending up to a limit of DKK 20 billion. Access to new re-lending ceases at the end of 2011.

Government capital injections into credit institutes

The Credit Package paved the way for government capital injections into Danish banks and mortgage-credit institutes by way of hybrid core capital up to a maximum of DKK 100 billion, provided that the institutes were solvent. The scheme is administered by the Ministry of Economic and Business Affairs. When the scheme expired at end-2009, capital injections totalled DKK 46 billion, distributed on 43 institutes.

The rate of interest on individual capital injections was set at the 5-year zero-coupon rate plus a risk premium. The average interest rate is 10.08 per cent. The premium relative to government securities reflects the higher credit risk on capital injections. The capital injections did not increase the central government's issuance requirement in 2009, but were financed by drawings on the central government's account at Danmarks Nationalbank.

Loans to Iceland and Latvia

To support the Icelandic economic stabilisation programme, which has been prepared in cooperation with the IMF, Denmark and the other Nordic countries have jointly committed themselves to a loan totalling EUR 1.775 billion. The scheme is managed by the Ministry of Finance. Denmark's share is provided in euro up to a limit of EUR 480 million. The loan runs for 12 years, with no repayments for a period of 5 years from the first instalment (EUR 81 million), which was disbursed in December 2009. The remainder of the loan is expected to be disbursed during 2010, provided that Iceland continues to implement the IMF programme and meets its international obligations.

Latvia has also been granted access to loans from the Nordic countries in connection with an economic stabilisation programme prepared in cooperation with the IMF. Denmark has committed itself to a maximum of EUR 378 million.

RE-LENDING IN 2009 8.3

Re-lending by Government Debt Management in 2009 amounted to DKK 35 billion, cf. Table 8.3.1. The stock of re-lending totalled DKK 82 billion at year-end. The pronounced increase in the volume of re-lending is attributable to the Financial Stability Company, which in 2009 borrowed DKK 25 billion under the re-lending facility, of which DKK 21 billion related to its acquisition of Roskilde Bank in August 2009. The Financial Stability Company is expected to reduce its volume of re-lending in 2010.

Sund og Bælt Holding A/S was given access to re-lending in 2009. The company used the facility to finance a capital injection into the subsidiary

RE-LENDING BY GOVERNMENT DEBT MANAGEMENT Table 8.3.1

DKK billion, nominal value	Re-lending in 2009	Redemptions in 2009	Portfolio end-2009
CPH City & Port Development	0.8	1.0	10.5
The Danish Broadcasting Corporation	1.1	-	3.8
The Danish North Sea Fund	0.1	-	0.2
Danish Ship Finance	2.0	1.3	10.6
Eksport Kredit Fonden	2.6	-	2.6
Energinet.dk	0.5	0.5	5.0
The Financial Stability Company	24.6	-	29.0
The Great Belt Bridge	1.7	-	12.7
Lending to Iceland	0.6	-	0.6
The Metro Company	-	-	-
Statens Serum Institut	0.1	-	0.1
Sund & Bælt Holding A/S	0.4	-	0.4
Øresund Landworks	0.3	-	7.0
Total	34.6	2.8	82.3

Femern A/S. Eksport Kredit Fonden took a 15-year serial loan for DKK 2.6 billion under the re-lending facility in 2009.

Re-Lending to Danish Ship Finance

In 2003, Danish Ship Finance gained access to a special re-lending facility in connection with the adoption by the Folketing (Parliament) of a temporary operating subsidy for Danish shipyards, cf. *Danish Government Borrowing and Debt 2003*, Chapter 10. This facility is subject to a set of agreements equivalent to those applying to government-owned companies.

In 2009, borrowing by Danish Ship Finance under the re-lending facility totalled DKK 2.0 billion. At year-end, the stock of re-lending to Danish Ship Finance was DKK 10.6 billion. Danish Ship Finance does not plan to use the facility in 2010.

Re-lending can be granted to Danish Ship Finance until the end of 2015. The maximum re-lending amount is DKK 18 billion. The central government transacts currency swaps between kroner and dollars in connection with re-lending in dollars, and therefore the central government does not assume any exchange-rate risk. The pricing of the loan is fixed on the basis of the central government's borrowing terms.

GOVERNMENT LOAN GUARANTEES IN 2009 8.4

At the end of 2009, government-owned companies whose loan guarantees are managed by Government Debt Management had issued government-guaranteed debt totalling DKK 50 billion, cf. Table 8.4.1.

GOVERNMENT LOAN GUARANTEES ADMINISTERED BY GOVERNMENT DEBT MANAGEMENT Table 8.4.1

DKK billion, nominal value	Loan guarantees in 2009	Portfolio end-2009
The Danish Broadcasting Corporation	•	0.9
The Danish State Railways	-	8.2
The Great Belt Bridge	-	17.9
Sund & Bælt Holding A/S	-	0.0
Øresund Landworks	-	3.2
The Øresund Bridge	1.9	19.3
Total	1.9	49.6

In addition, the central government has provided further guarantees for approximately DKK 100 billion, e.g. in connection with subsidised housing, export credits and international institutions, cf. the *Government Accounts*.

Guarantees linked to the financial rescue packages

Bank Rescue Package I includes a full government guarantee until 30 September 2010 for all depositors' and other unsecured creditors' claims in banks and mortgage-credit institutes comprised by the guarantee scheme.

As part of the Credit Package a transitional arrangement was adopted under which the Financial Stability Company, acting on behalf of the Danish government, can conclude agreements to provide individual government guarantees to banks and mortgage-credit institutes against payment of guarantee commission. The individual government guarantee comprises bonds with a maturity of up to three years. Until now, the European Commission has approved issuance under this scheme until 30 June 2010. The transitional arrangement ensures that banks and mortgage-credit institutes have access to government guarantees for medium-term loans, as is the case under guarantee schemes in other countries.

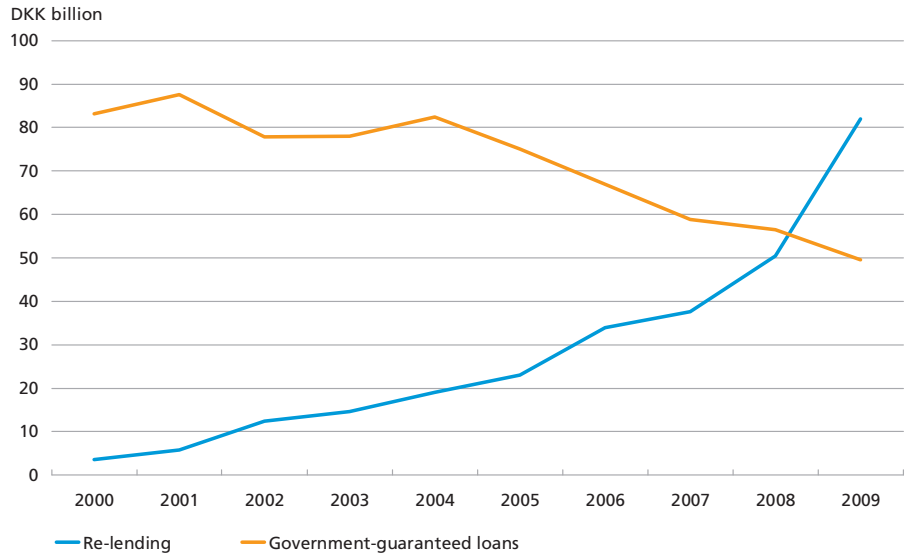
At end-2009, loans with individual government guarantees totalled DKK 53 billion.

DEVELOPMENT IN RE-LENDING AND LOAN GUARANTEES 8.5

In recent years, the government-owned companies have tended to use re-lending over government-guaranteed borrowing in the private market, cf. Chart 8.5.1. This development reflects that re-lending has been a cheaper source of financing for the companies and that re-lending has been the main option available to new government-owned companies. The increase in the volume of re-lending in 2009 is primarily attributable to re-lending to the Financial Stability Company.

RE-LENDING AND GOVERNMENT LOAN GUARANTEES ADMINISTERED BY GOVERNMENT DEBT MANAGEMENT

Chart 8.5.1



The central government's exposure to a potential loss in the event of default is the same for re-lending and government guarantees. Therefore, re-lending and loan guarantees are in principle equivalent with regard to the central government's risk, cf. *Danish Government Borrowing and Debt 2004*, Chapter 9.

CHAPTER 9

Risk Management

The point of departure for management of the central government's risk is a low interest-rate risk due to the long duration of the government debt portfolio. During the financial crisis an inappropriate distribution of the central government's interest-rate fixing has been built up. By concluding interest-rate swaps, the central government can achieve expected reductions of interest costs without increasing the risk of higher interest costs. Consequently, interest-rate swaps will continue to be transacted, provided that the swap markets are well-functioning.

The central government holds foreign debt in order to maintain an adequate foreign-exchange reserve. To minimise the exchange-rate risk, the central government's foreign debt portfolio is exposed solely in euro.

2009 saw an expansion of collateral pledged in connection with the central government's swap agreements. This can be attributed to generally lower ratings of the central government's swap counterparties. Overall, the higher volume of collateral contributed to reducing the central government's credit exposure. However, this should be viewed in the light of the central government's exposure to more counterparties with lower credit ratings.

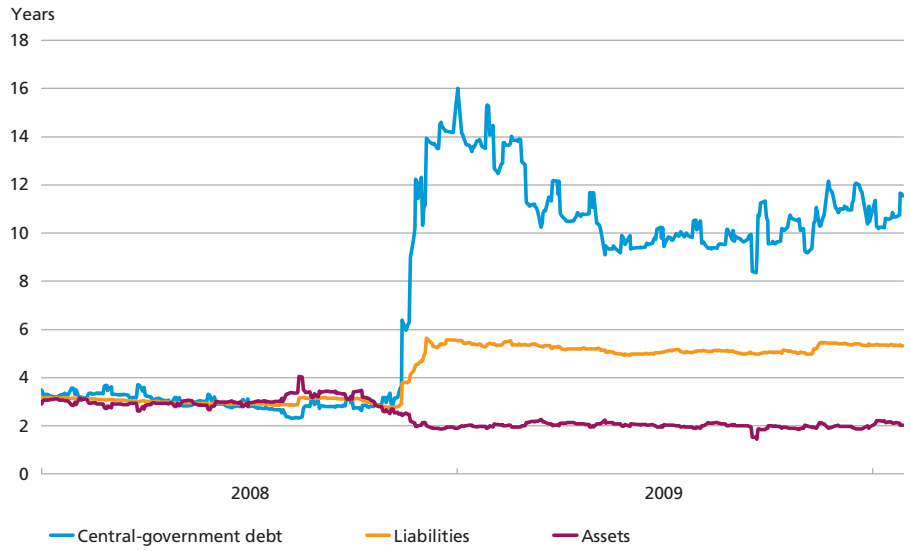
INTEREST-RATE RISK 9.1

The overall objective for Government Debt Management is to achieve the lowest possible long-term borrowing costs, while taking the degree of risk into account. A major risk factor with regard to Danish government debt is the interest-rate risk, i.e. the risk of higher borrowing costs as a result of the development in interest rates.

Management of interest-rate risk in 2009

The financial crisis has led to significant change of the central government's portfolio of assets and liabilities. In response to strong investor interest from the insurance and pension sector, a new 30-year government bond was opened in November 2008. The proceeds of DKK 90 billion were deposited in the central government's account at Danmarks Nationalbank. Moreover, foreign borrowing was increased in order to raise the foreign-exchange reserve, and the proceeds were deposited in

DEVELOPMENT IN DURATION DURING 2008 AND 2009 Chart 9.1.1



the central government's account. This led to build-up of the central government's gross portfolios, a longer duration of liabilities and a shorter duration of assets, whereby the duration of the total central-government debt portfolio rose considerably, cf. Chart 9.1.1.

At the beginning of 2009, the intention was to smooth out the interest-rate fixing by concluding 10-year interest-rate swaps for up to DKK 20 billion, provided that the swap markets normalise. In the 1st half of 2009, the swap markets were still strongly influenced by the financial crisis, so the central government did not transact interest-rate swaps. As the markets gradually normalised in the 2nd half of the year, the use of interest-rate swaps was resumed. 10-year portfolio interest-rate swaps for a total amount of approximately DKK 6 billion were concluded.

Management of interest-rate risk in 2010

The management of the central government's interest-rate risk in 2010 should be viewed in the light of the prospects of rising government debt in the coming years, greater uncertainty than usual concerning government finances and gradual normalisation of the financial markets.

The point of departure for management of the central government's risk is a low interest-rate risk. The duration of the government's liabilities is long after a period of issuance focused on the 10-year maturity segment and issuance of the 30-year government bond. At the same time, the duration of the central government's assets has declined due to the large balance of the central government's account and short-term re-lending to

the Financial Stability Company. In view of the continued low net government debt, fluctuations in the overall duration are thus considerable.

Interest-rate fixing

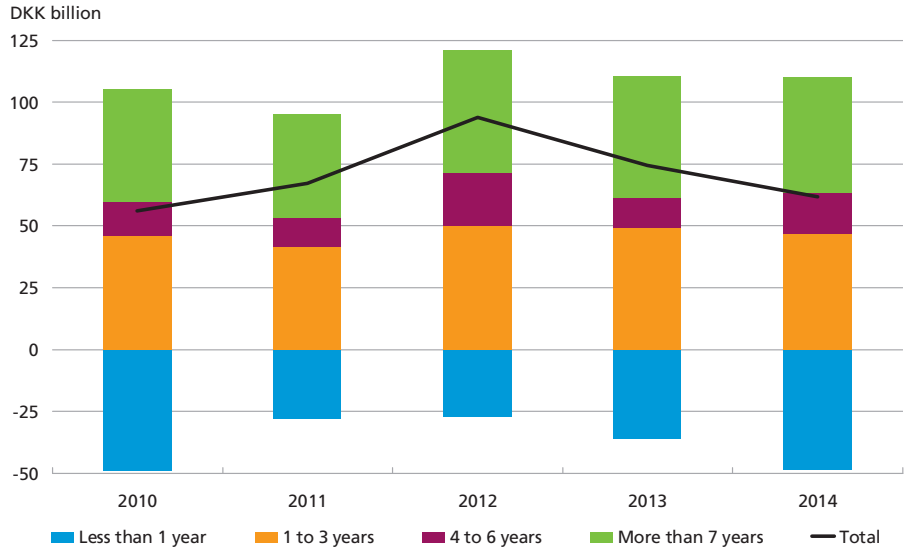
Interest-rate fixing is the amount in kroner on which a new, unknown rate of interest is to be fixed within one year. Interest-rate fixing is calculated as interest-rate fixing for liabilities less interest-rate fixing for assets.

Basically, an even distribution of interest-rate fixing over time and across maturity segments is expedient, and interest-rate fixing should be positive in each maturity segment. Thus the central government has diversified its interest-rate exposure across the yield curve and does not take speculative positions in relation to the future shape of the yield curve.

Since the liabilities in the government debt portfolio exceed the assets, interest-rate fixing will be positive overall, cf. Chart 9.1.2. The balance of the central government's account at Danmarks Nationalbank is large. Interest-rate fixing in 2010 will thus comprise more short-term assets than short-term liabilities, i.e. negative short-term interest-rate fixing.

The central government can obtain a more appropriate interest-rate exposure by concluding interest-rate swaps, whereby the central government pays interest at a floating rate and receives interest at a fixed rate. This increases short-term interest-rate fixing and reduces long-term interest-rate fixing, which smoothes interest-rate fixing, both in terms of maturity segment and over time.

INTEREST-RATE FIXING ON MATURITY SEGMENTS WITHOUT CONCLUSION OF INTEREST-RATE SWAPS — Chart 9.1.2



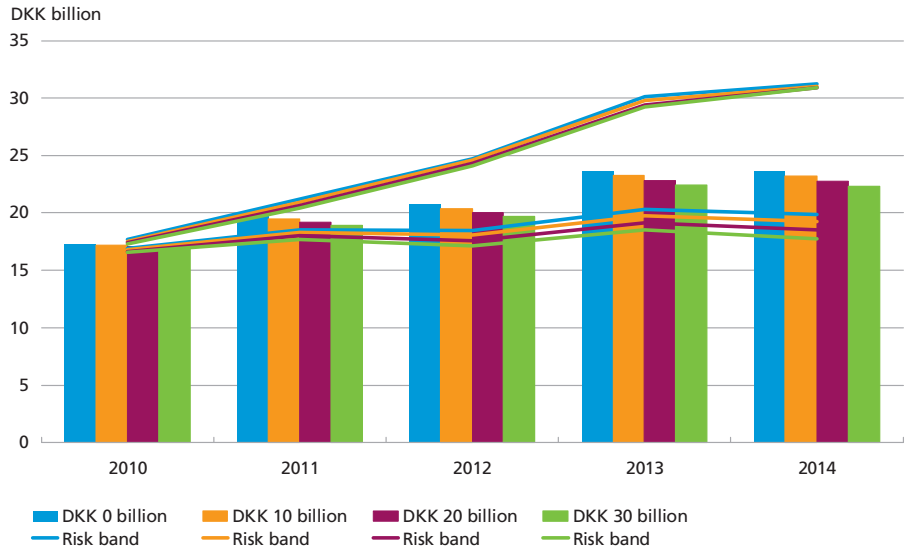
Analyses in the Cost-at-Risk model

The interest-rate fixing of the debt portfolio describes the sensitivity to changes in interest rates, i.e. the central government's interest-rate exposure. In order to assess the interest-rate risk, the probability of interest-rate changes needs to be taken into account.

The interest-rate risk is analysed in Government Debt Management's Cost-at-Risk (CaR) model, based on the strategy for future issuance, buybacks and re-lending to ensure that the expected financing requirement is met. Projections using the CaR model show that conclusion of interest-rate swaps entail savings without increasing the risk of higher interest costs in future. Moreover, by concluding interest-rate swaps the central government can still benefit from lower interest costs in future, cf. Chart 9.1.3.

The analyses of interest-rate fixing and the trade-off between interest costs and interest-rate risk in the CaR model show that it would be appropriate to conclude interest-rate swaps in the coming years. Against this background, Government Debt Management has chosen to continue to use interest-rate swaps in risk management, conditional on well-functioning swap markets. Moreover, the use of interest-rate swaps should be seen in the light of the reduction of the government's holdings of portfolio interest-rate swaps by DKK 22 billion since 2007 and the expiry of interest-rate swaps for a further DKK 16 billion in 2010.

EXPECTED INTEREST COST AND INTEREST-RATE RISK — Chart 9.1.3



Note: Annual conclusion of 10-year interest-rate swaps for DKK 0, 10, 20 and 30 billion. Risk bands are the 5th and 95th percentiles, respectively.

EXCHANGE-RATE RISK 9.2

The central government raises foreign debt in order to maintain an adequate foreign-exchange reserve. Exchange-rate risk is the risk that the value of the central-government debt in kroner increases as a result of changes in exchange rates. To minimise the exchange-rate risk, the central government's foreign debt portfolio is exposed solely in euro. The exchange-rate risk is low due to Denmark's fixed-exchange-rate policy vis-à-vis the euro. In addition, Danmarks Nationalbank's foreign-exchange reserve is predominantly exposed in euro.

In connection with foreign loans in dollars, Swedish kronor and Norwegian kroner, the central government has concluded interest-rate swaps so that the foreign debt is ultimately exposed in euro. Concurrently, the central government has issued Commercial Paper in dollar, also with ultimate exposure in euro via forward contracts with Danmarks Nationalbank.

Re-lending to Danish Ship Finance in dollars is financed in kroner and swapped to dollars, thereby hedging the exchange-rate risk.

CREDIT RISK 9.3

Credit risk is the risk of incurring a financial loss as a consequence of a counterparty's default on its payment obligations.

The central government's swap portfolio is subject to credit risk. When a swap is transacted, its market value is zero, but over time the market value may become either positive or negative for the central government, depending on the development in interest and exchange rates. A swap with a positive market value is an asset for the central government and therefore subject to credit risk since the central government is exposed to the swap counterparty's ability to pay.

The central government's credit risk is minimised by observing a number of credit management principles. Credit risk is spread on a number of counterparties with high credit ratings that have concluded agreements on unilateral pledging of collateral. The central government's credit management is described in more detail in the Appendix *Principles for Management of Credit Risk on Government Swaps*.

Foreign borrowing has increased the swap portfolio

At end-2009, the swap portfolio consisted of 324 swaps with 19 counterparties, with a principal totalling DKK 226 billion, cf. Table 9.3.1. In 2009, the central government transacted 21 swaps with a principal totalling DKK 76 billion. In connection with foreign borrowing, currency swaps into euro were transacted for DKK 59 billion.

THE CENTRAL GOVERNMENT'S SWAP PORTFOLIO, 2007-09 YEAR-END — Table 9.3.1

	2007[1]	2008[2]	2009
Number of counterparties	20	21	19
Number of swaps	355	360	324
	Principal, DKK billion		
Interest-rate swaps, Danish kroner	65.4	64.6	52.1
Interest-rate swaps, other currencies	57.2	70.0	86.0
Currency swaps DKK-EUR, EUR-DKK	13.3	11.7	8.2
Currency swaps DKK-USD[3]	6.9	10.4	11.0
Currency swaps USD-EUR	-	13.2	64.9
Currency swaps, other	-	0.0	3.5
Principal, total	142.8	169.9	225.6

[1] Excluding swaps from the Mortgage Bank of the Kingdom of Denmark which amounted to DKK 514 million.
[2] Excluding one swap from the Mortgage Bank of the Kingdom of Denmark which amounted to DKK 35 million.
[3] In connection with re-lending to Danish Ship Finance.

The dollar significantly affects the market value of the swap portfolio

The development in the market value of the central government's swaps reflects fluctuations in interest and exchange rates.

The market value of the central government's currency swap portfolio is primarily influenced by the dollar rate. As a result of the issuance of dollar loans, the currency swap portfolio consists chiefly of dollar-to-euro swaps. Hence, the market value of the swap portfolio tends to decline when the dollar weakens. As a result of the fixed-exchange-rate policy, the central government's portfolio of currency swaps between kroner and euro does not give rise to major fluctuations in market value.

Interest-rate swaps are typically used to restructure debt from long to short duration, which means that the central government primarily pays interest at a floating rate and receives interest at a fixed rate. The market value of the government's portfolio of interest-rate swaps thus increases when interest rates decline.

In 2009, the market value of the central government's swap portfolio fell by DKK 1.1 billion, cf. Table 9.3.2, primarily due to the depreciation of the dollar.

Lower credit exposure

The total market value of the swap portfolio cannot be directly applied as a measure of the central government's credit exposure. The credit exposure is calculated on the basis of the market values of the individual counterparties' swap portfolios with the central government. The central

NET MARKET VALUE OF THE SWAP PORTFOLIO — Table 9.3.2

DKK billion	2007[1]	2008[2]	2009
Interest-rate swaps	0.1	5.2	7.7
Currency swaps	0.4	-1.5	-5.0
Total	0.5	3.7	2.6

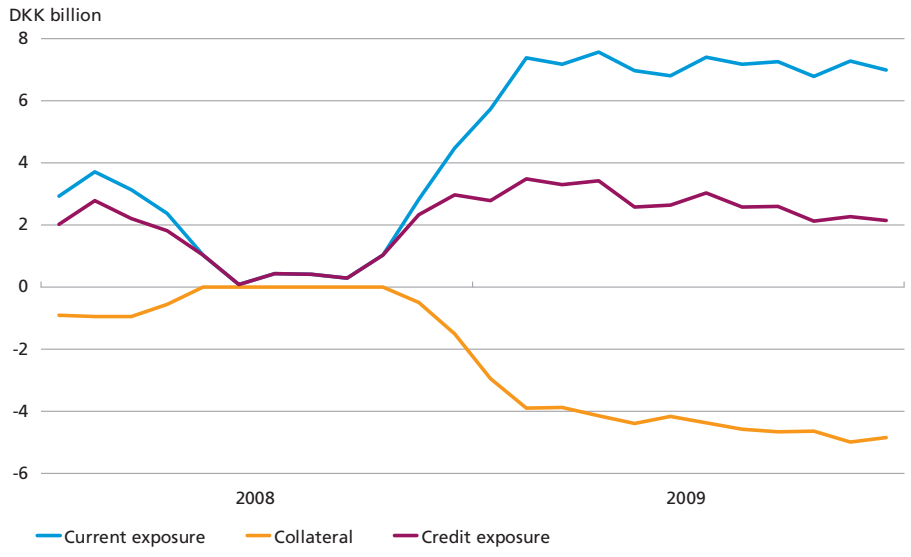
[1] Excluding swaps transferred from the Mortgage Bank of the Kingdom of Denmark (market value DKK -37 million).
[2] Excluding 1 swap transferred from the Mortgage Bank of the Kingdom of Denmark (market value DKK 9 million).

government's maximum credit loss without adjustment for the collateral pledged (current exposure) is the sum of the positive market values for the individual counterparties. A counterparty's swap portfolio is not included in the current exposure if the market value is negative. The current exposure rose by DKK 2.5 billion in 2009, primarily reflecting a higher market value of the central government's interest-rate swaps. In the same period, volume of collateral pledged rose by DKK 3.3 billion, resulting in a decrease in the central government's overall credit exposure by DKK 0.8 billion in 2009, cf. Chart 9.3.1.

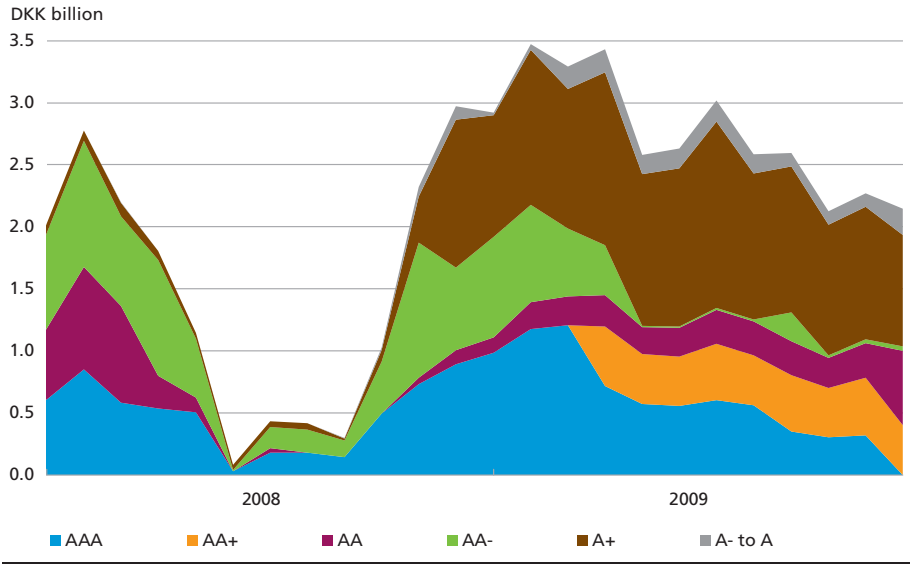
Downgrading of swap counterparties

In 2009, the increase in pledged collateral mainly reflected downgrading of the central government's swap counterparties. The counterparties' threshold values for pledging of collateral have thus been reduced, so the

CREDIT EXPOSURE ON THE CENTRAL-GOVERNMENT SWAP PORTFOLIO — Chart 9.3.1



CREDIT EXPOSURE BROKEN DOWN BY COUNTERPARTY RATING Chart 9.3.2



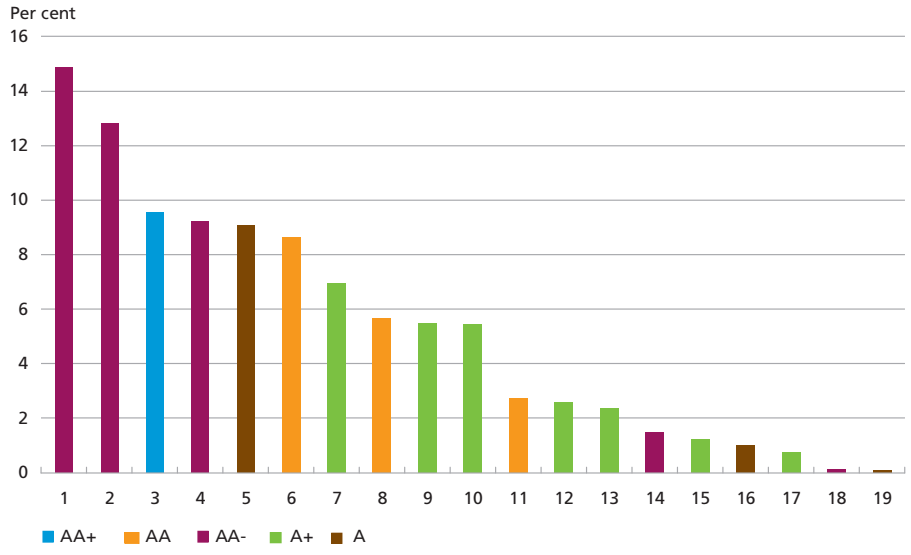
counterparties must pledge more collateral when the market values of their swap portfolios are positive for the central government. Viewed in isolation, downgrading of counterparties thus reduces the central government's credit exposure. Conversely, the quality of the credit exposure has declined since the exposure to counterparties with lower ratings has grown since the end of 2008, cf. Chart 9.3.2.

Swap counterparty diversification

The central government reduces the risk of substantial credit losses by using a large number of swap counterparties. At end-2009, the central government's outstanding swaps were distributed on 19 counterparties, cf. Chart 9.3.3.

In previous years, the central government had outstanding swaps with several counterparties with the highest rating (AAA), typically special purpose vehicles (SPVs) that had this rating as a result of their financial structure. An SPV is legally separated from all other companies in the same group, which means that its capital cannot be claimed by the parent company or other group companies if they encounter financial difficulties. An SPV hedges its entire market risk via the parent company, and the SPV's capital base is adjusted on an ongoing basis to ensure sufficient cover for the SPV's financial obligations at all times. Traditionally, the rating agencies have therefore considered the risk of the SPV defaulting on its financial obligations to be limited.

SWAP PORTFOLIO BROKEN DOWN BY COUNTERPARTIES Chart 9.3.3



Experience with SPVs during the financial crisis, particularly the SPVs associated with Lehman Brothers, caused the rating agencies to adopt a more critical approach to SPVs in 2009. Consequently, a number of SPVs were downgraded, including those that are counterparties of the central government. At the end of 2009, the central government had outstanding swaps with a principal totalling DKK 34 billion with two SPVs rated AA+ and AA, respectively.

Special-Topic Section

CHAPTER 10

Management of the Central Government's Interest-Rate Risk

Government Debt Management manages the interest-rate risk on central-government assets and liabilities on a consolidated basis. Interest-rate risk is established on the basis of an analysis of the central government's interest-rate exposure and the trade-off between interest costs and interest-rate risk according to the Cost-at-Risk (CaR) model. The central government's budget risk is assessed through stress testing of future budget deficits.

Analyses of interest-rate fixing and the trade-off between interest costs and interest-rate risk in the CaR model show that it will be expedient to transact interest-rate swaps in the coming years. Interest-rate swaps result in a more even distribution of interest-rate fixing across maturity segments. At the same time, the analyses in the CaR model show that the transaction of interest-rate swaps contributes to reducing the central government's interest costs without increasing the risk of higher future interest costs.

Against this background, Government Debt Management has chosen to continue to use interest-rate swaps in risk management, conditional on well-functioning swap markets.

CONSOLIDATED RISK MANAGEMENT 10.1

The overall objective is to achieve the lowest possible long-term borrowing costs, while taking the degree of risk into account. Consequently, Government Debt Management considers an appropriate trade-off between costs and risk in its medium-term planning of the government debt policy.

The financial risk on the central-government debt is managed on a consolidated basis, i.e. according to the Asset Liability Management (ALM) principle, cf. *Danish Government Borrowing and Debt 2008*, Chapter 11. Government Debt Management thus manages the total net exposure of the government debt portfolio. The risk management is based on a trade-off between costs and risk measured by nominal accrued costs, reflecting the cost concept of the central-government accounts.

LIABILITIES AND ASSETS IN THE CENTRAL-GOVERNMENT DEBT PORTFOLIO Table 10.1.1

End-2009	Nominal value, DKK billion	Duration, years
Domestic debt[1]	487.9	6.7
Foreign debt[2]	139.6	0.2
Liabilities, total	627.5	5.4
Government funds	-115.1	4.1
Central government's account	-210.9	0.0
Assets, total	-326.0	1.7
Central-government debt, total	301.5	9.2
Re-lending	-82.3	3.6
Refinancing of subsidised housing	44.4	2.5
Central-government debt portfolio[3]	263.6	9.9

Note: Durations include The Social Pension Fund's purchase in non-callable mortgage-credit bonds with value date 4 January 2010. A positive figure indicates a liability for the central-government; a negative figure indicates an asset.

[1] Duration on the domestic debt is 7.0 years excl. DKK denominated interest-rate swaps (Cibor).

[2] Duration on the foreign debt is 1.9 years excl. euro denominated interest-rate swaps (Euribor).

[3] The central-government debt adjusted for re-lending and refinancing of subsidised housing.

Portfolios in the central government's risk management

Central-government debt consists of both assets and liabilities. The liabilities comprise domestic and foreign debt, while the assets comprise the balance of the central government's account at Danmarks Nationalbank and the portfolios of three government funds, cf. Table 10.1.1.

Risk management is based on the central-government debt adjusted for re-lending and refinancing of subsidised housing. Adjustment is made for re-lending because the central government has a claim in connection with re-lending to government-guaranteed companies. As a result, the central-government's net interest costs do not increase in connection with re-lending, since the interest costs are borne by the recipients. Refinancing of subsidised housing is also included, as the central government is exposed to interest-rate risk in connection with its financing of the subsidised housing sector. In 2008, it was decided to hedge this interest-rate risk by letting the Social Pension Fund invest in the corresponding mortgage bonds. Refinancing of subsidised housing is therefore included in the central government's risk management.

SEPARATION OF ISSUANCE STRATEGY AND RISK MANAGEMENT 10.2

Government Debt Management uses interest-rate swaps in connection with its management of the central government's interest-rate and refi-

nancing risk, thereby enabling separation of the issuance and buy-back strategy from risk management. The advantage is that the issuance strategy can be targeted at building up large, liquid bond series, thereby reducing the central government's borrowing costs.

The separation of the issuance strategy and risk management makes it easier to stick to the issuance strategy in connection with minor or temporary changes in the borrowing requirement. The separation thereby supports a transparent issuance strategy, which contributes to reducing investors' risk. Consequently, the central government's buy-back strategy is able to support the build-up of key on-the-run securities and can be used to smooth the redemption profile.

The use of interest-rate swaps in risk management reduces the central government's refinancing risk compared with increasing short-term borrowing, as the principal in the interest-rate swap is not refinanced, cf. Box 10.1. In connection with refinancing of debt, the central government is exposed to the possibility that in a single year it may be particularly difficult to issue government securities. On the other hand, the use of interest-rate swaps increases the central government's instrument risk, i.e. the risk that the floating interest rate in the interest-rate swap, which depends on the interbank lending rate, and the corresponding government yield will show diverging development patterns. The financial crisis has demonstrated that the normal close link between short-term swap rates and short-term government yields can be broken during periods characterised by a high degree of uncertainty.

In addition to reducing the central government's refinancing risk, issuance of government bonds with longer maturities has several long-term advantages. This contributes to building up a government yield curve that

INTEREST-RATE SWAPS — Box 10.1

The central government's interest-rate swaps are typically transacted in Danish kroner or euro to change fixed-rate debt to floating-rate debt. An interest-rate swap consists of a floating leg and a fixed leg. The floating leg is a cash flow calculated on the basis of a floating interest rate, while the cash flow of the fixed leg is based on a fixed interest rate over the maturity of the swap. This means that the fixed-leg cash flow is known at the time of transaction, while only the first payment of the floating leg is known at the time of transaction. Normally, the interest rates on the two legs are calculated so that the present values of the cash flows are the same at the time of transaction. The cash flow from the fixed leg of a 10-year interest-rate swap has the same characteristics as the cash flow from a fixed-rate 10-year bullet bond. Similarly, the cash flow of the floating leg has the same characteristics as the cash flow from a floating-rate 10-year bullet bond. The principals of the two cash flows are not exchanged, which reduces the credit risk on interest-rate swaps.

can be used as a price benchmark for other financial instruments. It also helps to ensure long-term access to the credit market for the central government.

Government Debt Management adjusts the strategy for transaction of interest-rate swaps to the central government's overall interest-rate exposure. Rather than being linked to an individual bond issuance, interest-rate swaps are transacted as portfolio interest-rate swaps when this is deemed to be expedient in relation to risk management of the overall government debt portfolio.

INTEREST-RATE RISK 10.3

Interest-rate risk is the risk of higher interest costs as a result of the development in interest rates. There is normally a trade-off between interest costs and interest-rate risk, enabling the central government to reduce the expected annual interest costs by assuming a higher interest-rate risk. This is because yields on short-term bonds are normally lower than yields on long-term bonds, corresponding to a positive slope of the yield curve. On the other hand, short-term bonds more frequently entail refinancing at unknown future yields. In addition, short-term yields fluctuate more than long-term yields over time. This may contribute to increasing the risk on government debt.

In an international perspective, Denmark's government debt remains low. The duration of the central-government debt is long compared with those of other countries, which means that the interest-rate risk on government debt is low. The low interest-rate risk reflects the long duration of the central government's liabilities and the short duration of its assets.

The duration of the government debt portfolio does not include information on the absolute interest-rate exposure or its dispersion over time. The accumulation of assets of short duration and liabilities of long duration has made risk management more complex. An analysis of the central government's interest-rate fixing is important to avoid an uneven distribution of the central government's interest-rate exposure on various maturity segments.

INTEREST-RATE FIXING 10.4

The annual interest-rate fixing is given by the accrued amount in kroner for which a new interest rate is to be fixed in a given year, cf. Box 10.2. This means that the central government's interest costs in a given year will increase by 1 per cent of the annual interest-rate fixing in the event of a parallel upward shift in the yield curve of 1 percentage point.

INTEREST-RATE FIXING Box 10.2

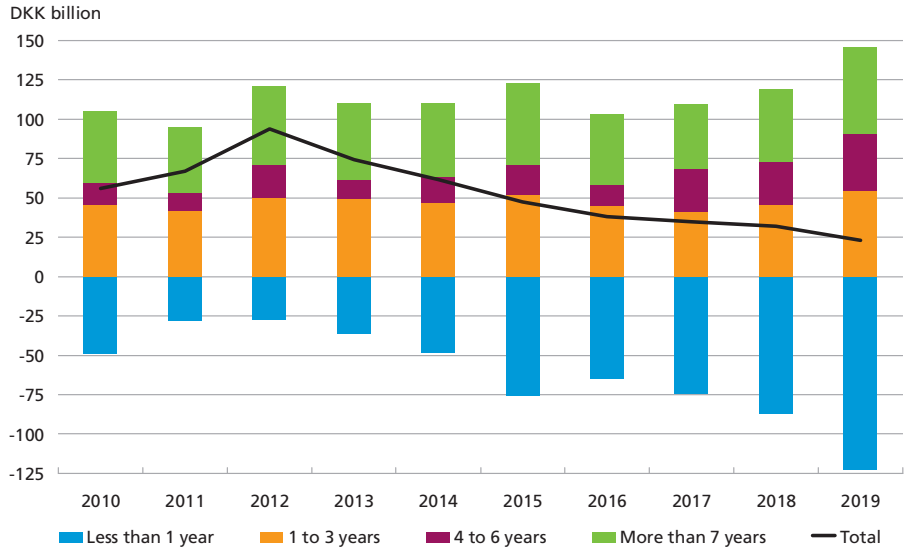
Interest-rate fixing is the accrued amount in kroner on which a new, unknown rate of interest is to be fixed. Interest-rate fixing is calculated as interest-rate fixing for liabilities less interest-rate fixing for assets.

- Interest-rate fixing for liabilities comprises issuance of government securities during the year, conclusion of interest-rate swaps and holdings of interest-rate swaps at the beginning of the year.
- Interest-rate fixing for assets comprises the year's buy-backs from the market, re-lending, interest-rate swaps transacted and the average balance of the central government's account at Danmarks Nationalbank.

A general increase in the level of interest rates by 1 percentage point will increase interest costs by 1 per cent of the interest-rate fixing. Interest-rate fixing is broken down into different maturity segments. Government Debt Management's short-term interest-rate fixing applies to maturities of less than one year. It primarily includes the balance of the central government's account, issuance of T-bills and the principal of the total portfolio of interest-rate swaps. In addition, interest-rate fixing is divided into the maturity segments from 1 to 3 years, from 4 to 6 years and of more than 7 years. This breakdown thus corresponds to the distribution of the central government's key on-the-run issues.

Since the central government has net debt, interest-rate fixing will be positive overall, cf. Chart 10.4.1. Basically, an even distribution of interest-rate fixing over time and across maturity segments is expedient, and

INTEREST-RATE FIXING ON MATURITY SEGMENTS WITHOUT CONCLUSION OF INTEREST-RATE SWAPS Chart 10.4.1



interest-rate fixing should be positive in each maturity segment. Diversified interest-rate exposure along the yield curve means that the central government does not take speculative positions in relation to the future shape of the yield curve.

Interest-rate fixing without transaction of new interest-rate swaps

With the specified issuance strategy and without the transaction of new interest-rate swaps, short-term interest-rate fixing will be negative in the period 2010 to 2019, cf. Chart 10.4.1. This is primarily due to the large balance of the central government's account at Danmarks Nationalbank. The reason for the increase in negative short-term interest-rate fixing over the period is the gradual expiry of the existing interest-rate swap portfolio of DKK 115 billion.

Interest-rate fixing by annual transaction of interest-rate swaps for DKK 20 billion

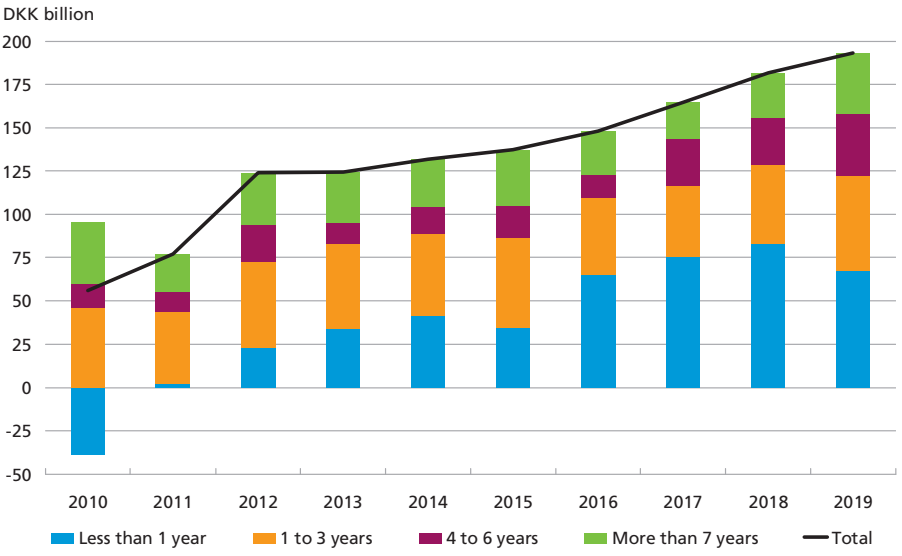
The central government's interest-rate exposure can be changed by the transaction of interest-rate swaps. Short-term interest-rate exposure increases on transaction of interest-rate swaps for which the central government pays interest at a floating rate and receives interest on the swap at a fixed rate. The transaction of 10-year interest-rate swaps for an amount of DKK 1 billion, with the central government receiving the fixed 10-year interest rate and paying the floating swap rate, would reduce the central government's long-term interest-rate fixing in the year of transaction by DKK 1 billion and increase the short-term interest-rate fixing by DKK 1 billion annually over the maturity of the swap.

The transaction of interest-rate swaps for a notional amount of DKK 20 billion annually ensures a significantly more even distribution of interest-rate fixing across maturity segments during the period analysed than interest-rate fixing without the transaction of new interest-rate swaps, cf. Chart 10.4.2. However, short-term interest-rate fixing remains low at the beginning of the period.

As interest-rate fixing is purely a measure of exposure, it is not possible to assess the expediency of a particular central-government interest-rate fixing scenario solely on the basis of interest-rate fixing. The analysis of the central government's interest-rate fixing is therefore combined with the Cost-at-Risk model that describes the trade-off between interest costs and interest-rate risk.

INTEREST-RATE FIXING ON MATURITY SEGMENTS WITH ANNUAL CONCLUSION OF DKK 20 BILLION INTEREST-RATE SWAPS

Chart 10.4.2



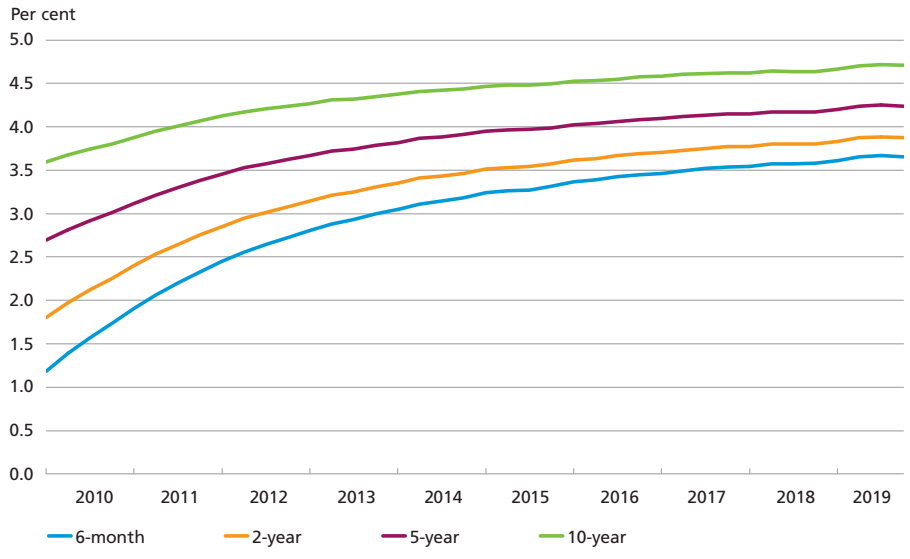
COST-AT-RISK MODEL 10.5

The strategy for the central-government debt is determined on the basis of a trade-off between costs and risk. To analyse the risk of a strategy, a baseline scenario for future issuance, buy-back and re-lending is constructed. The baseline scenario is consistent with the expected future financing requirements. Interest-rate risk is then analysed using Government Debt Management's Cost-at-Risk, CaR, model.

The CaR model applies 2,500 interest-rate scenarios. For each interest-rate scenario the central government's costs are calculated given the expected future financing requirements, re-lending, investments of the government funds and the chosen strategy for domestic and foreign issuance and transaction of interest-rate swaps. It is then possible to calculate the central government's expected interest costs and measures of risk in the form of the 5th and 95th percentiles for its annual interest costs. Both measures are relevant as they provide a band for the central government's expected future interest costs.

The input of interest rates is key to the CaR model trade-off between costs and risk. The interest-rate scenarios are calculated based on a two-factor Cox-Ingersoll-Ross (CIR) interest-rate model estimated on Danish government yields for the last 10 years, cf. *Danish Government Borrowing and Debt 2005*, Chapter 10.

AVERAGE INTEREST RATES FOR SELECTED MATURITY SEGMENTS Chart 10.5.1



Note: Based on the Government Debt Management's 2-factor CIR interest-rate model.

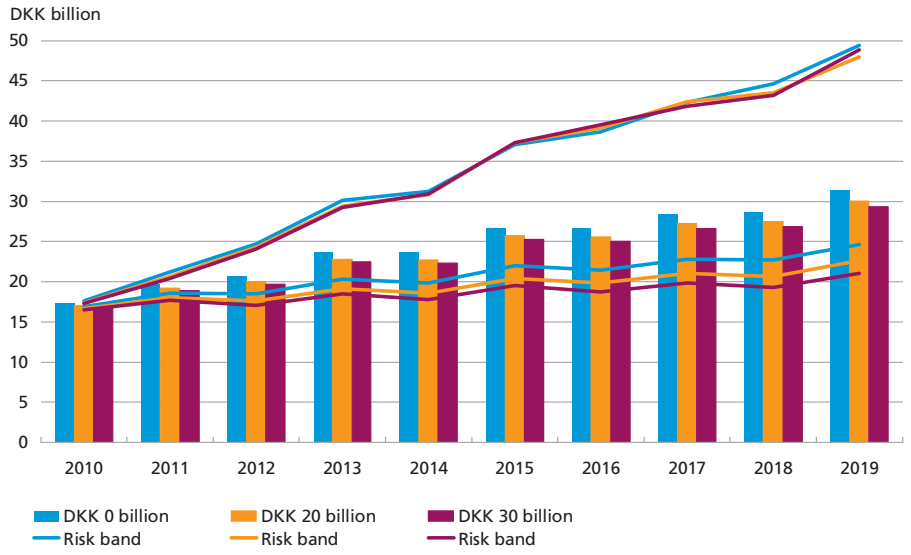
At the outset, the general government yield level is low, and the difference between the interest rates in the short and long maturity segments is substantial compared with the average over the last 10 years. The interest-rate model projects generally rising interest rates and a flatter yield curve, cf. Chart 10.5.1.

Expected saving without higher risk

In the baseline scenario it is possible to reduce the central government's average expected costs by transacting interest-rate swaps without increasing the risk of higher interest costs. This is because the balance of the central government's account at Danmarks Nationalbank to some extent hedges the floating leg of the interest-rate swap. It is therefore possible to exploit the fact that the interest rate for longer maturities is typically higher, i.e. the yield curve has a positive slope. Thus, the CaR model projects an annual saving by transacting interest-rate swaps for up to DKK 30 billion per year without increasing the risk of higher future interest costs. Moreover, the central government can still benefit from lower interest costs in future, cf. Chart 10.5.2. If interest-rate swaps for more than notionally DKK 30 billion a year are concluded, issuance of the 10-year government bond will no longer hedge the fixed leg of the interest-rate swap.

At the beginning of 2010, the duration of the liabilities in the government debt portfolio was 5.4 years, while the duration of the assets

EXPECTED INTEREST COST AND INTEREST-RATE RISK Chart 10.5.2



Note: Annual conclusion of 10-year interest-rate swaps for DKK 0, 20 and 30 billion. Risk bands are the 5th and 95th percentiles, respectively.

was 1.7 years. This resulted in a duration of the overall government debt portfolio of about 10 years. The long government debt duration reflects the increasing duration of the central government's liabilities over the last two years and the fact that a large balance of the central government's account reduced the duration of its assets.

The long duration of the central-government's liabilities is due to issuance of the 30-year bond at the end of 2008 and the fact that the notional principal of the central government's portfolio of interest-rate swaps has been reduced by DKK 22 billion since 2007 because the central government did not transact any interest-rate swaps in 2007 and 2008. In line with the normalisation of the financial markets, the central government gradually resumed the use of interest-rate swaps for risk management purposes in the 3rd quarter of 2009. At the beginning of 2010, the central government's outstanding interest-rate swaps amounted to notionally DKK 115 billion, of which DKK 16 billion will expire in 2010.

BUDGET RISK 10.6

The budget risk is the risk of a different development in the central government's budget than projected. The central government's budget is primarily affected by the economic development. During an economic slowdown, higher unemployment causes social benefit costs to increase and tax revenue to decrease. During periods with shifts in the economic

development, budget estimates are more uncertain. In addition, the central government has introduced various stimulus packages in connection with the financial crisis, which contributes to increasing its future budget risk.

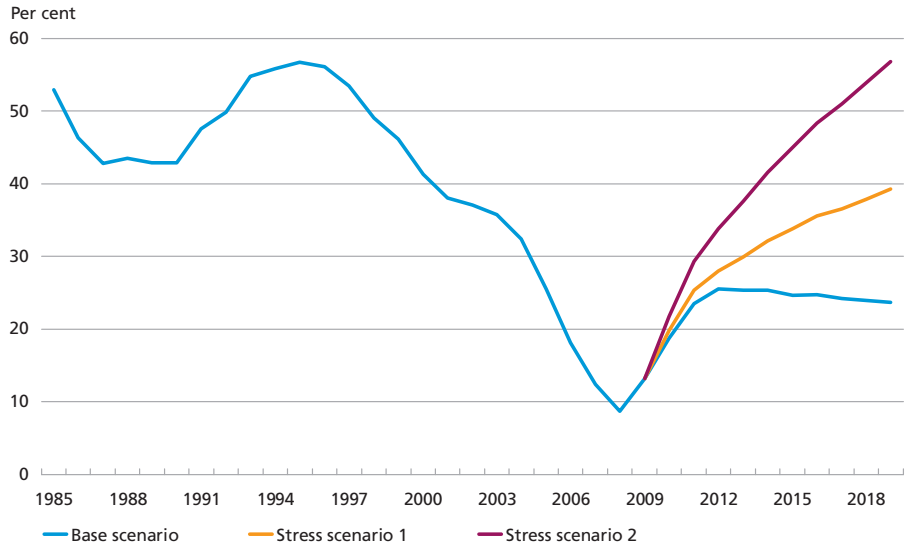
In a situation with a high budget risk it is advantageous for the central government's liabilities to be of long duration, as an increased issuance requirement has less impact on the central government's interest-rate risk. Furthermore, budget risk is accommodated by a large balance of the central government's account at Danmarks Nationalbank. The central government's budget risk is assessed through stress testing of future budget deficits.

Stress testing in the Cost-at-Risk model

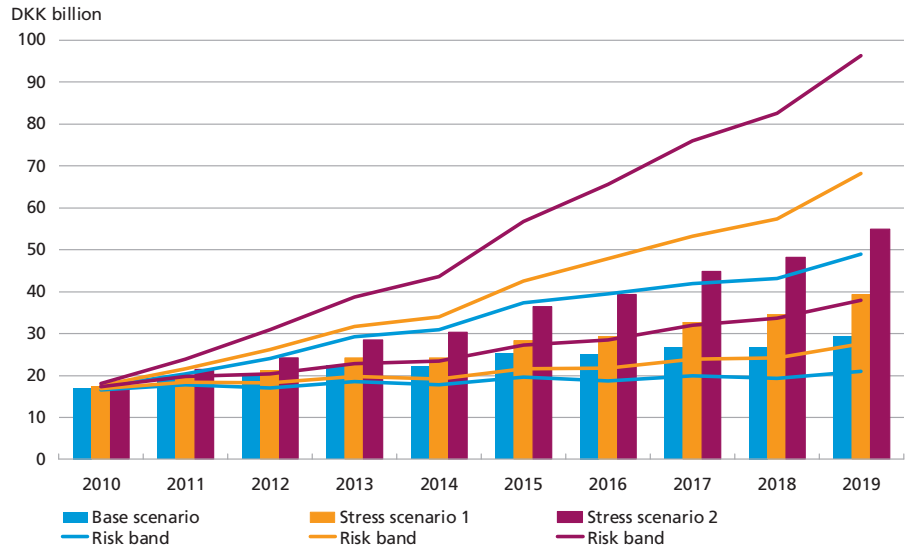
The greatest risk in relation to the central government's overall interest costs in the coming years is assessed to be the risk of larger budget deficits. The stress tests are based on two alternative scenarios in which government finances deteriorate relative to the baseline scenario, cf. Chart 10.6.1.

In the stress tests, the deterioration of the budget balance is financed by increasing the scope of the T-bill programme and the annual bond issuance according to the 40-20-40 issuance strategy. A deterioration of the central government's budget balance will naturally increase the annual expected interest costs accordingly. The risk of higher interest costs, measured by the 95th percentile, increases more than the expected

DEVELOPMENT IN CENTRAL-GOVERNMENT DEBT, RATIO OF GDP — Chart 10.6.1



EXPECTED COST AND RISK IN BASE AND STRESS SCENARIOS Chart 10.6.2



Note: Risk bands are the 5th and 95th percentiles, respectively.

interest costs do. This is because the share of government debt for which a new, uncertain interest rate is determined is larger in the stress scenarios, meaning that the future level of interest rates will have a stronger impact on the overall interest costs, cf. Chart 10.6.2.

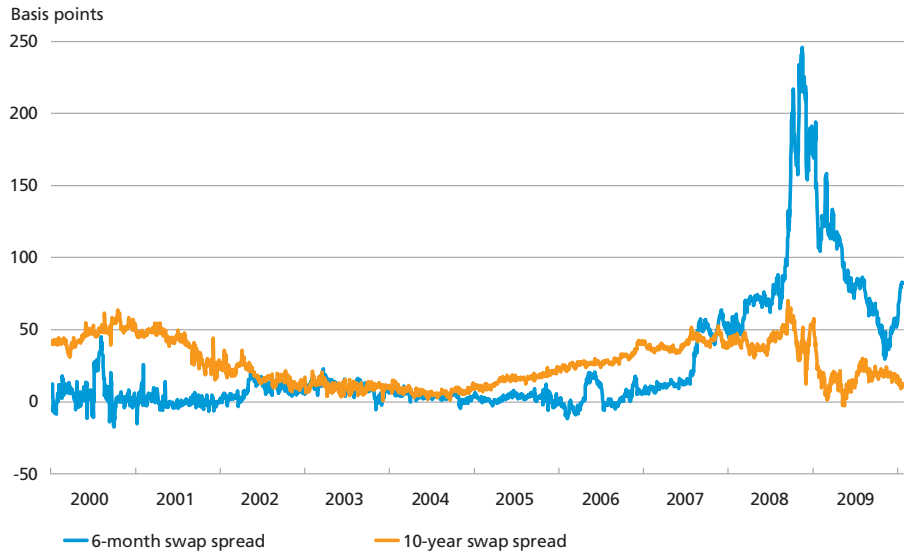
The CaR model does not take into account the fact that the central government's issuance level may affect the level of interest rates. Accordingly, the stress test does not allow for the fact that a strong increase in annual issuance may affect borrowing conditions and the level of interest rates.

INSTRUMENT RISK 10.7

The CaR model does not take into account instrument risk, i.e. the risk that interest rates within the same maturity segment, but on different instruments, show diverging development patterns. Another factor not taken into account is that the central government normally has a comparative advantage in connection with issuance in the long maturity segment in view of its high credit standing. Thus, it is assumed that the swap rates equal the corresponding government yields.

The analysis in the CaR model underestimates instrument risk in connection with interest-rate swaps. For a long time, swap rates and government yields have been closely linked. However, the financial crisis has shown that this close link can be broken during periods characterised by a high degree of uncertainty, cf. Chart 10.7.1.

DANISH SWAP SPREADS Chart 10.7.1



Note: In periods in which the 10-year swap spread is higher than the 6-month swap spread, the central-government has a comparative advantage by entering into interest-rate swaps compared to reducing long-term borrowing and increasing short-term borrowing.
Source: Bloomberg.

SUMMARY 10.8

Analyses of interest-rate fixing and the trade-off between interest costs and interest-rate risk in the CaR model show that transacting interest-rate swaps will be expedient in the coming years. Interest-rate swaps result in a more even distribution of interest-rate fixing across maturity segments. Basically, an even distribution of interest-rate fixing over time and across maturity segments is expedient, and interest-rate fixing should be positive in each maturity segment. Diversified interest-rate exposure along the yield curve means that the central government does not take speculative positions in relation to the future shape of the yield curve.

At the same time, the analyses in the CaR model show that the transaction of interest-rate swaps contributes to reducing the central government's interest costs without increasing the risk of higher future interest costs. As a result the duration of the overall debt portfolio can be reduced from the current high level without increasing the interest-rate risk.

Against this background, Government Debt Management has chosen to continue to use interest-rate swaps in risk management, conditional on well-functioning swap markets.

CHAPTER 11

Issuance Strategy in the Coming Years

Borrowing requirements are set to be large in the coming years, and hence there is a need to adapt the issuance strategy. The strategy is to issue liquid bonds in the 2-, 5- and 10-year maturity segments on the basis of a 40-20-40 percentage distribution. In addition, issuance of T-bills will be resumed.

When determining the strategy, emphasis has been placed on issuing in internationally recognised benchmark segments. At the same time, bond series will be built up to a volume for which investors are willing to pay a premium for high liquidity. In addition, the strategy entails a smooth redemption profile.

CONSOLIDATION OF CENTRAL-GOVERNMENT BORROWING 11.1

The central government's issuance strategy is designed to support a liquid domestic market for government securities. Investors are willing to pay a premium for high liquidity, thereby allowing the central government to cover its borrowing requirement at a lower rate of interest. A prerequisite for a liquid market for government bonds is that bond series are built up to a large outstanding volume. In addition, it is important to have a framework that supports a well-functioning government bond market with efficient trading on electronic platforms.

In the period until 2005, the issuance strategy was based on a 40-20-40 percentage distribution on the 2-, 5- and 10-year maturity segments, cf. Chart 11.1.1. Large government surpluses in the period 2005-08 meant that the central government did not really have a borrowing requirement during this period. Consequently, bond issuance was concentrated on the 10-year maturity segment and T-bills were phased out.

In 2007, Government Debt Management analysed the future perspectives of the market for government securities in the report *Government Debt Policy in the Light of Falling Debt*[1]. The analysis showed that the central government would still have a borrowing requirement until 2015, and that there would be costs involved in re-establishing a borrowing programme. In addition, the analysis showed that government securities contribute to an efficient financial market due to their role as price

[1] *Danish Government Borrowing and Debt 2007*.

ISSUANCE OF DOMESTIC GOVERNMENT SECURITIES Chart 11.1.1

Note: In context of the financial crisis, there was in 2008 extraordinarily issuance in the 2-year segment and the 30-year bond was issued to the pension sector.

reference and investment objects. Against this background, it was decided to continue issuance of government bonds.

In order to ensure a liquid market for government securities, the issuance strategy adopted was to build up a 10-year series to a volume of around DKK 50 billion over a 2-year period. The plan was to assess the strategy after 3-4 years.

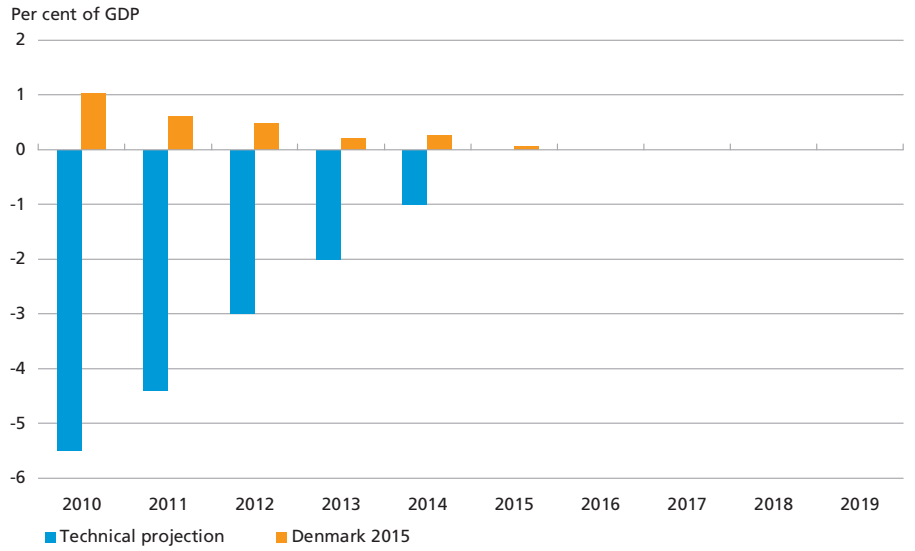
THE CRISIS HAS LED TO GOVERNMENT BUDGET DEFICITS 11.2

In 2009, the borrowing requirement rose substantially, mainly on account of the financial crisis and the economic slowdown. As a result, the issuance strategy was adjusted by opening a new 2-year series and resuming issuance in the 5-year segment, cf. Chapter 3.

Looking ahead, the government budget is set to deteriorate substantially compared with the scenario outlined in the government report *Towards New Goals – Denmark 2015*, which formed the basis for the report on falling debt. This reflects a weakening of the structural balance as a result of "…the growth-accommodating fiscal policy, lower potential GDP due to the crisis and growth in public service expenditures"[1].

[1] *Economic Survey,* December 2009, p. 5.

PROJECTION OF GOVERNMENT FINANCES Chart 11.2.1



Note: The technical projection is based on *Economic Survey*, December 2009 for the years 2010 and 2011. The projection hereafter is based on convergence to a balanced budget in 2015. The Denmark 2015 plan was published in the report *Towards New Goals – Denmark 2015*.
Source: *Economic Survey*, December 2009 and *Towards New Goals – Denmark 2015*.

Government Debt Management has made a technical projection of the development of government finances, cf. Chart 11.2.1. The prospect of a period of budget deficits entails a need to adjust the issuance strategy.

ISSUANCE STRATEGY TO MATCH A HIGHER BORROWING REQUIREMENT 11.3

Government debt policy in Denmark will continue to focus on issuance in large and liquid bond series. With prospects of government budget deficits in the coming years, it is necessary to build up liquid bond series in other maturity segments besides the 10-year segment. The strategy is to issue bonds in the 2-, 5- and 10-year segments on the basis of a 40-20-40 percentage distribution. The strategy is:

- Opening a 2-year on-the-run issue every year
- Opening 5- and 10-year on-the-run issues every other year.

To ensure a smooth redemption profile, the 5- and 10-year on-the-run issues will mature in different years. In addition, T-bills will be issued.

When determining the strategy, emphasis has been placed on issuing in internationally recognised benchmark segments, in which series are built up to a volume that is sufficiently large to support liquidity.

ISSUANCE SEGMENTS IN SELECTED COUNTRIES IN 2009 AND 2010 Table 11.3.1

	2-year	3-year	5-year	10-year	15-year	20-50-year
Belgium	X	X	X	X	X	X
Finland			X	X	X	
France	X		X	X	X	X
Germany	X		X	X		X
The Netherlands	X	X	X	X		X
Spain	X	X	X	X	X	X
Sweden	X		X	X		X

Source: Strategy announcements from the debt management offices.

Choice of issuance segments

Internationally, the 2-, 5- and 10-year benchmark segments are among the most important segments, cf. Table 11.3.1. Issuances in these segments are attractive for a broad group of domestic and foreign investors, which contribute to reducing the central government's borrowing costs. Issuance in different segments helps to ensure a broad investor base, thereby reducing the risk of declining investor interest in specific segments.

Build-up of liquid bonds and a smooth redemption profile

The financial turmoil has highlighted the importance of a liquid market for government securities. To achieve this, bond series must be built up to a sufficiently large volume. The number of issuance segments is therefore limited in order to ensure liquidity. As a result, small countries and countries with low debt typically spread their issuance on fewer maturity segments.

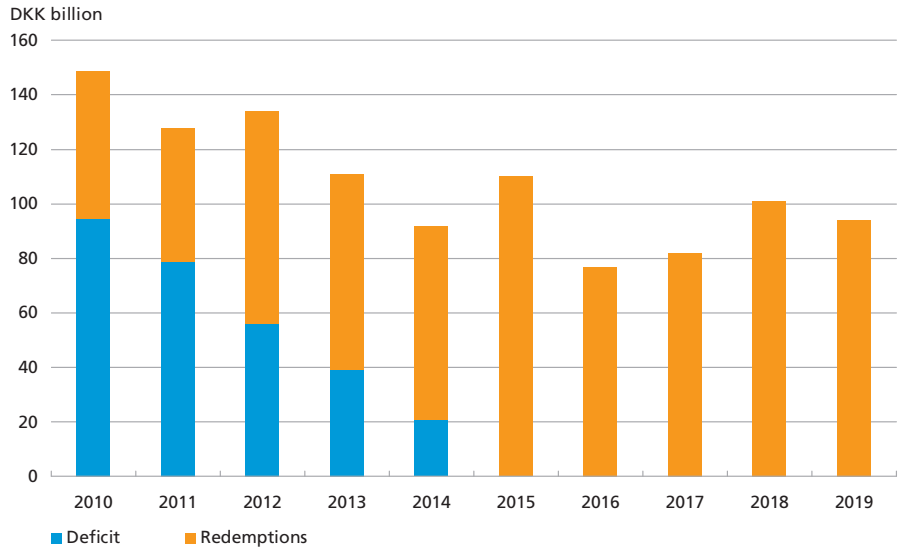
Based on a technical budget projection and the issuance strategy the average annual borrowing requirement is approximately DKK 100 billion until 2020, cf. Chart 11.3.1. This entails average annual issuance around DKK 40 billion in the 2- and 10-year series and around DKK 20 billion in the 5-year series. Hence, the 2- and 5-year series will be built up to a final outstanding volume of approximately DKK 40 billion and the 10-year series to approximately DKK 80 billion.

The international standard is to build up series of government securities to at least EUR 5 billion to ensure they can be traded on international electronic platforms. 10-year bond series are often larger.

In addition to providing a liquid range of on-the-run issues, the strategy ensures a relatively smooth redemption profile. This reduces the risk that the central government will have to refinance very large volumes in unfavourable market conditions.

CENTRAL-GOVERNMENT BORROWING REQUIREMENT BASED ON THE TECHNICAL PROJECTION

Chart 11.3.1



Note: Redemptions are based on a 40-20-40 percentage distribution of issuances in the 2-, 5- and 10-year segments.
Source: *Economic Survey*, December 2009 and own calculations.

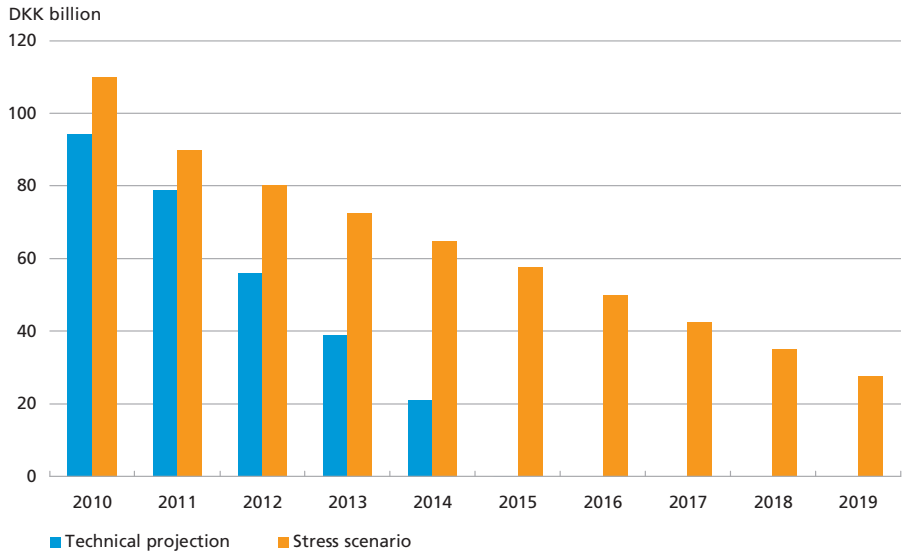
A ROBUST STRATEGY IF THE GOVERNMENT BUDGET DETERIORATES 11.4

The government budget is primarily influenced by economic developments. When the economy is shifting, government budget estimates are subject to greater uncertainty. Consequently, Government Debt Management has performed a scenario analysis in which the technical budget projection is supplemented with a stress scenario with slower convergence towards government budget balance, cf. Chart 11.4.1.

In the "larger deficit" scenario, the average annual borrowing requirement increases to DKK 150 billion. Maintaining the 40-20-40 issuance strategy would mean building up the 2- and 5-year series to around DKK 60 billion and the 10-year series to DKK 120 billion, which is the benchmark in many euro area member states. The issuance strategy is thus resilient to a pronounced deterioration of the government budget.

If the government budget deteriorates further, the issuance strategy can be adjusted, either by opening new series more frequently or by issuing other types of loans. If the government budget improves significantly, with large surpluses for a number of years, issuance can be consolidated in fewer segments.

STRESS SCENARIO FOR GOVERNMENT BUDGET DEFICITS Chart 11.4.1



CHAPTER 12

New Market-Making Obligations for Primary Dealers

The financial crisis has reduced liquidity and price transparency in the markets for government securities. The spread between bid and ask prices on electronic trading platforms has increased, and it has become more difficult to make large transactions without affecting the price in the market.

In order to improve liquidity conditions and price transparency in the secondary market, most government debt management offices, DMOs, including the Danish DMO, gradually tightened the primary dealers' market-making obligations in 2009. This was done by narrowing the maximum bid-ask spreads and increasing the depth requirements as market conditions improved.

The stricter requirements have had limited impact on liquidity. Against this background, a number of countries have introduced new requirements based on market making by primary dealers relative to each other. Requirements of this type are well suited for adjustment of market-making obligations to changing market conditions.

A system to calculate maximum bid-ask spreads was introduced in the Danish market for government bonds in January 2010. Depending on experience, further elements may be added to increase competition among the primary dealers.

INTERNATIONAL TRENDS 12.1

Issuers, banks and investors all have a shared interest in the markets for government securities being liquid and well-functioning. Effective and transparent price formation in the secondary market is a precondition if investors are to buy and sell government bonds without affecting the market price. Investors are typically willing to pay a premium for liquid bonds, and turnover in the secondary market is typically higher in liquid securities. This helps to ensure lower financing costs and easier access to the financial markets for the central government than would otherwise be the case. It is therefore in the interest of DMOs to ensure a framework that supports a well-functioning secondary market.

In periods when the markets are unstable, failure to adjust the bid-ask spread requirements may lead to artificially high activity on electronic

platforms. This is because the primary dealers' quoting of prices will often lead to mutual trading among primary dealers as a result of more significant movements in bond prices. Failure to adjust requirements to more volatile market conditions may therefore lead to primary dealers being forced to take unwanted positions. Ultimately, the banks may choose not to be primary dealers.

In a system with fixed market-making obligations, adjustments to requirements are typically made in consultation between the DMOs and the group of primary dealers. Individual primary dealers often have different interests. Wide bid-ask spreads give rise to large profits on individual transactions, while activity is typically low. Conversely, narrow bid-ask spreads typically give rise to higher trading activity, while profit per transaction is lower. As a group, primary dealers are typically diversified. Thus the individual primary dealers' definitions of optimal market-making requirements may vary significantly. Consequently, fixed bid-ask spread requirements have proved to involve sluggish adjustment to changing market conditions.

Lower liquidity in the secondary market

The financial crisis caused considerable uncertainty and volatility in the markets for government securities. In that context, DMOs eased the requirements relating to the primary dealers' market-making obligations. Unlike in several other financial markets, however, market making functioned in most markets for government securities during the crisis.

Liquidity conditions and price transparency declined as a result of the less stringent market-making requirements. At the same time, the banks needed to reduce the risk on their balance sheets due to the financial crisis. The primary dealers were consequently unable to stock large portfolios of government bonds to the same extent as before. This reduced their capacity to trade and resell bonds in the secondary market, thereby weakening liquidity and price transparency even further.

Adjustment of market-making obligations in 2009

In the spring of 2009, volatility in the financial markets declined. In that connection, several DMOs launched initiatives to increase liquidity in the markets for government securities by gradually tightening market-making requirements. In general, it has only to some extent been possible to recreate the level of market-making requirements that existed before the financial crisis. At the same time, the markets are still characterised by primary dealers making smaller balance sheets available, which has affected liquidity. Finally, the markets are characterised by reduced resiliency, i.e.

LIQUIDITY Box 12.1

The term liquidity cannot be defined unequivocally. The term is generally used about the option to buy and sell a security without affecting its price. The degree of liquidity of a security involves four parameters:

- The *depth* indicates the amounts that can be traded without affecting the price.
- The *width* indicates the difference between the bid and ask price.
- The *immediacy* indicates how fast a counterparty can be found that meets an investor's requirements.
- The *resiliency* indicates how fast the market regains equilibrium following changes in supply or demand that are not based on new information.

A liquid market is associated with substantial depth, insubstantial width and high levels of immediacy and resiliency.

Source: Harris, L., 1990, *Liquidity, trading rules and electronic trading systems*. Monograph Series in Finance and Economics 1990-4, Salmon Centre, New York University.

reduced ability to regain equilibrium following changes in supply or demand that are not based on new information, cf. Box 12.1.

Relative market-making obligations

Acknowledging that fixed bid-ask spread requirements are difficult to adjust and thus to adapt to changing market conditions, a number of countries have introduced a new type of market-making requirements. This type of requirements is based on the primary dealers' quoting of prices relative to each other, cf. Box 12.2. As a result, the bid-ask spread requirements are automatically adapted to changes in market conditions. There are still fixed requirements in terms of amounts.

In order to give the primary dealers an incentive to undertake market making at competitive bid-ask spreads, a number of countries have introduced non-competitive allocations in connection with the introduction of relative market-making obligations, cf. Box 12.3. The allocations are conditional on good results in the secondary market, among other factors. This increases the primary dealers' incentive to create a well-functioning secondary market.

NEW DANISH MARKET-MAKING SYSTEM FROM JANUARY 2010 12.2

Liquidity in the Danish market for government securities has mirrored the international development during the financial crisis. Stricter market-making requirements were gradually imposed throughout 2009 as market conditions allowed. However, it has not been possible to recreate the level of liquidity from before the financial turmoil.

EXAMPLES OF RELATIVE MARKET MAKING Box 12.2

Belgium introduced a new system on 1 October 2009 under which primary dealers quote prices for minimum amounts and within a calculated competitive bid-ask spread that varies between securities and between days. When the system was introduced, the competitive spread was calculated as the average bid-ask spread plus one standard deviation.

Based on experience with very low standard deviations, the calculation of the competitive spread was subsequently changed to a fixed factor of 1.25 multiplied by the average spread. At the same time, a lower market-making limit was set under which primary dealers are compliant.

Primary dealers are ranked on the basis of an evaluation of their market making. The evaluation comprises several parameters, including the price-quoting quality (the bid-ask spread level), the number of price-quoting hours and trading activity. On the basis of the evaluation, non-competitive allocations are made through auctions. The allocations are made to the five best primary dealers in the secondary market over a specified prior period. On the settlement date (three trading days after the auction), each of the five dealers is allowed to buy an additional amount at the average price that applied at the auction.

The *Netherlands* uses a dual system for market-making requirements. Under normal conditions, the requirements in terms of bid-ask spreads and amounts are fixed. If more than half of the primary dealers indicate that they are unable to quote prices within the specified bid-ask spreads in a given security, special conditions are applied in that security. Under special conditions, the primary dealers comply with the market-making requirements if prices are quoted for minimum five hours within the average bid-ask spread plus one standard deviation. When more than half of the primary dealers are able to quote prices within the fixed bid-ask spreads again, the market-making requirements revert to normal conditions.

The primary dealers who comply with the market-making obligations for minimum 90 per cent of the time during a specified period prior to an auction are allowed to make non-competitive bids for up to three days after an auction. Settlement will take place at the average auction price.

NON-COMPETITIVE ALLOCATIONS Box 12.3

Non-competitive allocations is the general term used about bidding rights where no bid price is required. Such allocations are made as options where the buyer at an auction is entitled to buy an additional amount for a period of time after the auction and at a price fixed at the auction. The value for the buyer depends on the price development after the auction. If the price goes up, the buyer will typically choose to exercise the right to buy additional securities.

In the autumn of 2009, Government Debt Management analysed international experience with improving liquidity in the markets for government securities. Based on good experience from other countries and positive announcements from primary dealers in government bonds, the market-making obligations in Danish government bonds were changed. In the preparation of the new market-making requirements for Danish primary dealers, the following was emphasised:

- flexible adjustment to market conditions
- some international harmonisation
- independence of choice of electronic platforms.

In connection with the re-opening of the T-bill programme, special market-making requirements will be introduced. The market for T-bills is characterised by a smaller group of participants and a wide range of price benchmarks in the money market. For T-bills fixed requirements in relation to bid-ask spreads and amounts are consequently introduced.

Compliance with market-making obligations in the new system

In the new market-making system, quoting of prices for government benchmark bonds is mandatory as such bonds are references in the Danish market. In order to support liquidity and price transparency for all government bonds, quoting of prices in the other government bonds is included with a certain weight in overall market making.

Government Debt Management, in cooperation with the primary dealers, determines a fixed minimum amount for the bond series, cf. Table 12.2.1.

The mandatory amount is the required market making by a primary dealer if the price-quoting is to be included in the calculation of compliance with market-making obligations. In addition, a mandatory period is determined, during which a primary dealer must quote prices within the average spread multiplied by a fixed factor (the competitive spread).

While explicit requirements apply to the price-quoting amount and period, the competitive spread for each security will vary from day to day.

MARKET MAKING OBLIGATIONS, JANUARY 2010 — Table 12.2.1

DKK million	Mandatory amount	Mandatory period
Benchmarks		
2-year segment	100	5 hours
5-year segment	80	5 hours
10-year segment	50	5 hours
30-year segment	25	5 hours
Liquids	25	5 hours

COMPLIANCE WITH MARKET-MAKING OBLIGATIONS Box 12.4

The competitive spread in security *s* ($CompSp_s$) is calculated as a scaling of the average of each primary dealer *p*'s time-weighted bid-ask spread during the best five hours ($5HrSp_{p,s}$). If a primary dealer quotes prices for less than five hours, the simple time-weighted spread will be applied. Market making is only included where prices are quoted for the mandatory amount or more. The competitive spread is calculated as follows:

$$CompSp_s = k \cdot \frac{\sum_{p \in PD_s} 5HrSp_{p,s}}{\#\,PD_s},$$

where $\#PD_s$ is the number of primary dealers quoting prices in security *s*. In benchmark series, $\#PD_s$ is the total number of primary dealers. For liquid series, the variable indicates the number of primary dealers who have quoted prices for the mandatory amount. *k* is fixed at 1.5, but it will be evaluated on an ongoing basis.

For each security, compliance ($Compliance_{p,s}$) will be in the 0-1 interval, depending on the number of hours ($Hours_{p,s}$) during which primary dealer *p* quotes prices in security s within the competitive spread and for the mandatory amount. If $Hours_{p,s}$ is minimum five, there is full compliance with the obligations in security *s*, i.e.:

$$Compliance_{p,s} = \min\left[\frac{Hours_{p,s}}{5}, 1\right].$$

Daily compliance: Based on compliance in each security, *s*, daily compliance ($DC_{p,d}$) is calculated for each primary dealer *p* and for each working day *d*. In such calculations, the weighting of benchmark securities differs from the weighting of liquid series:

$$DC_{p,d} = \alpha \cdot \frac{\sum_{s \in benchmarks} Compliance_{p,s}}{\#\,benchmarks} + (1-\alpha) \cdot \frac{\sum_{s \in liquids} Compliance_{p,s}}{\#\,liquids}.$$

If market making is restricted to benchmark series alone, daily compliance cannot exceed α. α is fixed at 0.8 and like *k* it will be evaluated on an ongoing basis in cooperation with the primary dealers.

Monthly compliance: Monthly compliance (MC_p) is calculated as the average daily compliance for primary dealer *p*, i.e.:

$$MC_p = \frac{\sum_{d \in working\ days} DC_{p,d}}{\#\,working\ days},$$

where the number of working days may vary from one primary dealer to the next depending on public holidays. Primary dealer *p* is compliant during a month if MC_p is at least 85 per cent.

For each security, individual primary dealers' time-weighted bid-ask spread will be compared with the calculated competitive spread and included in the calculation of the daily and monthly compliance with market-making obligations, respectively, cf. Box 12.4. The evaluation of primary dealers is based on compliance with obligations on a monthly basis.

Opportunities of adjustments and extensions in Denmark

The new market-making requirements in relation to Danish government bonds are not restricted to market making being conducted on specific trading platforms. Market-making obligations will always be based on the quoting of prices on the trading platform where the primary dealer has the lowest time-weighted bid-ask spread.

In connection with the implementation of the new Danish system, the competitive spread in each security is calculated as 1.5 multiplied by the average spread. Some DMOs apply a lower factor. The relatively high factor has been selected based on the assessment that it is important to ensure that the system introduced is not too restrictive from the outset.

Depending on the experience gained with the new system, the market-making obligations may be adjusted.

Appendices

Information on Government Borrowing and Debt

Government Debt Management focuses on transparency in government borrowing and debt. To this end, information on the government debt policy is regularly published. The information is published on Government Debt Management's website, www.governmentdebt.dk, which is also accessible via Danmarks Nationalbank's website, www.nationalbanken.dk under Government Debt.

A wide range of information concerning government borrowing and debt is published via DN News[1]. Several news agencies transmit the information from DN News, e.g. Bloomberg and Reuters. The information is also available at Government Debt Management's website. It is possible to be notified directly of new information and updates concerning government borrowing and debt by subscribing to Danmarks Nationalbank's electronic news service (see www.nationalbanken.dk under News service).

Enquiries concerning government borrowing and debt should be directed to Government Debt Management at the e-mail address governmentdebt@nationalbanken.dk.

The following table presents the information on government borrowing and debt that is published on an ongoing basis.

[1] Danmarks Nationalbank's system for dispersing information to connected news agencies.

INFORMATION ON GOVERNMENT BORROWING AND DEBT

	Overall contents	Information at	Frequency
Danish Government Borrowing and Debt, usually in February	• Development the previous year • Detailed debt and transaction statements • Report section, evaluation and strategy	• www.governmentdebt.dk	Annually
Government debt policy, June and December	• Borrowing strategy • On-the-run issues	• DN News • www.governmentdebt.dk	Semi-annually
Opening of new securities	• Coupon • Maturity date • Opening date	• DN News • www.governmentdebt.dk	Irregularly
Budget Outlook, normally in May, August and December	• Net financing and borrowing requirement, current and coming years	• Publication from the Ministry of Finance • www.fm.dk	Normally 3 times a year
Monthly buy-backs and sales, 1st banking day	• Monthly sales by series • Monthly buy-backs by series • Monthly currency swaps	• www.governmentdebt.dk	Monthly
Government funds' holding of government securities, 1st banking day	• Government funds' holding of Danish government securities as of end of previous month	• www.governmentdebt.dk	Monthly
Foreign Exchange and Liquidity, 2nd banking day	• Government net financing requirement	• Press release from Danmarks Nationalbank • www.nationalbanken.dk	Monthly
Day-to day distribution of government payments, penultimate banking day	• Day-to-day distribution for liquidity impact of central government payments in coming months	• Announcement from Danmarks Nationalbank • www.nationalbanken.dk	Monthly
Government borrowing requirement	• Borrowing requirement cf. *Government debt policy*. • Government issues	• DN News • www.governmentdebt.dk	Daily
Daily buy-backs and sales	• Daily sales by series • Daily buy-backs by series	• DN News • www.governmentdebt.dk	Daily

Principles for Management of Credit Risk on Government Swaps

Counterparty credit standing (rating): To limit the credit risk on swap counterparties, swaps are only transacted with counterparties with high credit standing. A counterparty must normally be rated minimum Aa3/AA- by at least two well-reputed rating agencies (Fitch, Moody's or Standard & Poor's). If a counterparty is rated by three rating agencies, the minimum requirement is based on the lowest rating. For interest-rate swaps in kroner and euro and currency swaps between kroner and euro, however, counterparties with a rating of minimum A3/A- are permitted.

Legal basis of agreement: Swaps are only transacted with counterparties that have signed an ISDA Master Agreement, which governs the business relationship between the central government and the counterparty, and a collateral agreement.

Collateralisation: To limit any losses in the event of counterparty default, swaps may only be transacted with counterparties that have signed collateral agreements (ISDA Credit Support Annex) to the ISDA Master Agreements. The key elements of the agreements are:

- The agreements are unilateral, so that only the central government's counterparties pledge collateral.
- Collateral is not pledged until the market value in the central government's favour exceeds an agreed amount (the threshold value).
- Permitted collateral will normally be government bonds with a rating of minimum Aa3/AA-. Other bonds can also be accepted, subject to individual assessment, e.g. Danish mortgage-credit bonds. The collateral value of the bonds is calculated as the market value after a haircut. Haircuts will depend on the remaining maturity of the bonds and take into account that the value of the bonds can decrease.
- The administration of bonds pledged as collateral to the central government is transferred to the custodian bank with which the securities are deposited. On behalf of the central government, the custodian bank will request the counterparty to provide additional collateral, should the value of the deposited bonds decrease and become insufficient to cover the market value of the transacted swaps after deduction of the threshold. In the event of surplus cover, the custodian bank is authorised to release bonds to the counterparty.

Eligible swaps: Only plain-vanilla interest-rate swaps and plain-vanilla currency swaps may be transacted. The maturity will normally be 10 years or lower. Dual-currency swaps and zero-coupon swaps are considered to be plain-vanilla swaps. Structured swaps are no longer transacted. The same applies to transactions that include option elements, including swaptions, interest-rate caps, etc.

Netting: ISDA Master Agreements contain netting provisions whereby gains and losses on transacted swaps are set off if a counterparty defaults on its payment obligations. Master Agreements are signed only with counterparties domiciled in countries whose legislation is expected to provide for netting.

Early termination of swaps: It must be possible to terminate all swaps with a counterparty should the counterparty's rating fall to an unsatisfactory level. All new ISDA Master Agreements therefore contain rating triggers. A rating trigger entails that swaps can be terminated should a counterparty's rating fall to a given level. In most of the central government's ISDA Master Agreements, the rating trigger is Baa1/BBB+[1].

Cross-default clauses: If the counterparty defaults on its payment obligations to a third party, cross-default clauses allow swaps to be terminated if the counterparty defaults on its payment obligations to a third party.

Observation list: The ongoing monitoring of the counterparty credit risk entails that counterparties assessed to involve greater risk are monitored more closely on an "observation list". Only in special circumstances are new swaps transacted with counterparties on this list.

[1] Some Master Agreements, dating from before the rating trigger requirement was formalised, have none or a lower trigger.

Terms for the Securities Lending Facilities of the Central Government and the Social Pension Fund

Primary Dealers have the right to use the securities lending facilities of the central government and the Social Pension Fund (SPF) to which the participants are eligible. The purpose of the securities lending facilities is to supplement and strengthen market efficiency. Considering the functioning of the repo market, Primary Dealers shall make every effort to support a well-functioning market, and to prevent occurrences of intended market failures. Information on the terms for the Central Government's and the SPF's Securities Lending Facilities is given below.

The Central Government's Securities Lending Facility

- The lending facility applies to on-the-run government securities and government securities with benchmark status.
- The Lending facility can also apply to bonds eligible for lending through the SPF's Securities Lending Facility if the SPF does not hold a sufficient amount of the bond.
- The specific terms for lending in the individual government series are published in the central government's announcements concerning on-the-run issues.
- For government bonds the lending facility is available for Primary Dealers in Danish government bonds.
- For T-bills the lending facility is available for Primary Dealers in Danish T-bills.
- In normal circumstances the maximum lending in bond series is DKK 4 billion and the maximum lending in all T-bills is DKK 10 billion in total. However, these limits may be raised in the event of abnormal price formation on the market for securities lending.
- The fee is 0.2 per cent per year for securities lending of government bonds. The fee is 0.15 per cent per year for securities lending of T-bills.
- The lending facility is available as buy-/sell-back transactions. Participants borrow in one buy-/sell-back transaction and lend (provide collateral) in another buy-/sell-back transaction.
- The securities may be borrowed for a period from 1 to 5 trading days.
- Transactions can be made between 9.00 a.m. and 3.30 p.m., but should as far as possible be concluded before 2.00 p.m. (CET).

- Lending in securities is granted in the order that requests to Danmarks Nationalbank are received from securities dealers on the relevant day. The right to make discretionary allocations is reserved if deemed appropriate.
- Danish government securities denominated in Danish kroner issued via VP Securities in series with an outstanding amount of at least DKK 3 billion are accepted as collateral.
- A haircut of 2.5 per cent is applied to each buy-/sell-back transaction. Hence, the market price of the security lent by the central government is raised by 2.5 per cent and the market price of the security provided as collateral by the borrower is lowered by 2.5 per cent.
- Settlement takes place on the following trading day.
- In case settlement only succeeds for one of the buy-/sell-back transactions, be that the lending transaction or the collateral transaction as it may, borrowers are obliged to ensure immediate settlement of the failed transaction.
- Government Debt Management may from time to time amend the terms and conditions applicable to the Central Government's Securities Lending Facility to reflect market practice and ensure a well-functioning securities lending facility. Government Debt Management informs Primary Dealers at least one week prior to the implementation of any change to the terms of the lending facility.
- Any enquiries concerning securities lending transactions should be made to Danmarks Nationalbank, Market Operations, on tel. +45 3363 6752 or +45 3363 6736.

SPF's Securities Lending Facility

- Lending is in all government securities with more than 1 month remaining maturity of the type bullet loans in SPF's portfolio.
- The lending facility is available to Primary Dealers in government bonds.
- The fee is 0.2 per cent per year.
- The lending facility is available as buy-/sell-back transactions. Participants borrow in one buy-/sell-back transaction and lend (provide collateral) in another buy-/sell-back transaction.
- The securities may be borrowed for a period from 1 to 5 trading days.
- Transactions can be made between 9.00 a.m. and 3.30 p.m., but should as far as possible be concluded before 2.00 p.m.
- Lending in securities is granted in the order that requests to Danmarks Nationalbank are received from securities dealers on the relevant day. The right to make discretionary allocations is reserved if deemed appropriate.

- Danish government securities denominated in Danish kroner issued via VP Securities in series with an outstanding amount of at least DKK 3 billion are accepted as collateral.
- A haircut of 2.5 per cent is applied to each buy-/sell-back transaction. Hence, the market price of the security lend by the central government is raised by 2.5 per cent and the market price of the security provided as collateral by the borrower is lowered by 2.5 per cent.
- Settlement takes place on the following trading day.
- In case settlement only succeeds for one of the buy-/sell-back transactions, be that the lending transaction or the collateral transaction as it may, borrowers are obliged to ensure immediate settlement of the failed transaction.
- Government Debt Management may from time to time amend the terms and conditions applicable to the SPF's Securities Lending Facility to reflect market practice and ensure a well-functioning securities lending facility. Government Debt Management informs Primary Dealers at least one week prior to the implementation of any change to the terms of the lending facility.
- Any enquiries concerning securities lending transactions should be made to Danmarks Nationalbank, Market Operations, on tel. +45 3363 6752 or +45 3363 6736.

Appendix of Tables

CENTRAL-GOVERNMENT DEBT, YEAR-END 1999-2009 Table 1

DKK million	1999	2000	2001
A. Debt			
Domestic debt			
- Fixed-rate bonds	537,289	506,992	494,875
- Floating-rate bonds	-	-	-
- Lottery bonds .	900	900	900
- Treasury notes	74,040	81,257	70,788
- Treasury bills	36,350	36,846	49,224
- Index-linked loans and loan package[1]	-	-	-
- Currency swaps from DKK to EUR (net)[2]	-	-	-4,800
- Currency swaps from DKK to USD	-	-	-
- Government securities held by the central government	-	-2,000	-
Domestic debt, total	648,579	623,995	610,987
Foreign debt			
- in USD	1,187	-	-
- in CHF	3,616	3,822	-
- in JPY	2,453	1,672	-
- in EUR	82,386	79,287	83,753
- in other currencies and multi-currency	383	428	42
Foreign debt, total	90,025	85,209	83,795
Domestic and foreign debt, total	738,604	709,204	694,782
B. Government deposits with the central bank[3]	-35,237	-32,637	-39,627
C. The Social Pension Fund, The Preventive Measures Fund and The Advanced Technology Foundation			
- Government securities	-105,432	-106,312	-109,474
- Other securities	-36,207	-33,244	-31,621
The three funds, nominal value, total[4]	-141,640	-139,556	-141,095
Central-government debt, total (A+B+C)	561,727	537,011	514,060
Central-government debt, per cent of GDP	46.3	41.5	38.5

Note: A positive sign indicates a liability, a negative sign an asset. The liabilities of the Fisheries Bank of Denmark were transferred to the central-government debt in 2009.

[1] Loans transferred from the Mortgage Bank of the Kingdom of Denmark.

[2] Currency swaps from DKK to EUR less currency swaps from EUR to DKK.

[3] For 2009, the central government's account is compiled in accordance with the monthly balance sheet of Danmarks Nationalbank. At end-2009, the balance of the central government's account included DKK 16 billion related to the Social Pension Fund's purchases of mortgage-credit bonds in December 2009 which were not settled until the beginning of January 2010.

[4] Index-linked bonds are compiled at indexed value. The value of the funds portfolio of bonds, including mortgage bonds for settlement at the beginning of January 2010, was DKK 130 billion.

CENTRAL GOVERNMENT DEBT, YEAR-END 1999-2009 Table 1

2002	2003	2004	2005	2006	2007	2008	2009
497,938	480,874	480,590	440,351	428,796	403,039	451,394	506,974
-	-	-	-	-	-	-	-
400	400	400	200	200	200	200	100
79,371	78,532	71,690	33,980	-	-	-	-
63,404	67,347	68,602	60,092	42,660	19,660	-	-
-	-	-	-	379	277	-	-
-16,200	-16,200	-16,200	-15,456	-12,755	-13,262	-11,662	-8,197
-	-	-524	-2,688	-4,862	-7,873	-10,423	-10,956
-	-	-	-	-	-	-	-
624,913	610,953	604,558	516,479	454,418	402,040	429,509	487,921
-	-	518	2,810	4,583	6,884	9,947	10,218
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
83,689	83,861	83,370	87,833	75,219	61,738	123,126	129,351
42	42	40	38	21	20	19	19
83,730	83,903	83,929	90,681	79,823	68,642	133,092	139,588
708,644	694,856	688,487	607,160	534,241	470,682	562,600	627,509
-45,975	-40,621	-57,559	-53,297	-70,958	-86,333	-258,131	-210,892
-113,132	-118,138	-120,799	-124,635	-125,111	-128,547	-98,604	-77,720
-28,230	-20,576	-16,065	-11,284	-9,535	-8,686	-9,643	-37,376
-141,362	-138,714	-136,864	-135,919	-134,646	-137,233	-108,247	-115,096
521,308	515,521	494,064	417,944	328,637	247,116	196,222	301,521
38.0	36.8	33.9	26.9	20.1	14.5	11.3	18.1

SERVICE ON CENTRAL-GOVERNMENT DOMESTIC DEBT[1] AS OF 31 DECEMBER 2009 Table 2.1

DKK billion	Interest	Redemptions	Total
2010	21.0	53.4	74.4
2011	19.5	47.5	66.9
2012	17.1	41.3	58.3
2013	15.2	70.6	85.8
2014	11.8	-3.3	8.5
2015	12.0	68.1	80.2
2016	9.3	-1.0	8.2
2017	9.6	51.9	61.5
2018	7.6	-0.8	6.8
2019	7.6	47.7	55.3
2020	5.7	-0.3	5.4
2021	5.7	-0.1	5.6
2022	5.7	0.0	5.7
2023	5.7	0.0	5.7
2024	5.7	24.4	30.1
2025	4.0	0.0	4.0
2026	4.0	0.0	4.0
2027	4.0	-	4.0
2028	4.0	-	4.0
2029	4.0	-	4.0
2030	4.0	-	4.0
2031	4.0	-	4.0
2032	4.0	-	4.0
2033	4.0	-	4.0
2034	4.0	-	4.0
2035	4.0	-	4.0
2036	4.0	-	4.0
2037	4.0	-	4.0
2038	4.0	-	4.0
2039	4.0	88.5	92.4
Total	218.8	487.9	706.7

[1] Including net interest payments on domestic interest-rate swaps. Krone payments to and from the central government in currency swaps are included in the redemptions.

SERVICE ON CENTRAL-GOVERNMENT FOREIGN DEBT[1] AS OF 31 DECEMBER 2009 Table 2.2

DKK billion	Interest	Redemptions	Total
2010	1.3	25.2	26.5
2011	0.7	33.1	33.9
2012	-0.0	42.8	42.8
2013	0.2	1.1	1.3
2014	0.4	27.3	27.7
2015	-0.4	1.1	0.7
2016	-0.2	1.0	0.9
2017	-0.1	1.0	0.9
2018	-0.1	0.8	0.7
2019	-0.1	0.6	0.5
2020	0.0	0.3	0.3
2021	0.0	0.1	0.1
Total	1.7	134.5	136.2

[1] Excluding Commercial Paper. Including net interest payments on swaps. Payments in foreign currency to and from the central government in currency swaps are included in the redemptions.

THE CENTRAL GOVERMENT'S CURRENT, INVESTMENT AND LENDING BALANCE, NET CASH BALANCE AND GROSS DEFICIT, 1999-2009 Table 3

DKK billion	1999	2000	2001
Current, investment and lending budget	9.1	30.7	24.0
Re-lending of government loans	-1.6	-2.8	-2.4
Distributed capital losses on issue and due interest[1]	3.2	1.4	0.4
Other capital items[2]	0.2	-2.3	0.9
Net cash balance[3]	10.9	27.0	22.9
Redemptions on domestic government debt	75.9	91.3	101.2
Redemptions on foreign government debt	20.0	15.7	17.8
Gross deficit	-85.0	-80.0	-96.2
Gross deficit financing requirement	67.9	62.3	81.1
Sale of government securities, market value[4]	68.8	65.7	87.7

Source: Central Government Accounts. 2009 numbers are based on Danmarks Nationalbank's end-year specification. The numbers can deviate from the accounting figures.

[1] Including capital losses on buy-back.

[2] Includes e.g. movements in the central government's holdings, cf. *Budget Outlook* from the Ministry of Finance.

[3] Net bond purchases by the Social Pension Fund are not included in the net cash balance, but are instead included in the redemption on the domestic government debt.

[4] Includes net sales of T-bills.

THE CENTRAL GOVERMENT'S CURRENT, INVESTMENT AND LENDING BALANCE, NET CASH BALANCE AND GROSS DEFICIT, 1999-2009 Table 3

2002	2003	2004	2005	2006	2007	2008	2009
25.8	12.4	27.7	80.6	98.6	106.2	72.3	•
-8.9	-0.8	-5.4	-3.2	-12.4	-8.5	-13.5	•
-0.1	-0.7	0.5	-0.7	-0.9	0.4	0.3	•
-20.0	-4.1	0.9	-0.9	5.0	-15.3	-10.7	•
-3.2	6.9	23.6	75.9	90.2	82.8	48.3	-110.3
112.4	106.3	100.0	119.5	78.6	58.5	39.7	67.8
22.5	17.1	16.1	9.3	13.0	20.7	23.0	21.7
-138.1	-116.6	-92.5	-52.9	-1.3	3.6	-14.4	-199.8
115.5	99.7	76.4	43.6	-11.7	-24.3	-8.6	178.1
121.9	94.1	92.6	30.1	13.2	-3.8	97.1	117.0

ISSUANCE OF DOMESTIC CENTRAL-GOVERNMENT SECURITIES, 2009 Table 4.1

ISIN code	Coupon, per cent	Name	Redemption date	Issuance, DKK million, nominal
Government bonds				
DK0009921785	4	4 per cent bullet loans 2010 Issued 20 Apr 2004-	15 Nov 2010	3,100
DK0009922593	4	4 per cent bullet loans 2012 Issued 23 Apr 2009-	15 Nov 2012	48,280
DK0009921439	4	4 per cent bullet loans 2015 Issued 12 Feb 2004-	15 Nov 2015	11,940
DK0009921942	4	4 per cent bullet loans 2017 Issued 26 Jan 2006-	15 Nov 2017	300
DK0009922403	4	4 per cent bullet loans 2019 Issued 20 Jan 2009-	15 Nov 2019	48,235
DK0009922320	4,5	4.5 per cent bullet loans 2039 Issued 11 Nov 2008-	15 Nov 2039	840

ISSUANCE OF FOREIGN CENTRAL-GOVERNMENT SECURITIES, 2009 Table 4.2

ISIN code	Coupon, per cent	Name	Redemption date	Issuance[1], DKK million
Loans				
XS0408298494[2]	1.875	3,000 million USD-loan Issued15 Jan 2009	16 Mar 2012	16,309
NO0010490899[3]	3.50	500 million NOK-loan Issued 17 Feb 2009	17 Feb 2014	416
XS0413727453[4]	1.15	2,000 million USD-loan Issued 18 Feb 2009	19 Apr 2010	11,532
XS0417728325	3.125	1,250 million EUR-loan Issued 17 Mar 2009	17 Mar 2014	9,292
XS0417728325	3.125	250 million increase of EUR-loan Issued 30 Mar 2009	17 Mar 2014	1,858
XS0419327837[5]	3.165	4,100 million SEK-loan Issued 31 Mar 2009	31 Mar 2014	2,789
XS0417728325	3.125	600 million increase of EUR-loan Issued 16 Apr 2009	17 Mar 2014	4,440
XS0417728325	3.125	700 million increase of EUR-loan Issued 24 Apr 2009	17 Mar 2014	5,191
XS0392597026[6]	2.75	1,500 million increase of USD-loan Issued 24 Apr 2009	15 Nov 2011	8,641
XS0428037823[7]	2.25	3,500 million USD-loan Issued 12 May 2009	14 May 2012	19,507

[1] Loan amounts after entering into swap to EUR.
[2] The loan was swapped to EUR 2,188,503,064 with a fixed interest rate.
[3] The loan was swapped to EUR 55,803,571 with a floating interest rate.
[4] The loan was swapped to EUR 1,547,388,781 with a floating interest rate.
[5] The loan was swapped to EUR 374,429,224 with a floating interest rate.
[6] The loan was swapped to EUR 1,160,092,807 with a floating interest rate.
[7] The loan was swapped to EUR 2,618,780,397 with a fixed interest rate.

CENTRAL-GOVERNMENT COMMERCIAL PAPER FOREIGN ISSUANCE, 2009 Table 4.3

Month of issuance	Coupon, per cent	Amount in foreign currency	Amount in Danish kroner
Euro Commercial Paper		EUR million	DKK million
January	0	250	1,861
February	0	90	669
March	0	50	372
April	0	100	744
May	0	20	149
June	0	141	1,049
July	0	40	298
November	0	15	112
Euro Commercial Paper[1]		USD million	DKK million
February	0	816	4,735
March	0	895	5,020
April	0	100	558
May	0	100	563
June	0	310	1,649
July	0	179	946
August	0	518	2,702
September	0	95	481
October	0	147	733
November	0	65	327
December	0	135	681
US Commercial Paper[1]		USD million	DKK million
January	0	250	1,397
February	0	1,080	6,268
March	0	217	1,215
April	0	425	2,376
May	0	135	760
June	0	320	1,699
July	0	500	2,649
August	0	315	1,653
September	0	650	3,337
October	0	100	504
November	0	165	838
December	0	385	1,925

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

FOREIGN-EXCHANGE FORWARD CONTRACTS, 2009[1] Table 4.4

Month of conclusion	Amount received at expiry, USD million	Amount paid at expiry, EUR million
January	250	188
February	1,896	1,480
March	1,112	838
April	525	394
May	235	178
June	630	450
July	679	483
August	833	585
September	745	513
October	247	166
November	230	157
December	520	350

[1] Contracts with Danmarks Nationalbank attached to Commercial Paper issuances.

CENTRAL-GOVERNMENT INTEREST-RATE SWAP TRANSACTIONS, 2009 Table 5

Loan no.	Start date	Termination date	Amount, DKK million
Interest-rate swaps in euro			
1284	11-09-09	11-09-19	744
1287	21-09-09	21-09-19	744
1296	22-10-09	22-10-19	1,117
1298	23-10-09	23-10-19	1,117
1299	26-10-09	26-10-19	744
1303	10-11-09	10-11-19	744
1316	30-12-09	30-12-19	744
Interest-rate swaps in euro, total			5,954

Note: The Kingdom of Denmark receives a fixed interest rate and pays 6-month Euribor on swaps transacted in 2009. No krone interest-rate swaps have been concluded in 2009.

CENTRAL-GOVERNMENT CURRENCY SWAP TRANSACTIONS, 2009 Table 6

Loan no.	Start date	Receiving			Paying			Termination date
		Currency	Million	Interest	Currency	Million	Interest	
20028[1]	23-01-09	DKK	791.6	3.233	USD	140.0	2.539	23-01-21
10044	04-03-09	DKK	744.9	6-month Cibor-0.37	EUR	100.0	6-month Euribor	04-03-14
10045	12-03-09	DKK	1,490.2	6-month Cibor-0.33	EUR	200.0	6-month Euribor	12-03-14
20029[1]	17-03-09	DKK	822.0	3.2082	USD	140.0	3.585	17-03-21

[1] Currency swaps in connection with re-lending to Danish Ship Finance.

CENTRAL-GOVERNMENT DOMESTIC DEBT AS OF 31 DECEMBER 2009 Table 7.1

ISIN-code	Coupon per cent	Name[1]	Redemption date	Outstanding amount, DKK million
Government bonds, fixed interest rate				
Bullet loans				
DK0009921785	4	Bullet loans 2010 Issued 20 Apr 2004-	15 Nov 2010	54,280.0
DK0009919961	6	Bullet loans 2011 Issued 4 May 2000-	15 Nov 2011	48,500.0
DK0009922593	4	Bullet loans 2012 Issued 23 Apr 2009-	15 Nov 2012	48,280.0
DK0009920894	5	Bullet loans 2013 Issued 19 Feb 2002-	15 Nov 2013	71,680.0
DK0009921439	4	Bullet loans 2015 Issued 12 Feb 2004-	15 Nov 2015	69,200.0
DK0009921942	4	Bullet loans 2017 Issued 26 Jan 2006-	15 Nov 2017	52,870.0
DK0009922403	4	Bullet loans 2019 Issued 20 Jan 2009-	15 Nov 2019	48,235.0
DK0009918138	7	Bullet loans 2024 Issued 6 Apr 1994-	10 Nov 2024	24,431.0
DK0009922320	4.5	Bullet loans 2039 Issued 11 Nov 2008-	15 Nov 2039	88,440.0
Amortised loans				
DK0009902728	4	S 2017 Issued 29 Nov 1955-12 Sep 1958	15 Jun 2017[2]	38.5
Perpetuals				
DK0009901597	3.5	Dansk Statslån Issued 11 Dec 1886	Perpetuals[2]	17.8
•	5	Dansk-Islandsk Fond 1918 Issued 20 May 1919	Perpetuals	1.0
Government bonds, fixed interest rate, total				505,973.3

CENTRAL-GOVERNMENT DOMESTIC DEBT AS OF 31 DECEMBER 2009 Table 7.1

ISIN-code	Coupon, per cent	Name[1]	Redemption date	Outstanding amount, DKK million
Fisheries Bank of Denmark bonds				
DK0009604118	6	Fisheries Bank bond 2011	1 May 2011	9.4
DK0009603730	7	Fisheries Bank bond 2011	1 May 2011	10.4
DK0009603490	9	Fisheries Bank bond 2011	1 Nov 2011	2.5
DK0009603573	8	Fisheries Bank bond 2014	1 May 2014	41.9
DK0009604035	6	Fisheries Bank bond 2016	1 May 2016	19.7
DK0009603656	7	Fisheries Bank bond 2016	1 May 2016	33.7
DK0009604621	5	Fisheries Bank bond 2019	1 Nov 2019	530.4
DK0009604894	5	Fisheries Bank bond 2025	1 Nov 2025	352.9
The Fisheries Bank of Denmark bonds, total				1,001.0
Bonds, fixed interest rate, total				506,974.3
Lottery bonds[3]				
DK0009900433	7	Lottery bonds of 1965/2010 Issued 22 Sep 1965	22 Sep 2010	100.0
Lottery bonds, total				100.0
Domestic government securities, total				507,074.3
Swap from DKK to EUR				-8,197.2
Swap from DKK to USD				-10,956.0
Central-government domestic debt, total				487,921.1

[1] The issue period refers to the period the series has been open for issue. Series still open for issue are marked with "-" after the first day of issue. Certain securities are only sold on one single date. For these securities only this date is stated.

[2] May be redeemed by the central government at three months' notice.

[3] In addition, the central government has an outstanding amount on approximately DKK 127 million in expired, but outstanding lottery bonds.

CENTRAL-GOVERNMENT FOREIGN DEBT AS OF 31 DECEMBER 2009 Table 7.2

ISIN-code/ loan no.[1]	Coupon, per cent	Name	Redemption date	Outstanding amount, DKK million[2]
Euro Commercial Paper - EUR				
298-278	0	2009/10 ECP	25 Jan 2010	111.6
ECP issuances in EUR, total				111.6
Euro Commercial Paper - USD				
298-366	0	2009/10 ECP	08 Jan 2010	50.6
298-368	0	2009/10 ECP	13 Jan 2010	60.5
298-370	0	2009/10 ECP	21 Jan 2010	249.5
298-372	0	2009/10 ECP	14 Jan 2010	372.9
298-374	0	2009/10 ECP	06 Jan 2010	252.1
298-376	0	2009/10 ECP	25 Jan 2010	75.1
298-380	0	2009/10 ECP	16 Feb 2010	50.4
298-382	0	2009/10 ECP	16 Feb 2010	252.6
298-384	0	2009/10 ECP	17 Feb 2010	378.3
ECP issuances in USD, total				1,742.0
US Commercial Paper - USD				
244-316	0	2009/10 USCP	04 Jan 2010	504.2
244-318	0	2009/10 USCP	06 Jan 2010	253.9
244-320	0	2009/10 USCP	06 Jan 2010	203.1
244-322	0	2009/10 USCP	05 Jan 2010	380.8
244-324	0	2009/10 USCP	01 Feb 2010	246.9
244-326	0	2009/10 USCP	02 Feb 2010	246.1
244-328	0	2009/10 USCP	01 Feb 2010	98.5
244-330	0	2009/10 USCP	02 Feb 2010	197.6
244-332	0	2009/10 USCP	19 Feb 2010	505.3
244-334	0	2009/10 USCP	10 Feb 2010	379.0
244-336	0	2009/10 USCP	04 Feb 2010	252.6
USCP issuances in USD, total				3,268.0
EUR				
DK0009921868	3.125	2005/10 EUR-loan	15 Oct 2010	12,650.6
XS0392597026	2.75	2008/11 USD-loan	15 Nov 2011	7,785.5
1079	2.75	2008/11 swap from USD		-7,785.2
•	var.	2008/11 swap to USD		7,785.2
•	var.	2008/11 swap from USD		-7,785.2
•	3.457	2008/11 swap to EUR		4,091.7
•	3.468	2008/11 swap to EUR		4,091.7
XS0392597026	2.75	2008/11 Increase of USD-loan	15 Nov 2011	5,190.1
1079	2.75	2008/11 swap from USD		-5,190.1
•	var.	2008/11 swap to USD		5,190.1
•	var.	2008/11 swap from USD		-5,190.1
•	var.	2008/11 swap to EUR		5,891.9
XS0392597026	2.75	2009/11 Increase of USD-loan	15 Nov 2011	7,785.2
1079	2.75	2009/11 swap from USD		-7,785.2
•	var.	2009/11 swap to EUR		8,632.8
XS0401030316	3.125	2008/11 EUR-loan	28 Nov 2011	9,301.9
XS0408298494	1.875	2009/12 USD-loan	16 Mar 2012	15,570.3

1207	1.875	2009/12 swap from USD		-15,570.3
•	2.854	2009/12 swap to EUR		16,285.7
NO0010490899	3.50	2009/14 NOK-loan	17 Feb 2014	447.1
1215	3.50	2009/14 swap from NOK		-447.1
•	var.	2009/14 swap to EUR		415.3
XS0413727453	1.15	2009/10 USD-loan	19 Apr 2010	10,380.2
1223	1.15	2009/10 swap from USD		-10,380.2
•	var.	2009/10 swap to USD		10,380.2
•	var.	2009/10 swap from USD		-10,380.2
•	var.	2009/10 swap to EUR		11,514.9
XS0417728325	3.125	2009/14 EUR-loan	17 Mar 2014	9,301.9
XS0417728325	3.125	2009/14 Increase of EUR-loan	17 Mar 2014	1,860.4
XS0417728325	3.125	2009/14 Increase of EUR-loan	17 Mar 2014	4,464.9
XS0417728325	3.125	2009/14 Increase of EUR-loan	17 Mar 2014	5,209.1
XS0419327837	3.165	2009/14 SEK-loan	31 Mar 2014	2,963.5
1229	3.165	2009/14 swap from SEK		-2,963.5
•	var.	2009/14 swap to EUR		2,786.3
XS0428037823	2.25	2009/12 USD-loan	14 May 2012	18,165.4
1244	2.25	2009/12 swap from USD		-18,165.4
•	2.243	2009/12 swap to EUR		9,743.8
•	2.24	2009/12 swap to EUR		9,743.8
EUR, total				115,986.7

Swaps – EUR

10035	var.	2007/12 swap from DKK	23 Jan 2012	744.2
10036	var.	2007/12 swap from DKK	31 Jan 2012	744.2
10037	var.	2007/12 swap from DKK	12 Feb 2012	744.2
10038	var.	2007/12 swap from DKK	21 Feb 2012	744.2
10039	var.	2007/12 swap from DKK	15 Mar 2012	744.2
10040	var.	2007/12 swap from DKK	30 Mar 2012	744.2
10041	var.	2007/12 swap from DKK	27 Apr 2012	744.2
10042	var.	2007/12 swap from DKK	25 May 2012	744.2
10044	var.	2009/14 swap from DKK	04 Mar 2014	744.2
10045	var.	2009/14 swap from DKK	12 Mar 2014	1,488.3
EUR, total				8,185.7

Swaps – USD

20001	4.164	2004/16 swap from DKK	30 Jun 2016	139.0
20002	4.164	2004/16 swap from DKK	30 Jun 2016	139.1
20003	4.355	2005/17 swap from DKK	28 Jan 2017	153.8
20004	4.4875	2005/17 swap from DKK	10 Feb 2017	259.8
20005	4.497	2005/17 swap from DKK	11 Aug 2017	265.9
20006	4.66	2005/17 swap from DKK	20 Oct 2017	265.9
20007	4.7925	2005/17 swap from DKK	15 Dec 2017	283.5
20008	4.855	2006/17 swap from DKK	16 Nov 2017	295.9
20009	5.06	2006/18 swap from DKK	12 Apr 2018	301.3
20012	5.27	2006/18 swap from DKK	28 Aug 2018	480.3
20013	4.755	2006/18 swap from DKK	10 Nov 2018	480.3
20014	4.73875	2007/19 swap from DKK	10 Jan 2019	506.9
20015	4.671	2007/19 swap from DKK	26 Mar 2019	506.9
20016	5.1225	2007/19 swap from DKK	15 Jun 2019	532.5
20017	5.164	2007/19 swap from DKK	05 Sep 2019	560.5
20018	5.3875	2007/19 swap from DKK	14 Nov 2019	560.5
20020	5.315	2008/20 swap from DKK	29 Jan 2020	588.6
20021	3.745	2008/20 swap from DKK	25 Mar 2020	586.5

20022	3.78	2008/20 swap from DKK	05 May 2020	586.5
20023	4.18	2008/20 swap from DKK	22 Jul 2020	666.1
20024	4.144	2008/20 swap from DKK	14 Oct 2020	666.1
20028	2.539	2009/21 swap from DKK	23 Jan 2021	696.3
20029	3.585	2009/21 swap from DKK	17 Mar 2021	696.3
USD, total				10,218.5
Loans transferred from the Mortgage Bank of the Kingdom of Denmark				
XS0069330768		1996/11 JPY-loan	19 Sep 2011	33.7
1074		1996/11 swap to EUR		-33.7
•	var.	1996/11 swap from JPY		31.2
XS0074733543		1997/12 JPY-loan	13 Mar 2012	28.1
1075		1997/12 swap to EUR		-28.1
•	var.	1997/12 swap from JPY		26.1
Transferred loans, total				57.3
DKK				
DK0009901407	3	1894[3]	Perpetuals	9.9
DK0009901670	3.5	1901[3]	Perpetuals	3.8
DK0009901753	3.5	1909[3]	Perpetuals	5.0
DKK-loan, total				18.7
Central-government foreign debt, total				139,588.4

[1] ISIN codes are used to loans and loan number to swaps and Commercial Paper issuances.

[2] The outstanding amount as of 31 December 2009 is calculated to DKK on the basis of the following exchange rates: EUR = 744.15, JPY = 5.6226, NOK = 89.42, SEK = 72.28, USD = 519.01.

[3] Multi-currency loan. The creditor can choose which currency to make payments in, however, at a fixed rate of exchange. Redeemable by the Kingdom of Denmark at 3 months' notice.

CENTRAL-GOVERNMENT INTEREST-RATE SWAPS AS OF 31 DECEMBER 2009 Table 8

Termination year	Krone interest-rate swaps	Euro interest-rate swaps	
	Notional amount in DKK million	Notional amount in EUR million	Notional amount in DKK million[1]
2010	14,600	175	1,303
2011	11,950	150	1,116
2012	-	4,235	31,515
2013	4,400	810	6,028
2014	8,500	-	-
2015	1,800	1,500	11,162
2016	10,800	575	4,279
2017	-	175	1,303
2018	-	-	-
2019	-	800	5,953
Interest rate swaps, total	52,050	8,245	61,355

Note: The Kingdom of Denmark receives fixed interest rate and pays 6-month Cibor on all krone interest-rate swaps. The Kingdom of Denmark receives fixed interest and pays 6-month Euribor on all euro interest-rate swaps.

[1] Converted to DKK on the basis of the following exchange rate as of end-2009: EUR = 744.15.

KINGDOM OF DENMARK'S RATING IN DOMESTIC CURRENCY — Table 9.1

	Moody's	Standard & Poor's
1986, July	Aaa	
1992, July		AAA
Current rating	Aaa	AAA

Note: Moody's Investors Service 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 are used 1, 2 or 3 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 are used + or – to indicate a status slightly better or worse within the category.

KINGDOM OF DENMARK'S RATING IN FOREIGN CURRENCY — Table 9.2

	Moody's	Standard & Poor's
1981, March		AAA
1983, January		AA+
1985, April	Aa	
1986, August	Aa1	
1987, March		AA
1991, October		AA+
1999, August	Aaa	
2001, February		AAA
Current rating	Aaa	AAA

Note: See the note in Table 9.1 for ranking of the rating categories.

RATING OF SELECTED COUNTRIES' CENTRAL-GOVERNMENT DEBT, JANUARY 2010 Table 10

	Moody's		Standard & Poor's	
	Domestic	Foreign	Domestic	Foreign
Australia	Aaa	Aaa	AAA	AAA
Austria	Aaa	Aaa	AAA	AAA
Belgium	Aa1	Aa1	AA+	AA+
Canada	Aaa	Aaa	AAA	AAA
Czech Republic	A1	A1	A+	A
Denmark	Aaa	Aaa	AAA	AAA
Finland	Aaa	Aaa	AAA	AAA
France	Aaa	Aaa	AAA	AAA
Germany	Aaa	Aaa	AAA	AAA
Greece	A2	A2	BBB+	BBB+
Ireland	Aa1	Aa1	AA	AA
Italy	Aa2	Aa2	A+	A+
Japan	Aa2	Aa2	AA	AA
Netherlands	Aaa	Aaa	AAA	AAA
New Zealand	Aaa	Aaa	AAA	AA+
Norway	Aaa	Aaa	AAA	AAA
Portugal	Aa2	Aa2	A+	A+
South Africa	A3	A3	A+	BBB+
Spain	Aaa	Aaa	AA+	AA+
Sweden	Aaa	Aaa	AAA	AAA
Switzerland	Aaa	Aaa	AAA	AAA
UK	Aaa	Aaa	AAA	AAA
USA	Aaa	Aaa	AAA	AAA

Note: See the note in Table 9.1 for ranking of the rating categories.
Source: Moody's and Standard & Poor's.

Glossary

This glossary presents explanations of a number of key terms and concepts in the area of government debt. Terms in *italics* are included elsewhere in the glossary.

Acceptance rate
Issued government securities as a share of the total bid volume.

Accrued interest
Accrued interest is payment for the interest accruing on a paper since the last interest due date. In the Danish bond market trades are with coupon interest. The buyer of the paper pays a proportion of the coupon to the seller for the period from the last due date to the settlement date. See also *clean price* and *dirty price*.

Asset swap
A swap attached to specific assets, by means of which the investor can alter the interest rate and/or currency of the assets concerned.

Auction
At an auction, a bond is offered. A group of market participants may submit bids requesting a certain volume of bonds at a given price or interest rate.

Basis points
1 basis point is 0.01 percentage point.

Benchmark bond
A key bond for issuance. Changes in the benchmark status of Danish government bonds are determined by Government Debt Management after discussion with the *Primary Dealers.*

Bid-ask price
The bid-ask price is the price at which the market maker is willing to buy/sell. The difference between the ask and bid prices is the bid-ask spread.

Bullet loans
Loans on which only interest is paid during the term of the loans. The loans are repaid on the maturity date. Danish government bonds are bullet loans.

Buy-back issues
The government securities which the central government can buy back before maturity.

Callable bond
A bond which can be prematurely redeemed by the debtor on terms agreed in advance. The debtor's right to redeem is tantamount to having a call option on the bond.

Capital losses/gains on issuance
Capital losses and gains on issuance arise when a loan is issued at prices below and above par, respectively.

Central-government debt
Comprises liabilities in the form of domestic and foreign debt as well as assets in the Social Pension Fund, the Danish National Advanced Technology Foundation, the Preventive Measures Fund and the balance of the central government's account with Danmarks Nationalbank.

Cibor (Copenhagen Interbank Offered Rate)
The interest rate at which a bank in the Copenhagen interbank market is willing to lend Danish kroner without collateral to another creditworthy bank. Cibor is the reference interest rate for a large number of financial contracts. See also *Euribor* and *Libor*.

Clean price
The price of a bond excluding accrued interest. Government bonds are quoted on the trading platforms at a clean price. See also *accrued interest* and *dirty price*.

Clearing and settlement
Clearing is the compilation of each participant's purchase and sale, resulting in the net position of each participant. Settlement is completion of a trade by final settlement of agreed commitments.

Commercial Paper (CP)
Short-term debt instruments with maturities of up to one year. The central government has two CP programmes, directed to the European market (ECP programme) and American market (USCP programme), respectively. Under the USCP programme the issuance is exclusively in US dollar, while under the ECP programme it is possible to issue in several currencies. The USCP programme has a maximum outstanding of USD 6 billion, while maximum outstanding in the ECP programme is USD 12 billion.

Cost-at-Risk (CaR) model
Simulation model developed by Government Debt Management to quantify the risk of the central-government debt portfolio to future interest-rate developments.

Credit standing
Assessment of a debtor's willingness and ability to honour its obligations. See also *rating*.

Derivative
See *financial derivative.*

Dirty price
The price of a bond including accrued interest. See also *accrued interest* and *clean price.*

Discount rate
Danmarks Nationalbank's discount rate is a signal rate indicating the overall level of the monetary-policy interest rates.

Duration
The average fixed-interest period for a financial portfolio. Long duration of the government debt usually implies a low interest-rate risk, since on average smaller proportions of the interest costs are adjusted to changes in the level of interest rates.

Electronic trading
Placement of orders (bid or ask) via electronic facilities to a trading system in which orders are matched and executed automatically.

Emission
Issuance of government securities.

Euribor (Euro Interbank Offered Rate)
The interest rate at which a bank in the euro interbank market is willing to grant money-market loans in euro to another creditworthy bank without collateral. Used as a reference interest rate in a large number of financial contracts, e.g. *swaps*. See also *Cibor* and *Libor*.

Exposure
Exposure denotes a financial position that entails a risk of losses or gains if the market conditions change.

Final exposure
Denotes the currency or interest-rate exposure on a loan compiled after *swaps*.

Financial derivative
An instrument of which the value is derived from the price of an underlying asset, e.g. securities, goods or currency.

Floating interest rate
An interest rate that is agreed to float as, or in step with, another interest rate listed on the market at specific shorter intervals than the maturity of the loan, typically every third or sixth month.

Forward contract
Agreement on delivery and payment of goods, securities or currency on a future date at a price fixed at the time of the agreement (forward price).

Funding rules
Framework for the distribution of the central government's domestic and foreign borrowing.

Gross financing requirement
The gross financing requirement is compiled as the *net financing requirement* with the addition of redemptions on the domestic and foreign debts, the net bond purchases of government funds, and the central government's currency swap payments.

Haircut
The deduction made from a paper's market value on determining its collateral value. A haircut takes account of the risk of a lower value of the security from the date of compilation of the collateral value until the possible enforced realisation of the paper.

Interest-rate fixing
The interest-rate fixing assessed at a given point in time is the amount of debt that will have the interest rate refixed within one year.

ISDA Master Agreement
Framework agreement whereby all *swaps* with one and the same counterparty are documented.

Key on-the-run issues
Government series that are being built up and which are issued to cover the current domestic borrowing requirement.

Lead manager
The bank or banks, that organize a syndicated bond loan. Lead manager is responsible for co-ordination, distribution and documentation of the supply of bonds. Distribution of the bond loan is normally handled by a syndicate of banks. See also *syndicated bond issuance.*

Libor (London Interbank Offered Rate)
The interest rate at which a bank in the London interbank market is willing to undertake money-market lending in various currencies to another creditworthy bank without collateral. Used as a reference interest rate in a large number of financial contracts, e.g. *swaps*. See also *Cibor* and *Euribor*.

Liquidity
Liquidity expresses tradability. Liquid bonds are often characterised by a large outstanding amount, high turnover and a narrow spread between *bid and ask prices*. Investors will generally be willing to pay a higher price for a more liquid bond (liquidity premium).

Market maker
A securities dealer that quotes current tradable bid and ask prices (market making) in securities.

Market risk
The risk that fluctuations in market prices (e.g. interest rates, exchange rates, bond prices and equity prices) will result in losses.

Medium Term Notes, MTN
Bonds issued under a loan programme with standardised documentation. The Central Government has a Euro Medium Term Notes (EMTN) programme that is used for foreign borrowing.

MTS Denmark
A market segment in MTS where wholesale trading in Danish government bonds is conducted at present.

Net financing requirement
The net financing requirement is compiled as the deficit on the central government's current, investment and lending (CIL) account with addition of *re-lending* (net of redemptions) and portfolio movements and accruals.

Non-competitive allocation
Right to bid where a price quotation is not needed. In various countries non-competitive allocations are used in connection with government bond auctions. Dependent on the size of the separate primary dealer's participation in the actual auction, the primary dealer have the option to buy an extra share of bonds at the same price after the auction.

Option-adjusted duration
The *duration* for *callable bonds* where adjustments have been made for the uncertainty of the maturity structure as a consequence of the borrower's right to early redemption of the bond.

Over-the-Counter (OTC)
Trading in financial instruments outside a stock exchange, e.g. via a dealer network or by telephone.

Par yield
Par yields are adjusted for differences in the remaining maturities of the bonds. For example, the par yield for a 10-year government bond is the coupon rate which ensures that a synthetic *bullet loan* with a maturity of exactly 10 years has a theoretical value of 100 ("par").

Perpetual
Loan with infinite maturity, i.e. the only payments are the ongoing coupon payments. The Kingdom of Denmark has a few minor perpetuals from the end of the 19th century and beginning of the 20th century.

Plain vanilla
Term used for standardised and simple products.

Primary dealer
Primary dealers are financial institutions that by agreement with the issuer, against special rights, are obliged to provide *liquidity* in specific government securities.

Primary market
Market for issuance of bonds. See also *secondary market*.

Private placement
Bond or other loan offered to a small group of buyers and not normally listed.

Rating
Grade of *credit standing* assigned by rating institutes such as Fitch Ratings, Moody's and Standard & Poor's.

Refinancing risk
The risk that a borrower has to finance repayments on its debt in a period with a temporary general high interest level or in a period, where the loan terms of the specific borrower are particularly un-favourable.

Re-lending
Re-lending constitutes central-government loans to government-owned companies and Danish Ship Finance.

Re-lending list
The range of government securities in which *re-lending* can be granted. The re-lending list is specified by Government Debt Management.

Risk aversion
Applied to describe an investor's preference for safe assets. The degree of risk aversion expresses investors' demand for compensation in order to take on a risk.

Risk-free interest rate
The risk-free interest rate is the interest rate that can be obtained in the market without assuming any risk. The risk-free interest rate is often the yield on short-term, liquid government securities with a high credit rating. See also *risk premium*.

Risk premium
Additional payment for holding assets that are subject to risk. See also *risk-free interest rate*.

Secondary market
Market for trading of bonds after they are issued in the *primary market.*

Securities lending
Securities lending is a transaction whereby the seller is paid to transfer securities to a buyer. On conclusion of the agreement, the parties simultaneously commit to buy back the securities at an agreed price on expiry of the agreement.

Serial loan
A loan for which the debt is repaid in equal redemptions on each interest due date.

Swap
A swap is an agreement between two parties to exchange payments over a fixed period. A swap is a separate financial transaction.

Swap rate
The swap rate is the fixed interest rate paid or received in an interest-rate swap.

Swap spread
The swap spread is the difference between the fixed interest rate received by the central government in an interest-rate swap, and the yield to maturity on a government bond with the same maturity.

Syndicated bond issue
Bond issue intermediated by a syndicate of banks which carry out the practical part of the sale for a payment. At issuance the syndicate banks obtain bids from investors. When the "book" of bids has been build up, the issuer determines price and allocation together with the syndicate banks.

Synthetic re-lending
Bond loans that are included on the *re-lending list*. The loans are granted on the basis of an estimated zero-coupon yield curve and are introduced to bridge the gaps between existing bullet loans in the maturity segments between 2 and 10 years.

Tap sale
Ongoing *issuance* in the same series. In Denmark, the issuance of government bonds is normally via tap sale. See also *auction*.

T-bills
T-bills (Treasury Bills) are government securities in the short end of the maturity spectrum. In 2010, the T-bill programme will be reopened in Denmark after having been closed down since the end of 2008.

From the end of February 2010, Danish T-bills will be issued at monthly auctions. Every third month a new 9-month bill will be opened. Issuance in the bills can continue up until the term to maturity reaches 1 month.

T-bills are zero-coupon bonds, i.e. the cost of borrowing is solely a result of a *capital loss* on issuance.

Tick
1 tick is equivalent to 0.01 price quotation points.

Uncollateralised yield
The interest rate payable on bonds and lending agreements connected with credit risks. The spread between an uncollateralised and a *risk-free interest rate* for a given maturity determines the risk premium.

Value date
Settlement date, i.e. the date on which e.g. a securities deal is closed by delivery of securities against payment.

Volatility
Statistical term for the size of variation in the rate of return of an asset or an index. It is typically measured by the standard deviation on the yearly rate of return.

VP Securities Services
Securities clearing/settlement and custodian institution. VP also handles electronic issuance of securities and registration of ownership and rights pertaining to electronic securities.

Yield curve
Relationship between the interest rate and maturity of securities. A rising yield curve – i.e. where interest rates for short-term securities are lower than interest rates for long-term securities – is called normal. A falling yield curve is described as inverted.

Yield spread
The spread between the yields on two bonds. On calculating yield spreads, adjustment is often made for differences in the bonds' remaining terms to maturity.

Yield to maturity
The fixed discount rate that makes the present value of payments on the bond equivalent to the actual price of the bond.

Zero-coupon bond
Loan that is not subject to current interest payments, and which is redeemed on maturity. The cost of borrowing is solely a result of a *capital loss* on issuance. *T-bills* and *Commercial Papers* are zero-coupon bonds.

Zero-coupon rate
The *yield to maturity* on a *zero-coupon bond*. The zero-coupon yield structure indicates the relation between remaining maturity and the zero-coupon rate.