Ministerstvo financí
ČESKÉ REPUBLIKY

State Debt and Financial Assets
Management Department

The Czech Republic Funding and Debt Management Strategy

2011

2nd December 2010

On 30th November 2010 the Minister of Finance decided on the structure and financing of the central government's gross borrowing requirement in the 2011 budget year and approved the basic absolute and relative limits for issues on the domestic and foreign markets and for active management of the net debt portfolio and State Treasury liquidity (ref. No. 20/118624/2010).

The operational framework thus defined in the form of this Funding and Debt Management Strategy for 2011 (the "Strategy") enables the Ministry of Finance (the "Ministry") to operate flexibly on the domestic and foreign financial markets when actively securing funding to cover the central government's borrowing requirements and securing daily solvent position of the State, thus creating initial conditions for the smooth implementation of the government's budgetary and fiscal policy.

The Strategy is based on and is consistent with the draft act on the Czech Republic's state budget for 2011, the Medium-term Outlook of the Czech Republic's State Budget for 2012 and 2013, the Medium-term Expenditure Framework for 2012 and 2013 and the Fiscal Outlook of the Czech Republic.

The Strategy is submitted by the State Debt and Financial Assets Management Department (the "Department"), which is responsible for operations linked to state funding, Treasury liquidity management and the investment of cash funds of state financial assets.

Content

Summary

The strategy of the central government's funding in the medium-term outlook focuses on the segments of the government financial balance sheet whose management is the direct responsibility of the Minister of Finance and whose structure has a direct impact on state budget cash flow as a result of the constant fluctuation of economic and financial risk factors such as interest rates and exchange rates.

The principal financial item on the government balance sheet is the **state debt**, which accounts for over 90% of total gross public sector debt and will exceed 36% of gross domestic product (GDP) in 2011. In the medium-term outlook the state debt growth rate will slow-down to approach 39% in 2013.

Outlining of the Strategy for the years 2011 to 2013 results from an outlook of a gradual economic recovery which begun in the 3rd quarter 2009, stable domestic banking sector, external macroeconomic balances, credible monetary policy of the central bank and stable majority government with a program of public budgetary system stabilization through structural reforms with a target of reducing government sector deficit down to 3% of GDP till 2013 and to reach balanced public finances in 2016 at the latest as long as positive economic growth is reached in the given period.

The fiscal consolidation plan has substantially improved the state budget outlook and the trajectory of the gross borrowing requirement in the years 2011 to 2013. The Czech Republic's issuance activity is therefore lower than originally expected, which helps boost the country's credibility on the international stage. That has positive impacts on the interest costs of the state debt, which was, together with overall decline in capital markets yields, the main driving force of significant savings of the expenditure on state debt in 2010 compared to the budgeted expenditure. Positive appraisal of the Czech Republic government's reform effort was already manifested during eurobond launch in September of this year which was met with historically highest demand from investors and credit spread lower than several eurozone countries and countries with a better credit rating.

Gross borrowing requirement for 2010 is expected to reach CZK 251.6 billion which is CZK 28.4 billion lower than planned in the Strategy for 2010. In **2011** the **gross borrowing requirement** is planned at **CZK 219.5 billion** making it CZK 86.2 billion lower than last year's plan and in 2012 at the level of CZK 218.8 billion which is CZK 94.1 billion lower than planned in 2009. In 2013 further decline of gross borrowing requirement to CZK 207 billion is expected.

Gross issuance of medium-term and long-term government bonds on both domestic and foreign markets for 2011 is planned at CZK 184 billion. With redemptions on government bonds, including buy-backs, at the level of CZK 112.1 billion, the **net issuance of medium-term and long-term government bonds** will reach **CZK 71.9 billion**.

On the domestic market the Ministry will resume issuance of floating-rate notes while re-opening the 55th Issue of VAR/2016 and issuing a new 63rd Issue of VAR/2023 based on 12M PRIBOR rate which is currently on demand on the domestic market. As to the fixed-rate bonds, a new 62nd Issue maturing in March 2014 will be launched and following issues will be re-opened: 51st Issue 4.00/2017, 61st Issue 3,85/2021 and 58th Issue 5.70/2024 with a goal to support their market liquidity towards an equivalent of € 3 billion. Foreign issues will cover at most 40% of gross borrowing requirement for 2011 while at least one syndicated benchmark euro-denominated issue is planned.

The Ministry plans to increase **net money market issuance** to **CZK 20-40 billion** which reflects the Ministry's goal to reduce interest costs while keeping long-term target for short-term debt not to exceed 20% of the total state debt.

The Ministry also plans to implement a **system of retail government bonds** to be offered to households and non-profit organizations in 2011 and as of 1st July 2011 to start operating pan-european **electronic platform MTS** for domestic bond market trading and to set-up a new effective business structure between the Ministry and its primary dealers.

1 – Economic and fiscal outlook

The year 2009 was dominated by the global financial and economic crisis, which erupted in the United States of America in September 2008 and quickly spread to other parts of the world, including Europe. The palpable decline in global demand meant that not even the Czech economy, with its strong export orientation, was spared the consequences of the rapid economic downturn. Despite the robust economic growth that followed the country's accession to the European Union, 2009 brought a fall in real growth of GDP similar to that experienced in eurozone countries.

The economic activity begun to restore in the 3rd quarter 2009 and the year 2010 is expected to bring a slight economic upturn of around 2.2% and a gradual increase towards a figure of 3.8% in 2013. Fiscal consolidation plan is reflected in real decrease of government final consumption which can be mainly attributed to a fierce decline of expenditures on collective consumption with regard to reduction of operating costs of state budget's chapters. Consequently, real GDP growth will be generated by other components of aggregate demand.

Table 1: Main macroeconomic indicators of the Czech Republic

	2009	2010	2011	2012	2013
Real GDP growth (%)	-4,1	2,2	2,0	3,2	3,8
Real government consumption growth (%)	4,2	0,2	- 4,5	- 0,8	- 1,1
Average rate of inflation (%)	1,0	1,5	2,2	2,3	2,0
Unemployment rate (%)	6,6	7,4	7,2	7,0	6,5
Current account/GDP (%)	- 1,0	- 1,4	- 1,1	- 1,5	- 2,0
CZK/EUR exchange rate	26,4	25,3	24,2	23,5	22,8
Real GDP growth in eurozone EA 12 (%)	- 4,1	1,6	1,5	2,0	2,3

Source: Czech Statistical Office, Ministry of Finance

The dramatic GDP drop in 2009 was strongly reflected in the worsened budgetary result of the government sector in 2009, when a deficit of CZK 210.3 billion, i.e. 5.8% of GDP was returned. In comparison with a previous year, government sector's revenues dropped by approx. 1.8% and expenditures grew by approx. 5.2%.

For 2010 government sector budgetary deficit is expected at the level of CZK 189.9 billion, approx. 5.1% of GDP which is a significant drop of CZK 28.1 billion in comparison to a previously notified deficit of 5.9% of GDP in April of this year and also lower than targeted level of 5.3% of GDP which was approved by a former caretaker government. Government sector revenue growth is expected at 2.9% this year while expenditures growth at just 1.3%.

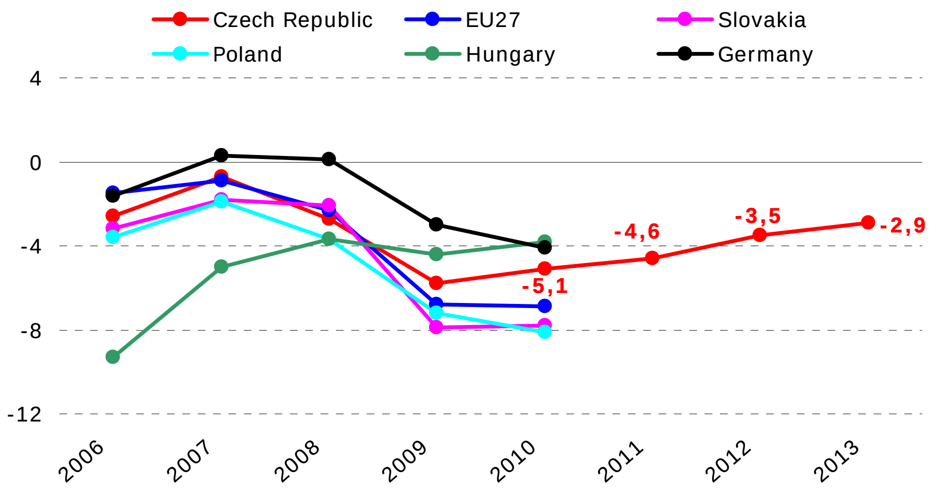
More favourable results of government sector budget than previously expected and planned were achieved mainly by active austerity measures adopted by the government, higher than previously expected GDP growth and last but not least a drop of interest costs on the government debt by more than 6 % in comparison with 2009.

In July 2010 established new coalition government immediately adopted further austerity measures on both the revenue and expenditures side of the budget and prepared draft state budget for 2011 and medium-term budgetary outlook for the years 2012 and 2013 with a target of gradual decrease of government sector budget to 4.6% of GDP in 2011, 3.5 % in 2012 and 2.9 % in 2013. The trajectory outlined in such a way represents more fierce fiscal targets than those outlined in the Convergence Program of the Czech Republic from January of this year. Long-term target is to achieve balanced government sector budget in 2016.

Fiscal consolidation strategy focuses on the expenditure side of the public budgets which was manifested in decrease of expenditures framework for state budget and state extra-budgetary funds for 2011 to the level of CZK 1,288.4 billion. Approved expenditures framework for the years 2012 and 2013 incorporates further decline in state budget expenditures and state extra-budgetary funds expenditures to the level of CZK 1,146.9 billion and CZK 1,171.0 billion, respectively. This expenditures reduction assumes more conceptual structural reforms which will be developed and introduced during the year 2011 and implemented in 2012 to 2013.

Fiscal consolidation measures of the government should contribute to a decrease of government sector budget deficit (according to ESA95) by CZK 78.4 billion while full 75% of the measures will be achieved on the expenditure side.

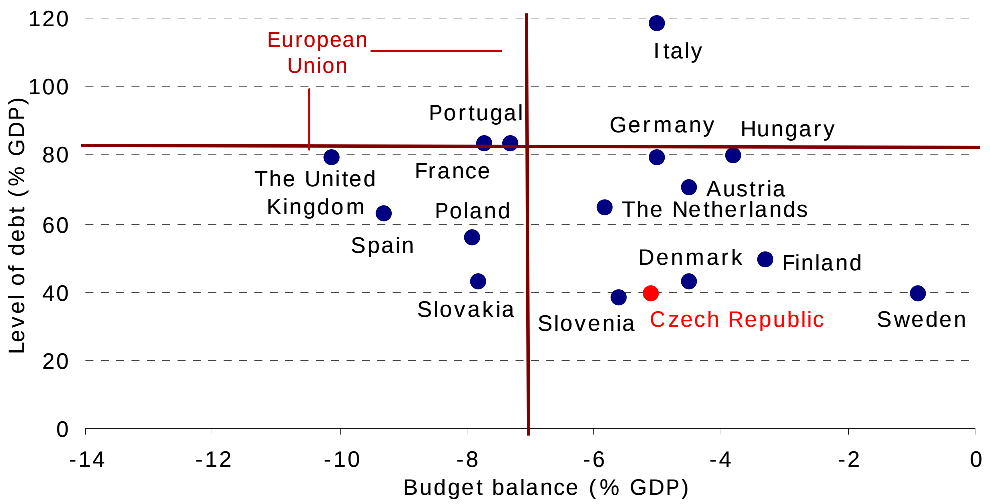
Figure 1: Government sector budget balance in chosen countries (% GDP, ESA95)



Source: Eurostat, Ministry of Finance

The state of public budgets and the rate of growth of the state debt would be, without fiscal consolidation, very concerning from the long-term perspective which would complicate smooth state debt funding in the situation of extreme instability on the international financial markets. However, the Czech Republic still ranks among the European Union countries with one of the lowest levels of debt and budget deficit comparable to the best-ranked European governments.

Figure 2: Level of debt and budget balance of government sector in 2010 (% GDP, ESA95)



Source: Eurostat, Ministry of Finance

When compared to other countries, the Czech Republic is relatively well-positioned to begin with implementing of government austerity measures and structural reforms which is appreciated by investors when evaluating trustworthiness of the Czech economy. It also manifests positively on sustainability of government gross borrowing requirement funding in the medium-term outlook with relatively favourable interest costs.

In 2010, the government debt (according to ESA95) is expected to be **41.5** percentage points below the European Union countries average and the government sector budget deficit will be **1.8** percentage points lower than that of the European Union average.

Central government subsector makes up more than 80% of the total government sector finances while the main component of the financial results is the state budget. When determining central government borrowing requirement and planning of financial markets operations, it is essential to use state deficit on cash-flow basis as a difference between aggregate revenue and expenditure accounts in the Czech National Bank. Therefore, it is not consolidated with other government sub-sectors or adjusted for net loans which affect revenues and expenditures of the state budget although they represent financing operations on the asset side of the balance so they have to be financed through debt operations.

Thus defined state budget is submitted every year for approval to the Chamber of Deputies of the Parliament as a separate act which also determines funding components of the state budget deficit. In relation to the government sector budget results in 2009, a record high state budget deficit was achieved at the level of CZK 192.4 billion. As a result of austerity measures plan for 2010, a deficit of CZK 162.7 billion was budgeted for 2010 while the final result of the state budget deficit is expected to be slightly below that figure mainly due to decrease of interest costs on the state debt. Fiscal targets for government sector approved by the current government are manifested in necessary decrease of state budget deficit for 2011 to 2012 on cash-flow basis.

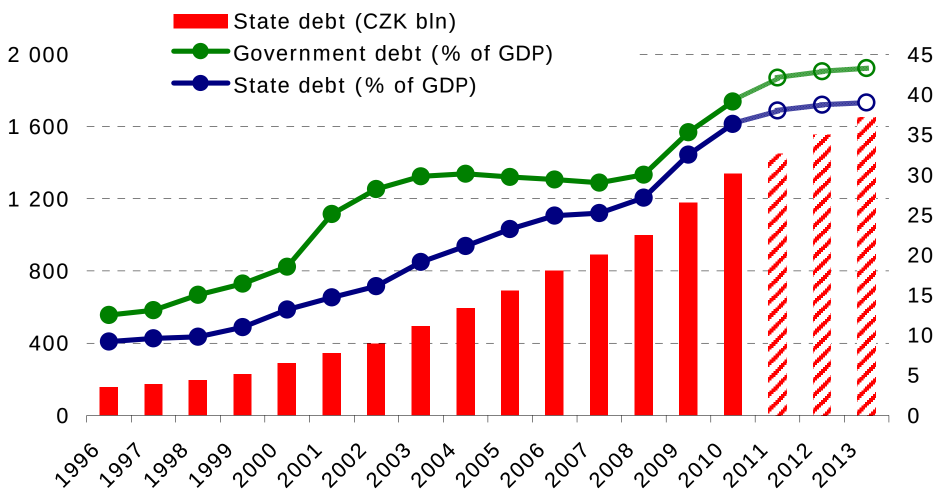
Table 2: The Czech Republic state budget balance in 2006 to 2013

	2006	2007	2008	2009	2010	2011	2012	2013
CZK billion	- 97,6	- 66,4	- 20,0	-192,4	-155,6	- 135,0	-110,0	-100,0
% GDP	- 3,0	- 1,9	- 0,5	- 5,3	- 4,2	- 3,5	- 2,7	- 2,4

Source: Ministry of Finance

The development of the state budget deficit is closely linked to the development of the state debt, which has been increased continuously in both absolute terms and relative terms in relation to the GDP since 1996. The following figure shows the course and estimated slow-down of growth of both the state and government debt in relative terms up to 2013 as a result of consolidation measures of the government and gradual economic upturn.

Figure 3: State debt and government debt development in the Czech Republic in 1996 to 2013



Source: Ministry of Finance

Following chapters of the Strategy use only unconsolidated state debt and state budget figures on the cash-flow basis, which are crucial for determining of the government borrowing requirement and consequent shaping of the strategy of financing and issuance activity on both the domestic and foreign financial markets and for financial risk management.

2 – The Borrowing requirement and state debt up to 2013

The net borrowing requirement and change in the state debt

The central government's net borrowing requirement in the medium-term outlook is mainly determined by the planned state budget deficits. The final level of the net borrowing requirement is also influenced by state financial assets operations, lending and on-lending, and changes in the level of the financial reserve generated by bond issues. The net borrowing requirement is also the principal factor driving the change in the nominal value of gross state debt. Since part of the state debt is denominated in foreign currencies, the state debt is also affected by changes in the exchange rate between the Czech koruna and those currencies.

Figure 3: The net borrowing requirement of the central government and change in the state debt

CZK billion	2009	2010		2011	2012	2013
	Actual	Planned	Predicted		Planned	
Gross state debt as of 1st January	**999.8**	**1,178.2**		**1,342.5**	**1,448.8**	**1,556.2**
Primary balance of state budget, excluding on-lending	147.9	105.9	119.7	66.5	34.5	17.4
Net expenditures on state debt[1]	44.5	56.8	35.9	68.5	75.5	82.6
Extra-budgetary borrowing requirement	0.0	0.0	0.0	0.0	0.0	0.0
Net borrowing requirement, net of assets operations	**192.4**	**162.7**	**155.6**	**135.0**	**110.0**	**100.0**
State financial assets operations[2]	5.4	3.2	2.8	2.1	2.4	2.3
On-lending (net change)[3]	0.0	0.0	1.7	4.9	0.0	0.0
Financial reserve (net change)[4]	-19.6	20.0	7.4	-35.7	-5.0	-5.0
Net borrowing requirement	**178.2**	**185.9**	**167.5**	**106.3**	**107.4**	**97.3**
Changes in nominal state debt[5]	0.2	0.0	-3.2	0.0	0.0	0.0
Gross debt change	***178.4***	***185.9***	***164.3***	***106.3***	***107.4***	***97.3***
Gross state debt as of 31st December	**1,178.2**	**1,364.1**	**1,342.5**	**1,448.8**	**1,556.2**	**1,653.5**
(% on GDP)	**(32.5)**	**(37.7)**	**(36.4)**	**(38.0)**	**(38.7)**	**(39.0)**

[1] *balance of budgetary chapter 396 – State debt excl. expenditures – Transfers on projects financed by loans from EIB*
[2] *balance of budgetary chapter 397 – State Financial Asstes Operations*
[3] *on-lending to other states and enterprises with full state-backed guarantee on their core business*
[4] *cash reserve generated by bonds issues according to the Act No. 218/2000*
[5] *exchange rate changes due to re-evaluation of foreign currencies denominated debt and state debt amortization within budgetary chapter 396.*

Source: Ministry of Finance

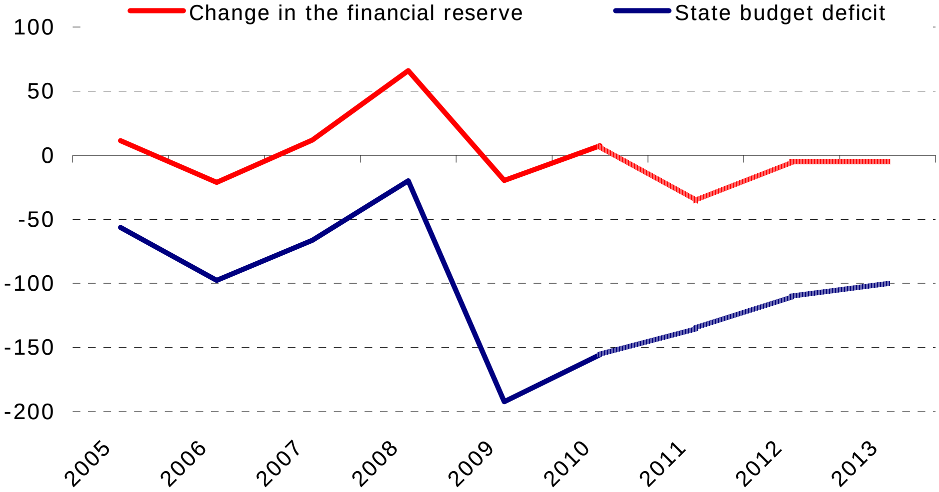
In 2010 the net borrowing requirement is expected to be approximately CZK 18.4 billion lower, mainly as a result of a CZK 12.6 billion lower than planned addition to the financing reserve and a deficit approximately CZK 7.1 billion lower than budgeted for. Conversely, operations with financial assets will lead to a slight increase of CZK 1.3 billion in the borrowing requirement than originally expected, caused mainly by the provision of extra-budget loans worth CZK 1.7 billion to the Czech Export Bank.

The planned net borrowing requirement for 2011 to 2013 is significantly lower than the original plan from 3th December 2009 as a result of the lower budget deficits achieved through the process of fiscal consolidation set out in the government's reform programme and also through the planned drawdown of the financial reserve accumulated from bond issues.

For the year 2011 the borrowing plan also incorporates the possible provision of a credit line worth up to € 200 million, or approx. CZK 4.9 billion, under bilateral international assistance to Latvia. Although the technical details of this credit mechanism have not been defined yet, activating the line of credit would result in an increase in the state's net borrowing requirement set against the increase in the provided loans on the side of financial assets. As the Czech government's commitment to the Latvian government concerning the provision of this financial assistance is still formally standing, this loan is factored into the outlook. As far as other operations linked to lending and re-lending to other institutions are concerned, the Ministry is not planning any other transactions in the given period that would have impact on the central government's net borrowing requirement.

Additions to and drawing on the financial reserve has been a significant item in the net borrowing requirement since 2008 in connection with the Ministry's prudent approach during the financial crisis and the considerable uncertainty that the freezing of the financial markets implies for the smooth execution of government bond issues.

Figure 4: Additions to and drawing on the financial reserve during 2005 to 2013 (CZK billion)



Source: Ministry of Finance

The close link between the change in the reserve and the state budget is logical, because when the deficit is lower than budgeted for, bond issues can be used to create a sufficient reserve without impacting on the planned net borrowing reserve and, conversely, the reserve can be drawn on when deficits are greater. The largest ever addition to the reserve thus took place in 2008, when the conversion of reserve funds into state budget revenues brought about a substantial reduction in the budget deficit. Bringing the accumulated reserve into play thus made it possible to ensure smooth funding of the state during the crisis year 2009.

The plan to gradually reduce the cumulative reserve by the end of 2013 is consistent with the planned implementation of fiscal reforms, which minimise the uncertainty in funding and managing the state debt caused by the unpredictability of the state budget's financial result. Decisions on the size and use of the reserve in the years 2011 to 2013 will thus depend primarily on the level of uncertainty arising from developments on the domestic and foreign financial markets and the credibility of the Czech Republic as an issuer.

Gross borrowing requirement and financing of the central government

The net borrowing requirement is the first component of the gross borrowing requirement, which determines the magnitude of the state's borrowing operations in the given year. The second component consists in redemptions on the state debt in the given year and the buy-backs and switches of government bonds before their original maturity.

The size of the annual redemptions on the state debt is planned as relatively balanced and is thus based on the Ministry's prudent approach to managing the state's refinancing and liquidity risk. This component hovers around a level of approximately CZK 110 billion per annum in the 2011 to 2013 period. In the medium-term outlook the fall in the gross borrowing requirement is thus categorically determined by the downward trend in the net borrowing requirement as a reflection of the planned structural reforms and the stabilisation of public budgets.

Figure 4: Gross borrowing requirement and instruments for funding of the central government

CZK billion	2009	2010		2011	2012	2013
	Actual	Planned	Predicted		Planned	
Net borrowing requirement	**178.2**	**185.9**	**167.5**	**106.3**	**107.4**	**97.3**
Redemptions on state debt, incl. buy-backs and switches within a budgetary year	98.0	83.0	83.0	102.1	98.3	98.6
Redemptions on loans from the EIB	0.8	1.1	1.1	1.1	3.1	1.1
Buy-backs and switches of bonds due in following years[1]	2.0	10.0	0.0	10.0	10.0	10.0
Gross borrowing requirement	**279.0**	**280.0**	**251.6**	**219.5**	**218.8**	**207.0**
Net money market issuance[2]	9.4	0.0	25.0	30.0	25.0	20.0
Gross government bonds issuance[3]	257.7	267.3	216.2	184.0	190.3	185.8
Loans from EIB	11.9	12.7	10.4	5.5	3.5	1.2
Net loans from the State Treasury	0.0	0.0	0.0	0.0	0.0	0.0
Funding of borrowing requirement	**279.0**	**280.0**	**251.6**	**219.5**	**218.8**	**207.0**

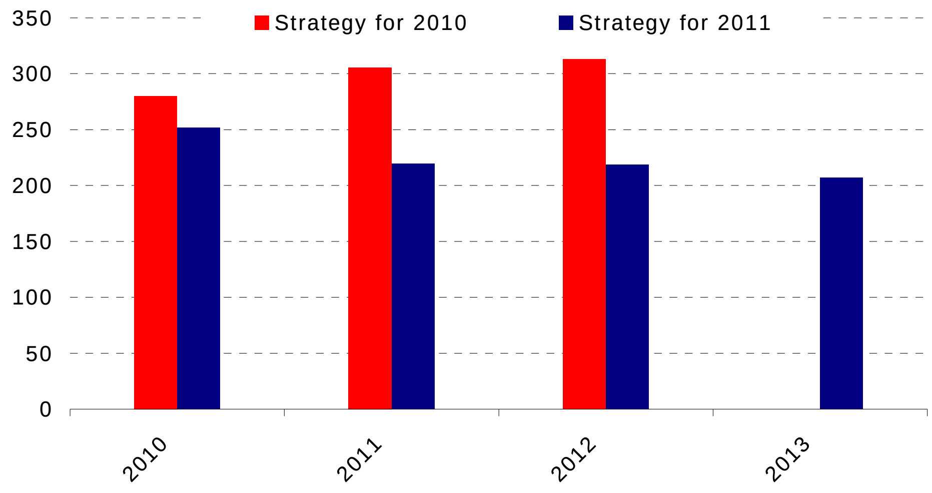
[1] *excl. operations with government bonds due within a budgetary year*
[2] *excl. revolving within a budgetary year*
[3] *nominal amount, ie. premia and discounts are included in net costs on state debt not entering net borrowing requirement.*

Source: Ministry of Finance

The gross borrowing requirement in 2010 is expected to be approximately CZK 28.4 billion lower than planned. CZK 18.4 billion of this reduction is accounted for by the lower net borrowing requirement and CZK 10 million by the Ministry's decision not to go ahead with the originally planned buy-back of government bonds. This decision is linked to the suspension of all the Ministry's bond operations on the secondary market until the rules for these operations are clearly defined and an electronic trading platform for the domestic government bonds market is implemented.

Comparing the gross borrowing requirement for the years 2010 to 2012 planned in the Funding and Debt Management Strategy from 2009 with the current strategy from 2010 shows that this plan has been substantially revised downwards which creates favourable conditions for bonds issuance in the medium-term outlook.

Figure 5: Change in gross borrowing requirement outlook for 2010 to 2012 (CZK billion)



Source: Ministry of Finance

The gross borrowing requirement is financed through three basic instruments. The drawdown of loans from the European Investment Bank, as a first one, is closely tied to the execution of the relevant state budget investment expenditure and a gradual reduction in use of this instrument is planned for the 2011 to 2013 period; this is determined partly by the government's austerity measures and partly by the preference for government bonds.

In the period in question the Ministry is also planning a slight increase in the issuance of money market instruments, most notably Treasury bills, to fund the gross borrowing requirement. This plan is consistent with the goal of achieving reductions in interest costs whilst simultaneously maintaining an acceptable level of refinancing risk. The growth in the role played by these instruments is planned in a way ensuring the fundamental 20% limit of the state debt repayable in a single year is not exceeded. The proportion of the state debt accounted for by money market instruments will thus grow from approx. 8.4% at the end of 2010 to approx. 11.3% at the end of 2013.

For the moment net borrowings from the Treasury are conservatively planned at zero, but this funding item will probably gain in significance in the period in question in line with the development of the technical mechanism for the short-term utilisation of Treasury client finances. In the first phase this will mainly involve finances on National Fund accounts. The use of these finances will make it possible to minimise the financing reserve in the medium term and will be one of the sources of savings on the interest costs of servicing the state debt.

The gross issuance of government bonds on the domestic and foreign markets is around a level of approximately CZK 190 billion per annum in the period in question; the net issuance of government bonds is around CZK 80 billion. These issuance volumes include the planned sales of government retail bonds; the size of these bonds will depend on the level of demand among small investors, which is currently very difficult to predict. The amount of retail bonds sold will thus reduce the offer of government bonds to institutional investors and the banking sector.

Net debt portfolio

The cash flow resulting from the net and gross borrowing requirements and from the central government's chosen funding instruments is reflected in the size and structure of the state debt and state financial assets, or the net debt portfolio.

The calculation of the net debt portfolio for the purposes of this Strategy is based on international practice in developed countries; financial assets closely linked to financial operations in state debt management and budgetary operations with state financial assets are set against the gross debt portfolio. Financial assets in this sense therefore do not include extra-budget balances on accounts that are also outside the system of the summary Treasury account (e.g. the privatisation account from the former National Property Fund) and also do not include other state financial assets like shares, other ownership interests and receivables due to the state from foreign countries or assets consisting in refundable financial assistance provided or state guarantees realised.

The net debt portfolio methodology brings a more realistic view of the state's financial position and the related risk parameters. The financial assets and their structure slightly reduce the refinancing, liquidity and credit risk attached to the state debt, and are therefore included in a new risk management framework.

Investment **portfolios** of a **hold-to-maturity** type managed by the Ministry are included in the financial assets. Investments of nuclear account balance, **nuclear portfolio**, is managed by the Ministry in accordance with the Act No. 18/1997, nuclear act, Section 27 and investments of special pensions account balance, **pensions portfolio**, in accordance with the Act No. 218/2000, on budgetary rules, Section 36. Balances on these accounts are conservatively invested solely in domestic government bonds by means of direct purchases or reverse repo operations using Treasury bills or Czech National Bank bills as a collateral. Revenues from investing of these balances are revenues of a budget chapter State financial assets operations. The finances accumulated in these portfolios will cover part of the state's special-purpose budget expenditures for nuclear waste disposal and public pensions reform in the future.

Figure 5: State and structure of net debt portfolio and financial sources of the State Treasury

CZK billion	2009	2010		2011	2012	2013
	Actual	Planned	Predicted		Planned	
Gross state debt as of 1st January	**1,178.2**	**1,364.1**	**1,342.5**	**1,448.8**	**1,556.2**	**1,653.5**
Money market instruments	88.2	88.2	113.2	143.2	168.2	188.2
Medium-term and long-term bonds	1,031.6	1,205.8	1,161.6	1,233.4	1,315.4	1,392.6
Loans from EIB	57.9	69.5	67.2	71.6	72.0	72.1
Bills of exchange[1]	0.6	0.6	0.6	0.6	0.6	0.6
Short-term liabilities to the Treasury	0.0	0.0	0.0	0.0	0.0	0.0
State financial assets as of 31st December	**102.2**	**125.3**	**114.0**	**85.3**	**82.7**	**80.0**
Nuclear investment portfolio	13.5	15.0	15.0	16.5	18.0	19.5
Pensions investment portfolio	21.2	21.6	21.6	22.0	22.5	23.0
Special-purpose financial assets accounts	9.2	10.4	10.0	10.2	10.6	10.9
Lending and On-lending[2]	0.0	0.0	1.7	6.6	6.6	6.6
Financial reserve[3]	58.3	78.3	65.7	30.0	25.0	20.0
Net debt portfolio as of 31st December	**1,076.0**	**1,238.8**	**1,235.9**	**1,363.5**	**1,473.5**	**1,573.5**
Accounts of Treasury clients	19.2	20.0	17.9	17.1	16.8	15.0
National Fund accounts	58,3	45,0	42,7	32,2	25,9	16,0
Short-term sources of the State Treasury as of 31st December	**77,5**	**65,0**	**60,6**	**49,3**	**42,7**	**31,0**

[1].Bills of exchange to cover equity holdings of the Czech Republic with international financial institutions
[2].lending to other states and to enterprises with full state-backed guarantee on the core business
[3] disposable cash balance bulit up by issuance of government debt according to the Act No. 218/2000, Section 35.

Source: Ministry of Finance

Balances on **special-purpose state financial asssets accounts** are not actively invested on the financial market but they can possibly cover a part of the future special-purpose expenditures of the state budget. These balances are, however, inlcuded in the summary account of the Treasury and are therefore indirectly invested on the money market in the short-term which makes it economically justified to set them against the gross debt position.

The financing reserve is formed by the issuance of government bonds for pre-financing of the future borrowing requirement and thus logically reduces the gross value of the state debt as of a given date. It is invested on the money market as a part of the summary account of the State Treasury in the short-term.

Lending and on-lending are also covered by issuance activity and so do not effectively increase the value of the net debt portfolio, on the assumption of course that the debtors in question honour their commitments on the loans.

The state's liquidity position is also documented by what are known as **short-term Treasury finances**, which can be utilised in the short term to finance net and gross borrowing requirements in the given year, when necessary. If the use of these finances was to last beyond the end of the calendar year they would represent a net borrowing from the Treasury. These sources of financing are always associated with lower interest costs than the Ministry's direct borrowing operations on the financial market.

During 2011 the active use is planned of primarily short-term cash finances in National Fund accounts which are intended in the long term to finance projects under the European Union's Structural Funds. The legislative framework for these operations will be put in place on the effective date of the ongoing amendment of Act No. 218/2000, on budgetary rules, specifically under the applicable provisions of Sections 33 and 34.

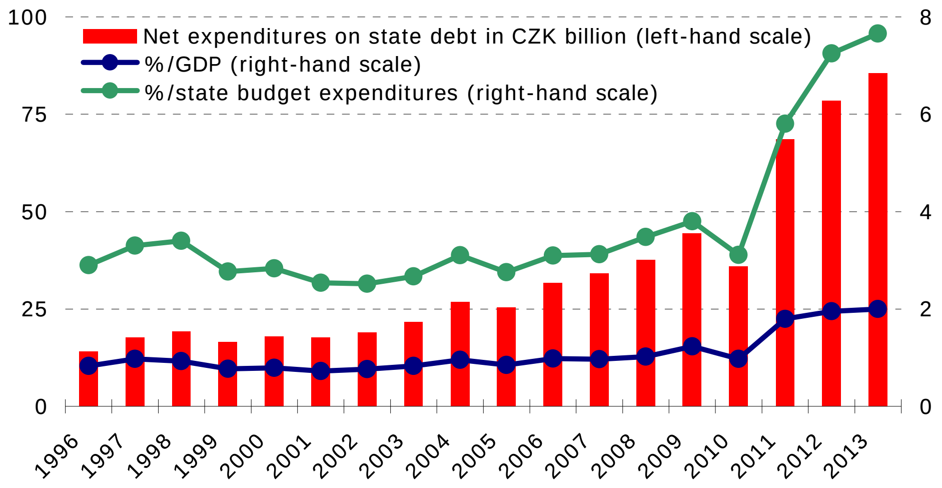
3 – Costs on state debt service

Costs on state debt are budgeted for and realized within a separate budgetary chapter 396 – State debt as of 1st January 2001. Till 2007 the chapter included only expenditures which simultaneously represented costs on state debt. From 2008 on, the methodology of budgeting and cash-flows from debt instruments are cathegorized as to their factual characteristic on the revenue side as well. Costs on state debt are therefore represented as a difference of state debt service expenditures and revenue which altogether results in **net expenditures on state debt service**.

Expenditures on transfers for projects financed by the European Investment Bank are not included in the costs on state debt. Even though these are budgeted in the chapter State debt, they are realized through budgetary measures by factually appropriate budgetary chapters in charge of infrastructural projects that are co-financed through these loans. State debt budgetary chapter balance requires therefore to be netted for these expenditures when analysis is done.

During the period 1993 to 2009 total net costs on debt service have almost tripled from CZK 15.1 billion to CZK 44.5 billion. In relation to the economic output, these costs have oscilated around 1% of GDP while reaching 1.2% of GDP in 2009. In relation to the total state debt expenditures, they have oscilated in the range of 2 to 4% while they reached so far the highest level of 3.8% of the total executed budget expenditures in 2009.

Figure 6: Net expenditures on state debt service in 1996 to 2013



Source: Ministry of Finance

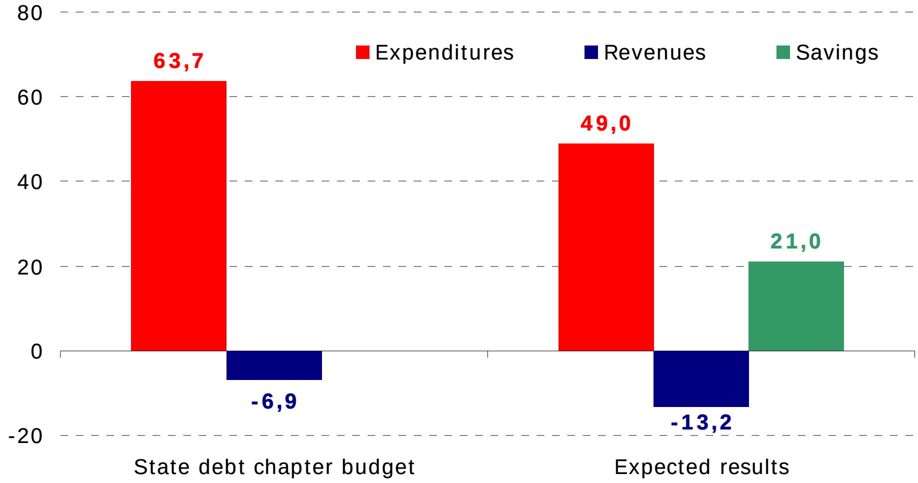
Significant **savings on net expenditures on state debt service** are expected at the level of almost **CZK 21 billion** in 2010 as compared to the budgeted amount of CZK 56.8 billion. These expenditures are to reach expected amount of CZK 35.9 billion which is almost 1% of GDP or 3.1% of expected total budget expenditures. This savings contributed to a better than expected government sector budget result. As compared to 2009, the costs will be reduced by approx. 19.3%.

Extraordinary savings result from a drop in both yields across the whole Czech government bonds yield curve in absolute terms, decline and stabilization of the Czech Republic credit spread relative to most European Union member states as compared to 2009.

International trustworthiness of the Czech Republic stems mainly from an on-going consolidation program of the coalition government and planned concept of structural reforms which is reflected in a significant decrease of budget deficits, net borrowing requirements and net issues of government bonds in medium-term outlook.

Expected savings in 2010 as compared to the budgeted revenues and expenditures stem from an increase in revenues by CZK 6.3 billion and a decrease in expenditures of CZK 14.6 billion.

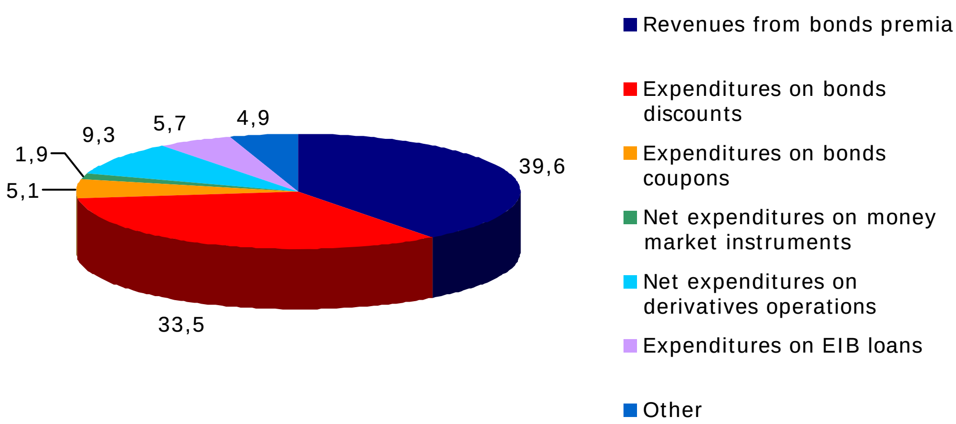
Figure 7: Expected savings of net expenditures on state debt service in 2010 (CZK billion)



Source: Ministry of Finance

Composition of expected state debt costs savings as to a source of savings is shown on a following figure. Clearly the major share of savings will be achieved through increased revenue from issue premia on government bonds and decreased expenditures on medium-term and long-term government bonds discounts which altogether accounts for almost three quarters of total expected savings of costs on state debt. This source of savings is logical since issues of these bonds are executed by re-openings of current issues which results in positive price changes when yields move down, not changes in coupons which are mostly (90%) fixed.

Figure 8: Sources of savings on net expenditures on state debt service in 2010 (v %)

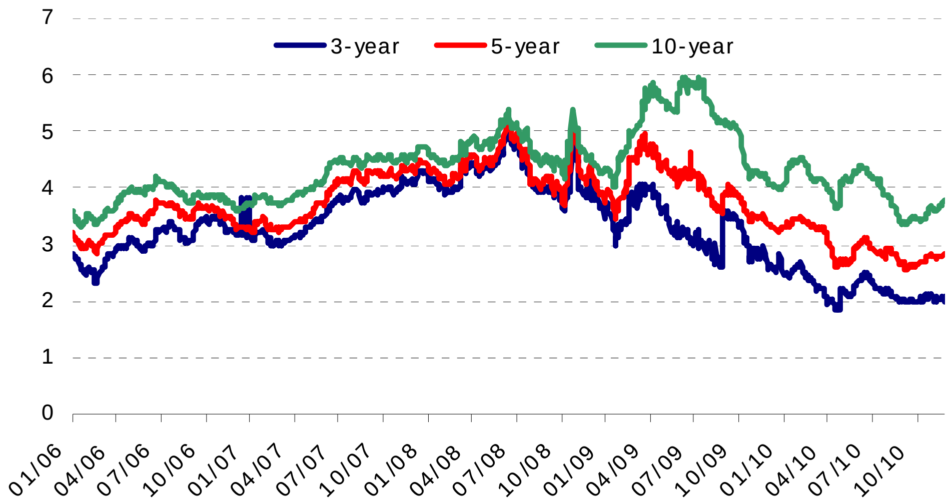


Source: Ministry of Finance

Savings were also achieved on all floating-rate instruments of the state debt, particularly floating legs of currency swaps that were executed as a hedge against foreign exchange risk thus making them synthetically floating-rate CZK instruments. Significant savings were also achieved on loans from the European Investment Bank that are usually floating-rated. A moderate savings were achieved on net expenditures on money market instruments despite the fact that actual revenues from investing of balance of summary account of the State Treasury were below those that were budgeted and in spite of a planned net increase in money market instruments at the level of CZK 25 billion as a source of financing of government borrowing requirement this year.

Decrease of costs on state debt service in 2010 was mainly caused by the Czech government bonds yield curve drop related to a reform effort of the Czech government in the area of public finance consolidation and overall decline in yields on the capital markets. Due to a drop in the Czech government bond yields in 2010 the Ministry reached an average weighted yield of CZK medium-term and long-term bonds sold via domestic auctions at the level of **3.32%** which is by full 1.16 percentage points lower than in 2009.

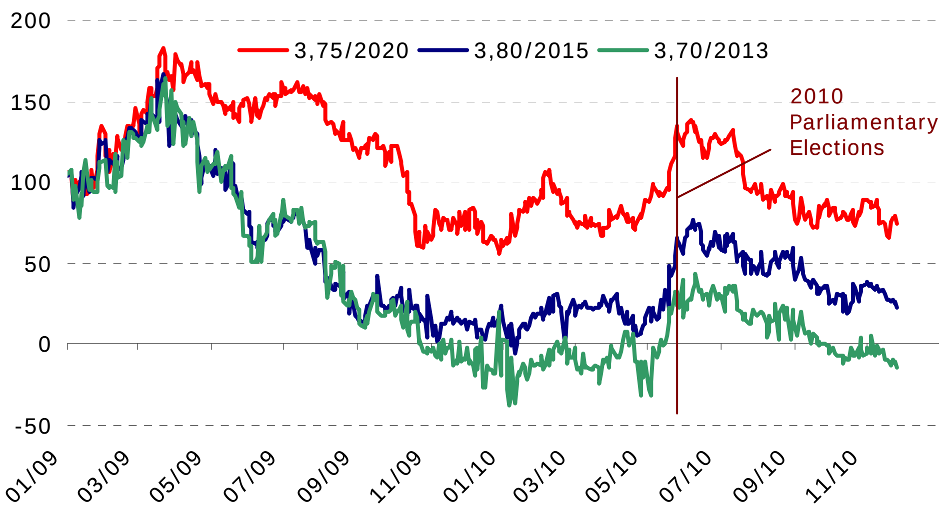
Figure 9: Development of yields on the Czech government bonds during 2006 to 2010 (%)



Source: Reuters

A drop in the Czech government bond yields in 2010 was caused partly by an overall decline of yields on the capital markets, incl. swap curve. However, a significant role was played by the program of fiscal consolidation launched by a new government that was highly praised by the markets after the 2010 parliamentary elections and was manifested in a drop of the credit spread that can be approximated by the asset swap spread (ASW).

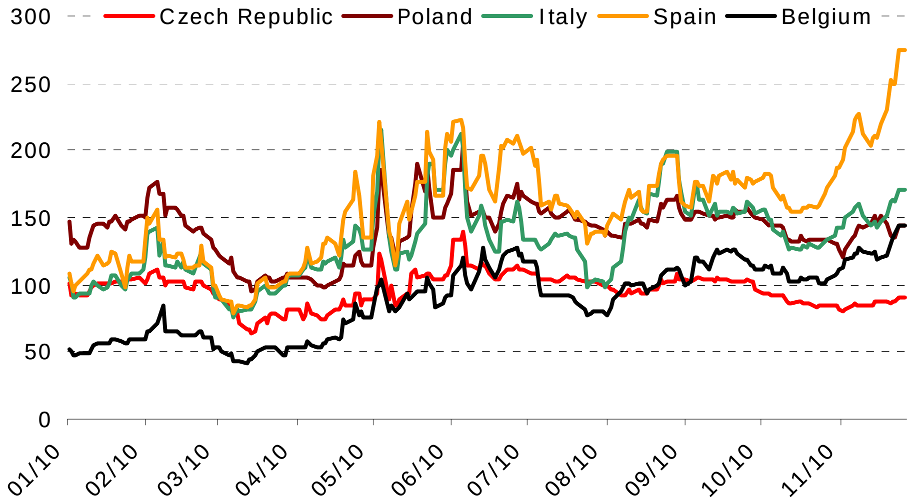
Figure 10: Development of asset swap spread on the Czech government bonds during 2009 to 2010 (bps)



Source: Reuters

Trustworthiness of the Czech Republic as a reliable borrower and government bonds issuer is manifested also by a development on the credit default swap (CDS) markets where investors are able to hedge against sovereign risk of the Czech Republic on more favourable conditions than that of several eurozone countries and countries with a better credit rating such as Italy, Spain and Belgium. A comparison with a regional peer Poland is also more favourable.

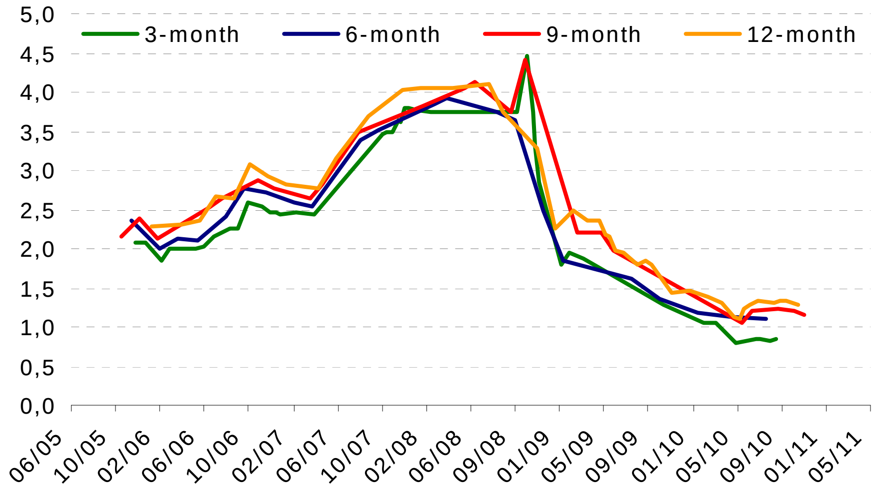
Figure 11: Development on the 10-year credit default swap (CDS) in 2010 (bps)



Source: Reuters

A significant drop in yields could be observed also in Treasury bills auctions which further contributed to the decline in interest costs on the state debt in 2010. Average auction yield of Treasury bills reached **1.14%** which is by full 0.82 percentage points lower than in 2009.

Figure 12: Development of Treasury bills yields during 2006 to 2010 (%)



Source: Ministry of Finance

4 – Funding programme for 2011

Implementation of the funding programme in 2010

The basis for defining the funding programme for 2010 is the implementation of the 2009 funding programme plan. At CZK 251.6 billion the gross borrowing requirement was CZK 28.4 billion lower than planned. This change is mainly due to the reduction in the government's net borrowing requirement and the Ministry's decision not to perform any buy-backs in 2010.

Table 6: Funding programme for 2011

CZK billion	Plan as of 3rd December 2009	Expectation as of 2nd December 2010
The government´s gross borrowing requirements	**280.0**	**251.6**
Issuance of medium-term and long-term bonds [1]	**242.3 to 292.3**	**216.2**
Issuance of medium-term and long-term on the domestic market	102.3 to 292.3	167.0
Issuance of medium-term and long-term on the foreign markets	0.0 to 140.0	49.2
Loans from EIB	**12.7**	**10.4**
Net issue in money market instruments	**-25.0 to 25.0**	**25.0**
Net borrowings from State Treasury	**0.0**	**0.0**

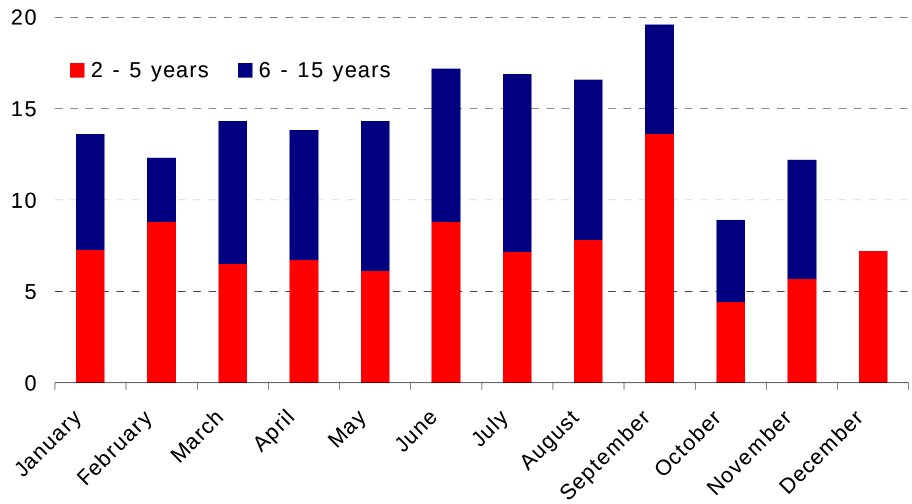
[1]*including direct sales from own portfolio on the secondary market and to the European Investment Bank*

Source: Ministry of Finance

Almost 20% of the government's gross borrowing requirement was covered by the fifth issue of Eurobonds worth € 2 billion in September, which thus made it possible to reduce the supply of medium-term and long-term Czech CZK government bonds on the domestic market during the rest of 2010 by cutting back on issuance activity in the 4th quarter of 2010.

Twenty-three auctions were executed on the domestic market from January to November, and another auction is scheduled for December. The estimated amount of bonds sold through the auctions during the year is **CZK 158.5 billion**. Direct sales to the European Investment Bank amounted to CZK 5 billion and CZK 3.5 billion were sold on the secondary market. The Ministry has almost not carried out any sale on the secondary bond market during this year.

Figure 13: Supply of medium-term and long-term bonds in 2010 (CZK billion)



* *according to the date of the primary auction or sale on the secondary market and to the European Investment bank*
Source: Ministry of Finance, Czech National Bank

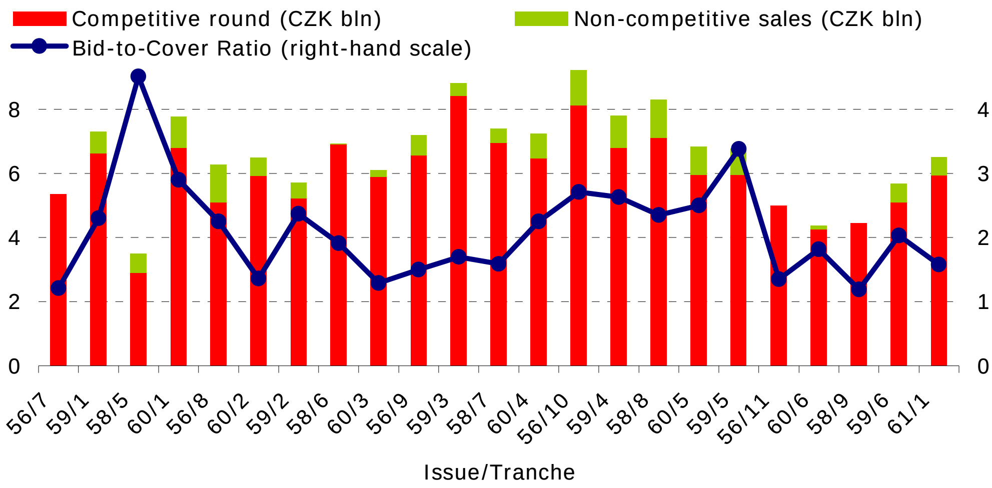
The volume of medium-term and long-term bonds issued on the domestic market by the end of the year is estimated to reach a total volume of **CZK 167 billion**, i.e. approx. 57% of the upper limit set in the funding programme for 2010. All the medium-term and long-term bonds issued in 2010 were fixed-rate instruments. Part of the sales in the amount of CZK 2.1 billion was also purchased for nuclear investment portfolio.

Total CZK nominal amount of medium-term and long-term government bonds sold on the both domestic and foreign financial markets is expected at the level of **CZK 216.2 billion** and will not reach even the lower band of the range planned in 2009.

Starting in the 4th quarter of 2010 the Ministry reverted to the standard practice of staging domestic auctions in indicated volumes. The Ministry will go ahead with this transparent conduct on the primary market in the future as well, but it retains the option of departing from the indicated volumes in the event of non-standard conditions on the capital markets or other special circumstances. Possible ways for the Ministry to respond more flexibly to the level of demand or the auction price will be defined in connection with the planned new rules linked to the implementation of an electronic platform for trading on the secondary market.

During the year 2010, it was possible to observe relatively stable demand for medium-term and long-term bonds in domestic auctions as well as the ratio of total demand to accepted bids (Bid-to-Cover-Ratio).

Figure 14: Primary auctions of medium-term and long-term bonds in 2010 (CZK billion)



Source: Ministry of Finance, Czech National Bank

The net issuance of money market instruments in the form of Treasury bills will be implemented at the upper limit of **CZK 25.0 billion** for the whole year of 2010; i.e. these instruments will cover approximately 10 % of the annual government's gross borrowing requirement.

Loans from the European Investment Bank at the level of **CZK 10.4 billion** will be slightly lower than the anticipated volume, securing approx. 4 % of the annual government's gross borrowing requirement.

Funding programme for 2011

The funding programme for 2011 is based on the planned gross government borrowing requirement of **CZK 219.5 billion** and is adapted to the situation of the diminishing borrowing requirement in the years 2011 to 2013 in an environment of falling yields and, above all, relatively low yields at the short end of the yield curve.

Foreign market financing will aggregate at most 40 % of the planned annual gross government borrowing requirement.

In 2011 the Ministry will analyse the current development of the financing conditions on the domestic and foreign markets and will operate within the framework of the given plan, while respecting market developments. The Ministry's goal is to carry out at least one public benchmark issue of Eurobonds during the year. While taking a prudent approach to currency risk management and taking into account the global limit for currency exposure, foreign operations are not constrained by any explicit limits. The euro remains the preferred currency for foreign issues.

CZK 5.5 billion of the borrowing requirement will be covered by long-term CZK loans from the European Investment Bank.

The drawing of these long-term loans intended solely for infrastructure projects is conditional on the relevant acts being passed by the Parliament of the Czech Republic. The use of the loan finances is strictly tied to specific investment projects and programmes and, as in previous years, is explicitly factored into the draft state budget for 2011. The individual loan contracts offer both a broad range of maturities from 3 to 40 years and the option of choosing between fixed and variable interest rates. The European Investment Bank's unique status on the financial market means that the rates offered are more advantageous than purely market rates. The value of loans drawn from the European Investment Bank is expected to fall in 2012 and 2013 to CZK 3.5 billion and CZK 1.2 billion, respectively.

The value of the medium-term and long-term CZK government bonds issued on the domestic market will not exceed CZK 194 billion.

This maximum value will be achieved if no public or non-public foreign issues are executed during the year of 2011. Given the planned gross borrowing requirement, the supply of medium-term and long-term government bonds will thus in any case be lower than in 2010; this should help stabilise the domestic market.

The timing of auctions of medium-term and long-term bonds on the domestic market will be governed by the indicative auctions plan, which is scheduled to relatively balanced distribution of domestic issues redemption segments of 3-6 years and 10-13 years, with **at least 30 % of the volume issued on domestic market will consist of variable rate bonds**.

Instruments and indicated volume of each auction will be published quarterly at the beginning of each month preceding a given quarter.

Figure 7: Indicative schedule of auctions of medium-term and long-term bonds in 2011

2011	Auction date (dd.mm.yyyy)	Issue date (dd.mm.yyyy)	Additional auctions[1] (dd.mm.yyyy)	Issue date (dd.mm.yyyy)
1st Quarter	12.01.2011	17.01.2011	16.02.2011	21.02.2011
	26.01.2011	31.01.2011	16.03.2011	21.03.2011
	09.02.2011	14.02.2011		
	23.02.2011	28.02.2011		
	09.03.2011	14.03.2011		
	23.03.2011	28.03.2011		
2nd Quarter	06.04.2011	11.04.2011	30.03.2011	04.04.2011
	13.04.2011	18.04.2011	04.05.2011	09.05.2011
	27.04.2011	02.05.2011	18.05.2011	23.05.2011
	11.05.2011	16.05.2011		
	25.05.2011	30.05.2011		
	08.06.2011	13.06.2011		
	22.06.2011	27.06.2011		
3rd Quarter	20.07.2011	25.07.2011	14.09.2011	19.09.2011
	10.08.2011	15.08.2011		
	07.09.2011	12.09.2011		
	21.09.2011	26.09.2011		
4th Quarter	19.10.2011	24.10.2011	05.10.2011	10.10.2011
	02.11.2011	07.11.2011	26.10.2011	31.10.2011
	16.11.2011	21.11.2011	14.12.2011	19.12.2011
	30.11.2011	05.12.2011		
	07.12.2011	12.12.2011		

[1] *possible extension of issuance plan of CZK medium-term and long-term bonds provided that foreign issue will not be executed in the expected volume or in case of occurrence of other special circumstances*

Source: Ministry of Finance

The Ministry will offer fixed-rate and floating-rate government bonds for sale in 2011.

As to the fixed-rate bonds the Ministry will continue to sell government bond 5.70/2024 up to the maximum remaining issue limit of CZK 32 billion and CZK 25-40 billion worth of government bond 3.85/2021. The Ministry is also planning to launch a new issue of a three-year fixed-rate bond totalling CZK 30-40 billion. Also, the government bond 4.00/2017 will be re-opened up to an additional volume of CZK 30 billion.

As to the floating-rate notes the Ministry is planning to launch a new issue of VAR/2023 with an annual coupon tied to the 12M PRIBOR rate in a volume of CZK 15-30 billion. Also floating rate bond VAR/2016 will be re-opened up to an additional volume of CZK 30 billion.

Figure 8: Issuance strategy of medium-term and long-term bonds in 2010 (CZK billion)

Domestic Issue	Outstanding volume as of 31th December 2010	Issue limit	Planned supply in 2011
62. Issue, x.xx/2014	0.0	50	30 - 40
55. Issue, VAR/2016	50.1	80	10 - 30
51. Issue, 4.00/2017	59.2	95	10 - 30
63. Issue, VAR/2023	0.0	100	15 - 30
61. Issue, 3.85/2021	6.5	120	25 - 40
58. Issue, 5.70/2024	58.2	90	15 -30
Retail bonds, 1 - 6 years	0.0	-	0 - 10
Foreign Issue			**Planned Sale 2011**
€ Eurobond, 11 - 20 years	-	-	Benchmark volume
Other currencies, 6 - 30 years	-	-	0 - 30

Source: Ministry of Finance

Part of the issued volume of medium-term and long-term bonds through domestic auctions will be carried out by the final sale of bonds from the Ministry's own portfolio. For this purpose the Ministry plans to use **VAR/2016**, **4,00/2017** and **5,70/2024** bonds in 2011. The notes and bonds in the Ministry's own portfolio can be also used for repo operations or direct sales to the European Investment Bank.

Figure 9: Ministry's own portfolio (CZK billion)

Issue	ISIN	Expected portfolio as of 31st December 2010
54th Issue, 4.10/2011	CZ0001002158	4.202
50th Issue, 3.55/2012	CZ0001001887	4.335
57th Issue, VAR/2012	CZ0001002505	3.000
55th Issue, VAR/2016	**CZ0001002331**	**11.893**
51st Issue, 4,00/2017	**CZ0001001903**	**10.135**
52nd Issue, 4.70/2022	CZ0001001945	3.374
58th Issue, 5.70/2024	**CZ0001002547**	**3.000**
53rd Issue, 4.85/2057	CZ0001002059	13.240
EUR VAR/2015	XS0453511577	€ 37.510 million

Source: Ministry of Finance

The Ministry does not plan any direct secondary sales of CZK bonds from its own portfolio till the implementation of the MTS electronic trading platform with regard to setting new rules of secondary market functioning.

In 2011 the Ministry will not open foreign currency denominated bond issues on the domestic market and will not re-open a special issue of variable-rate euro-denominated note issued in 2009. **Sale of the rest of this issue from the Ministry's own portfolio will be conducted on 5th January 2011**. Given the low volume, an auction will not be conducted at the Czech National Bank but the sale will be executed via Reuters Dealing platform at <MFCR>. The rest of the issue will be offered in full amount while the Primary dealers will be asked to deliver their prices.

Maximum of CZK 16 billion worth of medium-term and long-term government CZK bonds will be sold to the European Investment Bank.

Part of the sale of medium-term and long-term CZK bonds takes place within the framework of cooperation with the European Investment Bank. This cooperation has taken place since 2009 in the form of sales of government bonds to the European Investment Bank's portfolio as "hold-to-maturity". This is a less legislatively demanding equivalent to direct loans. The Ministry played a major role in preparing this mechanism, which is very innovative from the perspective of the European Investment Bank and the Czech Republic was the first country to apply it to specific projects. For example, the Ministry currently uses this mechanism to generate funding for clearing up the damage caused by floods in 2009 and 2010.

An interest retrocession corresponding to the rates offered by the European Investment Bank is applied to every sale at market price. Savings of approximately CZK 227 million were achieved in 2010 on sales of bonds with a total nominal value of CZK 5 billion. Each sale was and will continue to be published on the Ministry's web site within five days after settlement.

Depending on state budget expenditure on the given programmes the Ministry plans to sell to the European Investment Bank bonds with a nominal value of up to 16 billion in 2011. This quantity is included in the item entitled gross issuance of government bonds. The Ministry is currently not negotiating further loan contracts and any cooperation with the European Investment Bank related to the funding of transport infrastructure or water management programmes will take place through the direct sale of bonds to the European Investment Bank's portfolio.

In 2011 the Ministry will manage the volume of money market instruments when financing the government's long-term liabilities in a way ensuring the short-term state debt continues to be kept below the 20% limit during 2011.

The projection of the debt portfolio structure as of the end of 2011 shows that staying within the limit for the short-term state debt indicator (debt with a maturity of up to one year) requires that money market instruments account for approximately 10% of the debt portfolio. The funding programme envisages an increase of up to CZK 40 billion of money market instruments in circulation in order to make use of the relatively low yields at the short end of the yield curve. Even if this maximum increase is effected, the aforementioned refinancing risk limit will be kept by the given planned borrowing requirement.

The volumes are defined with regard to the planned net change in money market instruments of CZK 30 billion in 2011. Should it be necessary to increase the net change in money market instruments to the maximum of CZK 40 billion, this increase can be attained by increasing the volumes of bonds issued in auctions or adding an additional auction.

Table 10: Indicative plan of Treasury bills auctions in 2011

2011	Auction Date (dd.mm.yyyy)	Issue Date (dd.mm.yyyy)
1st Quarter	13.01.2011	14.01.2011
	27.01.2011	28.01.2011
	03.02.2011	04.02.2011
	10.02.2011	11.02.2011
	24.02.2011	25.02.2011
	03.03.2011	04.03.2011
	10.03.2011	11.03.2011
	17.03.2011	18.03.2011
2nd Quarter	31.03.2011	01.04.2011
	07.04.2011	08.04.2011
	28.04.2011	29.04.2011
	05.05.2011	06.05.2011
	12.05.2011	13.05.2011
	26.05.2011	27.05.2011
	02.06.2011	03.06.2011
	09.06.2011	10.06.2011
	23.06.2011	24.06.2011
3rd Quarter	30.06.2011	01.07.2011
	14.07.2011	15.07.2011
	04.08.2011	05.08.2011
	25.08.2011	26.08.2011
	01.09.2011	02.09.2011
	15.09.2011	16.09.2011
	29.09.2011	30.09.2011
4th Quarter	06.10.2011	07.10.2011
	13.10.2011	14.10.2011
	03.11.2011	04.11.2011
	10.11.2011	11.11.2011
	24.11.2011	25.11.2011
	01.12.2011	02.12.2011
	15.12.2011	16.12.2011

Source: Ministry of Finance

Treasury bills with standardised maturities of 3, 6, 9 and 12 months will again be issued in 2011. The Ministry may also introduce a 1-month maturity in the event of adverse developments on the market.

Table 11: Planned Treasury bills auction volumes in 2011 (CZK billion)

Issue	3-month	6-month	9-month	12-month	Total
Issues maturing in 2011	39	11	-	-	**50**
Issues maturing in 2012	19	19	43	62	**143**
Gross issues	*58*	*30*	*43*	*62*	***193***
Redemptions on 2010 Issues	0	8	27	78	**113**
Net issues	*19*	*11*	*16*	*-16*	***30***

Source: Ministry of Finance

The programme for funding the government's gross borrowing requirement in 2011 is defined on the basis of the structure and scope of the aforementioned limits. This programme determines the planned structure of the debt portfolio and thereby unequivocally defines the boundaries within which the state debt management will operate.

Table 12: Financial program for 2011 (CZK billion)

Central government gross borrowing requirement	**219,5**
Direct loans from international financial institutions	**5,5**
Loans from the European Investment Bank	5,5
Other	0,0
Medium-term and long-term government bonds issues[1]	**174,0 až 194,0**
Medium-term and long-term government bonds issues on the domestic market	86,0 až 194,0
Medium-term and long-term government bonds issues on the foreign markets	0,0 až 88,0
Net change in money market instruments in circulation	**20,0 až 40,0**

[1]*including direct secondary market sales and sales to the European Investment Bank*

Source: Ministry of Finance

5 – Management of liquidity and financial assets

Act No. 218/2000, on the budgetary rules and on the amendment of certain related acts, created the Summary Account for the management of finances administered to the State Treasury. This account encompasses the state budget revenue and expenditure accounts, state financial assets accounts, the Treasury liquidity management account, the tax and customs offices accounts, the accounts of the reserve funds of organisational components of the state and the accounts of the cultural and social needs funds of organisational components of the state.

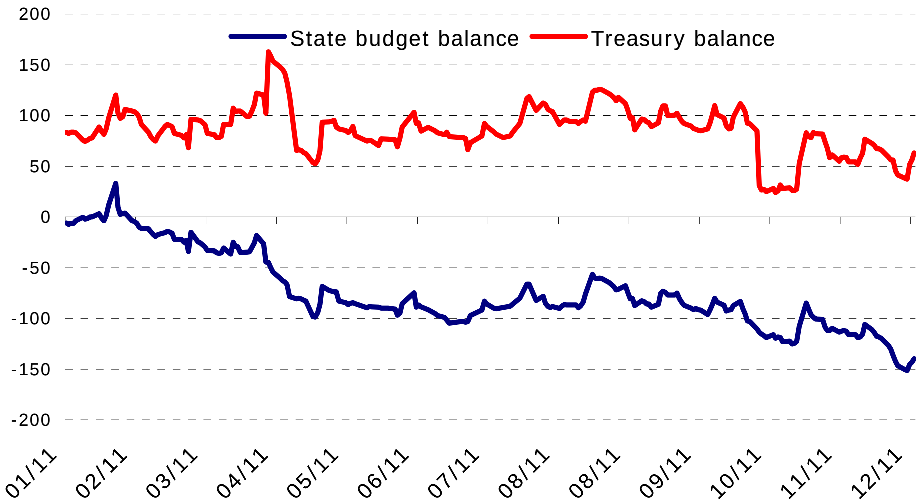
The introduction of the Summary Account for the management of finances administered to the State Treasury made it possible to bring into play the balances on the state financial assets accounts, tax and customs offices accounts, the accounts of the reserve funds of organisational components of the state and the accounts of the cultural and social needs funds of organisational components of the state in the funding of the state budget during the current year.

The liquidity of the Treasury Summary Account is managed mostly in the form of repo operations; these are short-term investments that mature within 14 days and use Czech National Bank bills and Treasury bills as collateral. In addition, short-term investments are performed in the form of depo operations due the following working day. Loans in the form of repo and depo operations are effected in the event of short-term shortages of funds.

In the event of an unforeseen deterioration of the state budget balance or adverse developments on the financial markets Treasury bills are issued to the Ministry's own portfolio; these can be used as collateral for loans in the form of repo operations. A loan may be drawn from the National Property Fund during 2011 if necessary. That will help to decrease the liquidity risks of the state as well as to give better precision to borrowing operations planning during the year with positive impact on interest costs.

The development of the Treasury balance is influenced by all its components, but most of all by the development of the state budget balance, the execution of bond issues to cover the state budget deficit and redemptions on the state debt. The effective management of Treasury liquidity is based on forecasts of all the Treasury components, including the state budget balance. The forecast for the development of the Treasury balance and the state budget balance for 2011 was made on the basis of the latest available data.

Figure 15: Daily prediction of the state budget balance and the Treasury balance in 2011 (CZK billion)



Source: Ministry of Finance

6 – Management of risks and the portfolio strategy

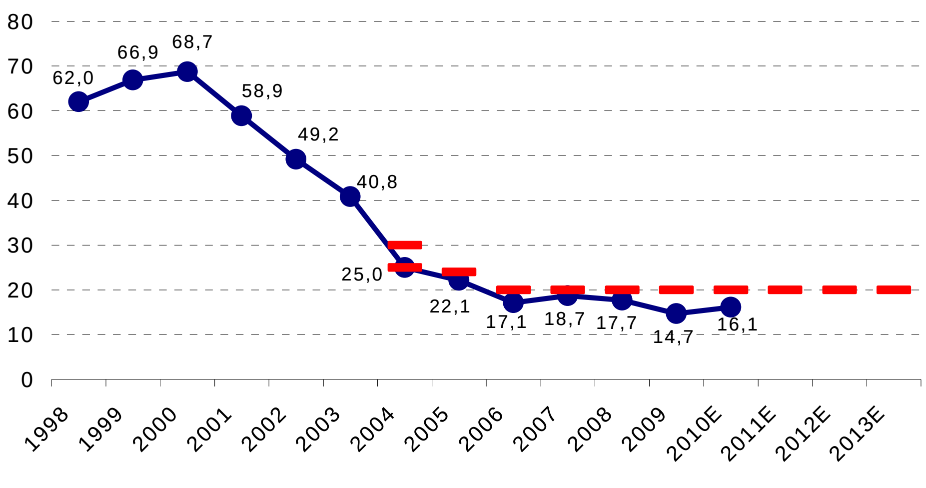
Publicly defining the strategic benchmark debt portfolio by declaring strategic targets is the principal means for increasing the transparency of the Ministry's debt portfolio in line with international best practice. Targets are set on the basis of the requirements ensuing from a prudent approach to managing financial and credit risks whilst minimizing economic costs in the long-term horizon. Refinancing, interest rate and currency risks are the main risks the debt portfolio is exposed to in the long term. **All the targets and limits specified below are applied to the portfolio of the state debt as a whole, i.e. including derivatives operations.** Starting in 2011 the Ministry will begin monitoring and managing the state assets portfolio in terms of market risks. State financial assets are included in net state debt portfolio.

Refinancing risk

The stabilisation of refinancing risk is the key factor in the Ministry's planning of bond issues. Since 2004, the **share of short-term state debt** (i.e. debt with a maturity of up to one year as a proportion of total debt) has been the key indicator that the Ministry targets in this context. The Ministry has met the target every year since 2004. Since 2006 the Ministry has applied a long-term target limit of 20%, which conforms to international best practice and respects the estimated absorption capacity of the domestic money market.

In line with the long-term strategy, in 2011 the ceiling of **20% of the total state debt** remains the fundamental limit on the Ministry's issuance activity and on the management of the financial risks of the Ministry's debt portfolio. The expected value of this indicator will be around 16.2% at the end of 2010. In the longer term the Ministry is planning to gradually increase the share of short-term state debt up to the 20% ceiling. The gradual increase in money market instruments in circulation up to CZK 40 billion in 2011 is also consistent with this gradual increase in the share of short-term state debt. The increase in money market instruments in circulation will also continue in the following years until the indicator nears the ceiling.

Figure 16: Short-term state debt in 1998 to 2013 (share on total debt in %)

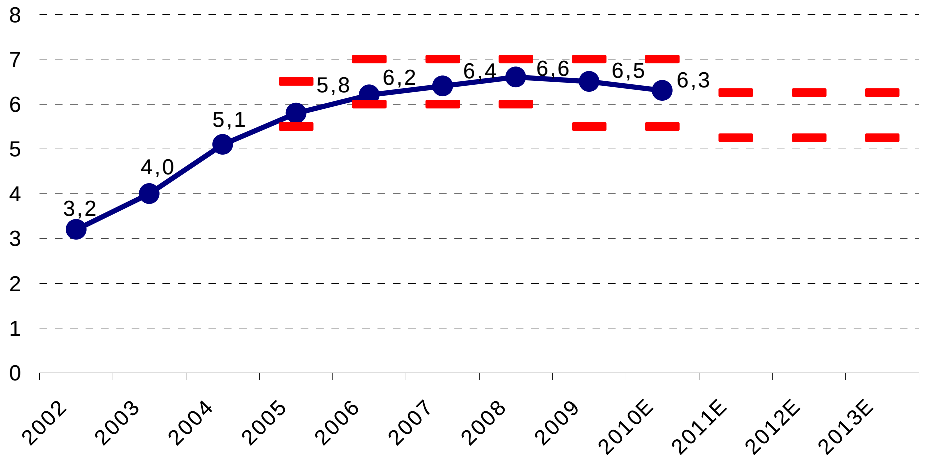


Source: Ministry of Finance

Another indicator used in managing refinancing risk is the **state debt's annual time to maturity**. The Ministry first announced an explicit target for this indicator for the year 2005. The declared targets were met every year. In the years 2005 to 2008 the target bracket was 1 year: in 2005 it was 5.5 to 6.5 years; for the years 2006 to 2008 this target bracket was shifted upwards by half a year to 6.0 to 7.0 years. For 2009 and 2010 the Ministry widened the target bracket downwards by half a year to 5.5 to 7.0 years. This widening downwards was linked partly to the considerable uncertainty on the capital markets ensuing from the global financial crisis and partly to the uncertainty of the domestic political scene.

For 2011 the Ministry is changing the target bracket for the average maturity of the state debt to **5.25 to 6.25 years**. The Ministry is thus narrowing the target bracket from the one in 2010 and shifting it downwards. The narrowing and down-shifting of the target bracket stems from the Czech Republic's increased credibility as a result of stable government and consequently also the lower refinancing risk. Achieving this target determines the timing and volume structure of government bond issues on the domestic and foreign markets and the repayment calendars for loans drawn from the European Investment Bank.

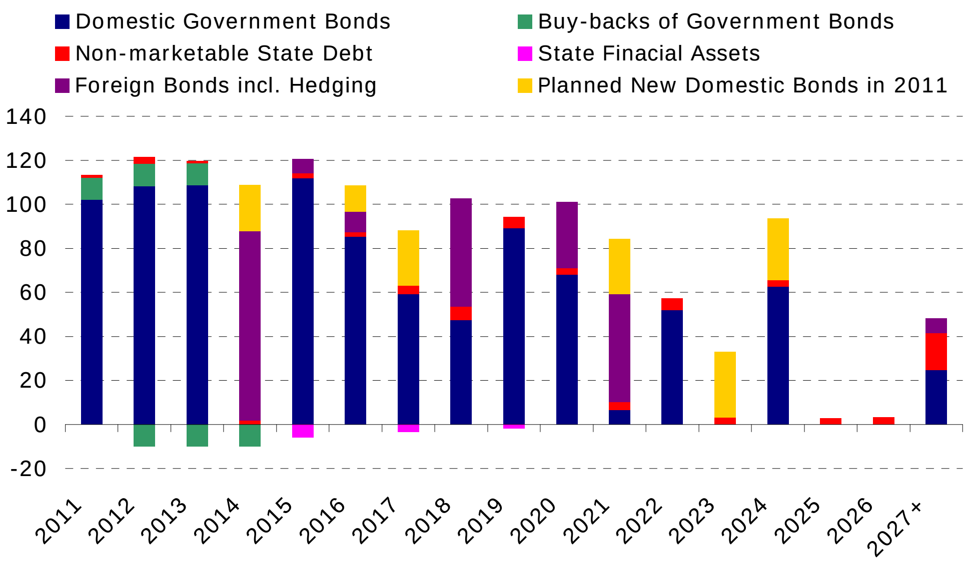
Figure 17: Average time to maturity of state debt and announced targets in 2002 to 2013



Source: Ministry of Finance

New issues of government bonds and the drawing of long-term EIB loans will continue to be managed in line with progress in achieving the key goal of **stabilising and smoothing the maturity profile of the state debt over time**, which has been pursued and planned on an integrated basis since 2005. The following figure also shows planned buy-backs in the years 2011 to 2013. In the medium-term outlook the annual repayments on state liabilities will not exceed CZK 110 billion.

Figure 18: Expected maturity profile of state debt and state financial assets as of the end 2011



Note: Excluding money market instruments on the debt and assets side. The positive vertical scale shows liabilities, the negative vertical scale shows state financial assets and for 2011 – 2013 planned buy-backs. Profile does not include the impact of planned retail government bonds with maturities between 2012 and 2017.

Source: Ministry of Finance

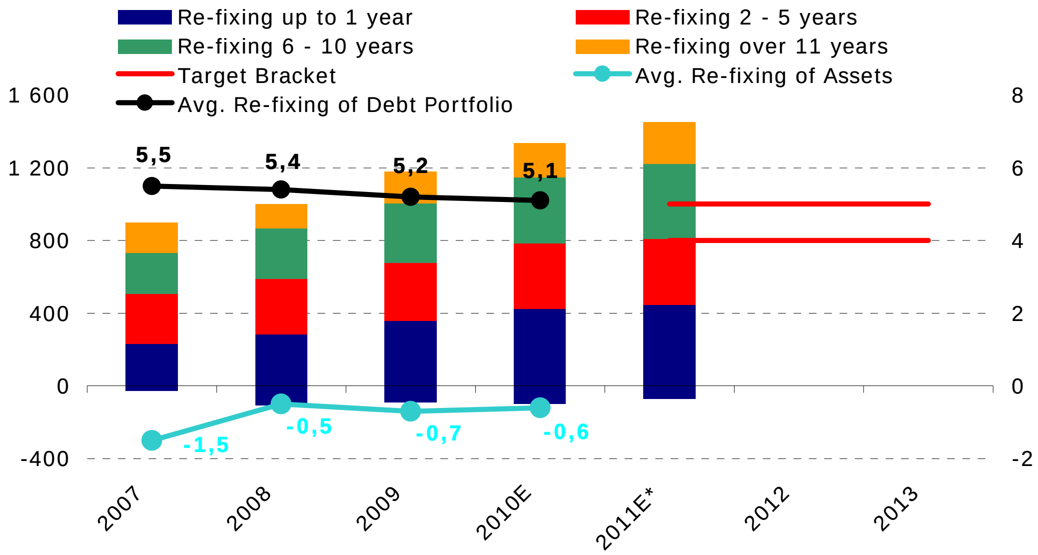
Interest rate risk

Interest rate risk remains the most important market risk for the management of the state debt. Starting in 2011 the Ministry is declaring a new strategic goal for market debt management – **the average time to state debt re-fixing**. For 2011, and for the longer-term horizon as well, the Ministry has set an explicit target of a **4-5 year interval** for this indicator. The target is set in line with international practice in respect of optimising the costs of state debt and the risks ensuing from re-fixing rates.

The primary tool used in complying with this limit will be issuance activity, e.g. issues of variable-rate bonds. However, the Ministry is also prepared to act to ensure this target is met by performing derivatives operations. The introduction of the target of 4-5 years for the average time to re-fixing of the state debt is also reducing the average time to state debt re-fixing compared to previous years. As a result of the introduction of this target the costs of the state debt will on average be generated at the shorter end of the yield curve than hitherto was the case; for this reason the Ministry expects relative savings to be made on the interest costs of the state debt in the longer term.

The degree of success in achieving these savings will be assessed on a relative basis, both against the budgeted balance of the state debt heading and against the benchmark portfolio, which will be replicated synthetically on the basis of fixed-rate bonds with the target average time to maturity.

Figure 19: Re-fixing of state debt and state financial assets in 2007 to 2013

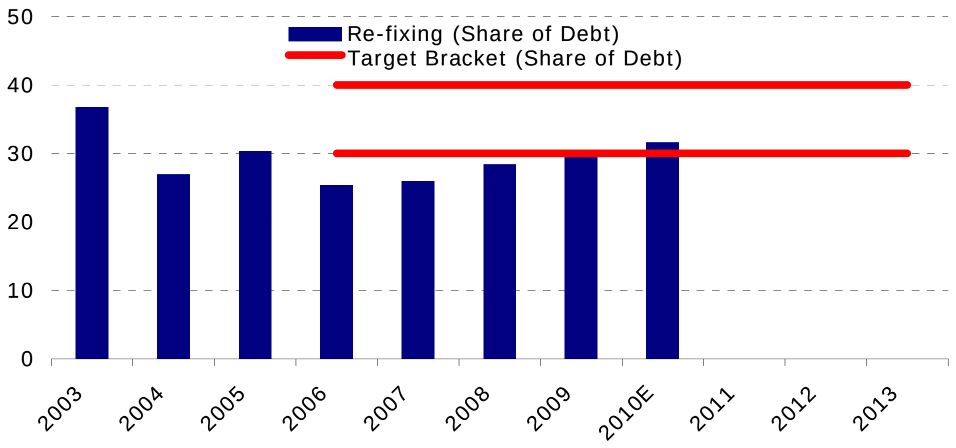


Note: On the positive vertical scale the debt portfolio is shown, on the negative vertical scale the state financial assets portfolio is shown. The unit of primary vertical scale is CZK billion and the unit of secondary vertical scale is year. At the end of 2011, the re-fixing profile based on the planned issuance activities for 2011 is shown.

Source: Ministry of Finance

Since 2006 the Ministry has also set a strategic target for the **interest rate re-fixing of the debt portfolio up to 1 year**, i.e. the proportion of the debt that is sensitive to interest rate fluctuations on the financial market in the following year. For 2011 the Ministry is retaining the target bracket of **30% to 40% of total state debt**, with the figure likely to be in the upper half of this interval. This target is consistent with the introduction of the 4-5 year interval for the average re-fixing target and will lead to the same results for the state debt portfolio. This target bracket was not achieved until 2009. In 2010 the indicator remains above its lower limit, with the year-end value expected to be at 31.6%.

Figure 20: Interest rate re-fixing of state debt portfolio up to one year and medium-term target in 2003 to 2013 (%)



Source: Ministry of Finance

The Ministry also monitors the development of the basic risk figures and the yield of state investment assets including on-lending. The fall in the indicators is caused primarily by the increasing volume of finances on the pension account, which is invested only to money market instruments with maturity up to one year.

Table 13: Risk figures and yield of state investment assets incl. on-lending in 2007 to 2010

Figure	2007	2008	2009	2010
Average yield (%)	3.8	2.9	2.1	1.9
Average maturity (years)	5.1	2.0	1.9	1.7
Modified duration (years)	4.2	1.8	1.7	1.6

Source: Ministry of Finance

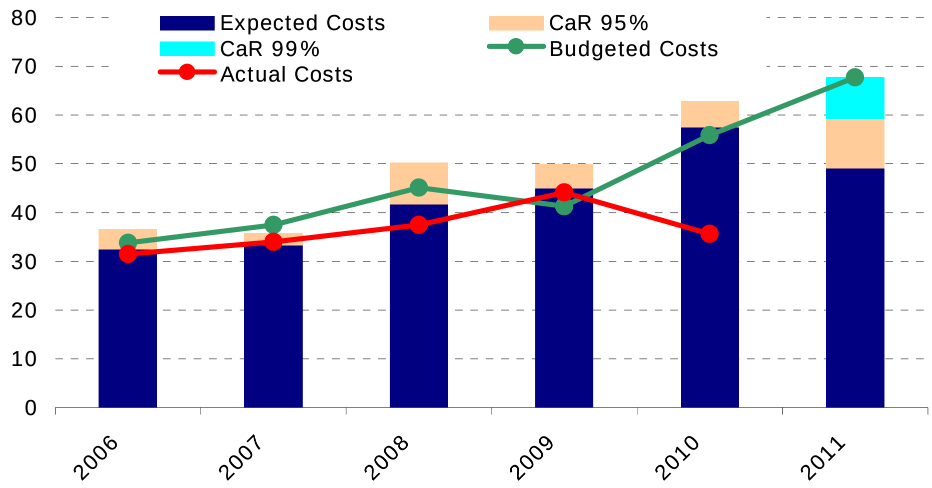
Cost-at-Risk of the state debt

Since 2005 the Ministry has applied a more sophisticated model framework when measuring and managing interest rate risk, namely **Cost-at-Risk** (**CaR**), which is based on the VaR methodology and simulates future expected and maximum interest costs at a given risk level that is derived from the volatility of the time structure of interest rates. The yield curve is the stochastic element in the CaR model; the deterministic element is the development of the state debt portfolio, which is based on the financing of the government's borrowing requirement in a way ensuring that all the strategic targets of risk management are met.

The model's primary objective is to define the maximum costs of the state debt which will not be exceeded with a 95% probability. The model's secondary goal is to predict the actual interest costs of the state debt. The model works with **the net interest costs of the state debt**. Compared to the net expenditure of the state debt, the net interest costs do not include fees, which are deterministic.

Figure 21 shows a comparison of the CaR of the state debt and expected and budgeted interest costs with actual interest costs, in the years 2006 to 2010 the model achieved the primary target, i.e. the maximum costs were not overstepped in any year during that period. From 2006 to 2009 the model also achieved the secondary target and correctly predicted actual interest costs, which were with the exception of 2009 lower than budgeted costs.

Figure 21: Net interest costs and Cost at Risk in 2006 to 2011 (CZK billion)



Source: Ministry of Finance

In 2010 the expected actual net interest costs on the state debt will reach CZK 35.6 billion, whereby the costs predicted by the model were CZK 57.5 billion and budgeted costs were CZK 55.5 billion. The model's primary goal was therefore achieved. The expected value of interest costs differs from the expected value of actual costs, however. This difference is mainly the consequence of the substantial fall in the Czech government bond yield curve (the model reckoned growth), which pushed down the interest costs of the floating-rate debt. This fall in interest costs was also supported by an increase in the auction premiums of re-opened issues (CZK 9.5 billion). Another significant factor contributing to the average overstatement of actual costs was the very unbalanced issuance activity in Treasury bills and medium-term and long-term bonds in 2010 (the model reckoned with evenly spread issuance activity). The last factor driving the reduction in actual costs has been the end of the political instability in the country and the fall in the Czech Republic's credit spread (the model reckoned with the credit spread at the level of that in the year 2009, i.e. substantially higher.

Cost-at-Risk of the state debt for 2011

For the year 2011 the Ministry replaced the existing model used to simulate yield curves with a model that is far more sophisticated and closer in line with reality. The principal and fundamental change is that the entire observable yield curve is now modelled, whereas in the past only the unobservable instantaneous spot interest rate was modelled and the yield curve was then construed from this single value. Another very advantageous feature of the new model is that it does not underestimate volatility at the longer end of the yield curve. The model used to simulate yield curves was first defined and described in *Yacine-Ait Sahalia, Testing Continuous Time Models of the Spot Interest Rate, The Review of Financial Studies, 9, 2, 385-426,1996*. The model is again characterised by "mean reversion", i.e. the expected rates converge to their equilibrium value. The model is modified by the Ministry to match the specifics of the less liquid Czech government bond market. The model's parameters are estimated from historical daily observations of the Czech government bond yield curve starting on 25th August 2000. Ten thousand daily simulations of the interest rate, dating from 9th November 2010 to 31st December 2011, are performed for each of the required maturities.

For 2011 the Ministry is introducing a new **CaR 99%**, i.e. a ceiling that state debt interest costs will not exceed with a 99% probability. **CaR 95%** is retained. The Ministry moved to introduce the CaR 99% because of the growing credit risks in the Eurozone, which could ultimately make interest rates more volatile. Conservatively set state budget of state debt chapter is therefore linked to the CaR 99%.

Table 14 shows the expected net interest costs on the state debt in 2011 as at each month's end. The table also includes the relevant critical values of CaR 95% and CaR 99%. The expected interest costs of the state debt portfolio for 2011 are **CZK 49.1 billion**. Cost-at-risk, i.e. absolute CaR 95%, is **CZK 59.2 billion** and CaR 99% **CZK 67.8 billion**. The actual interest costs will therefore not exceed expected costs by more than CZK 10.1 billion with a 95% probability and will not exceed expected costs by CZK 18.7 billion with a 99% probability.

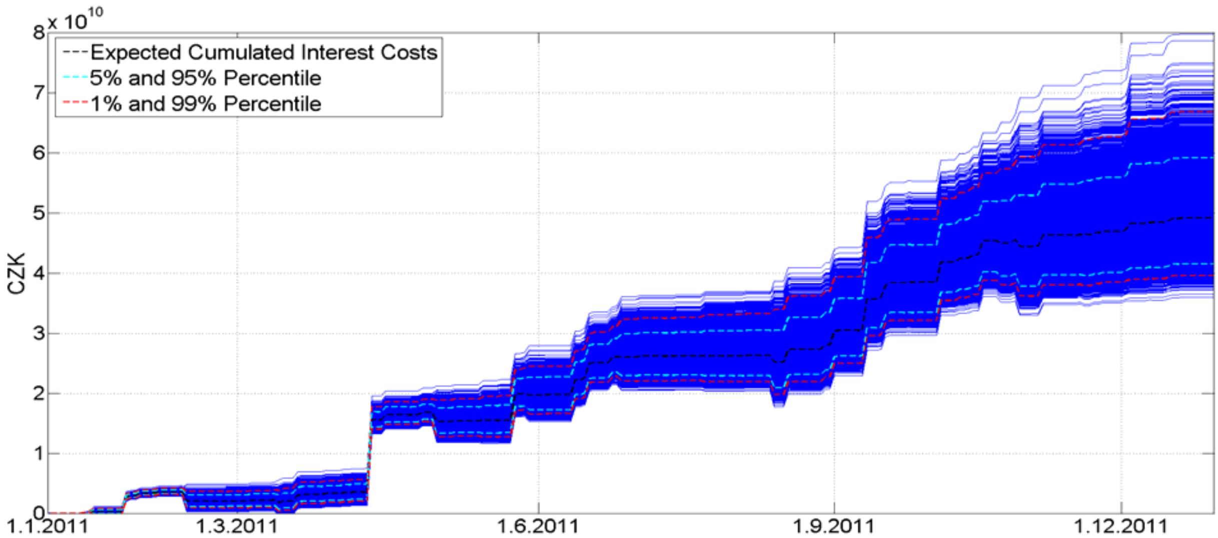
Table 14: Development of cumulative net interest costs in 2010 (CZK billion)

Month of the year 2011	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
Expected value	3.3	2.0	3.3	16.8	19.7	26.0	26.2	28.1	38.4	44.4	46.9	49.1
Absolute CaR 95%	3.7	3.1	4.6	18.2	22.6	29.9	30.4	33.4	44.6	52.9	55.9	59.2
Absolute CaR 99%	3.9	3.6	5.4	19.0	24.5	32.3	33.1	36.9	48.9	59.3	62.6	67.8

Source: Ministry of Finance

Figure 22 gives a graphic representation of the simulation of cumulative state debt costs in 2011 calculated on a daily basis. The figure also shows the expected costs and the relevant 5% and 95%, and 1% and 99% quantiles of the simulated values.

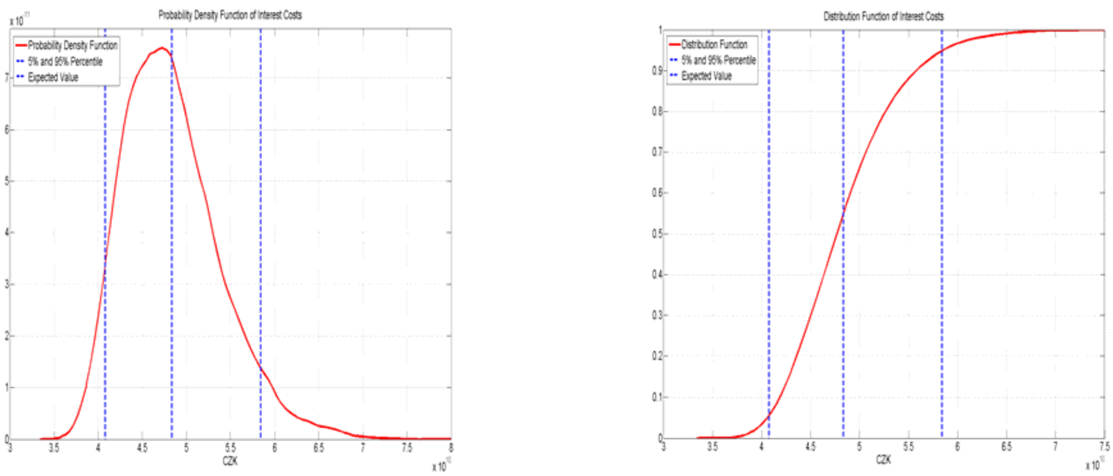
Figure 22: Simulation of net interest costs of state debt during 2011



Source: Ministry of Finance

The probability distribution of the state debt interest costs as of the end of 2011, described in terms of the probability density and distribution function of costs, is shown in Figure 23.

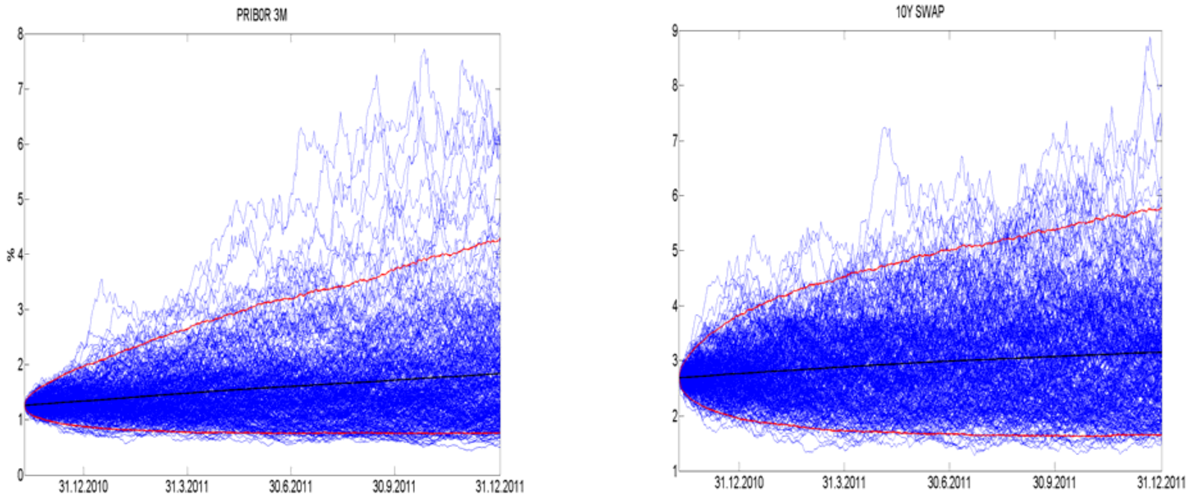
Figure 23: The probability distribution of the state debt interest costs as of the end of 2011



Source: Ministry of Finance

Simulations of the yield curve generated by the model form an input for the calculation of interest costs. The following figure presents a simulation of expected points on the yield curve, i.e. 3M PRIBOR and 10Y SWAP rates.

Figure 24: Daily simulations of Czech interest rates in 2011 as of 9th November 2010



Source: Ministry of Finance

Currency risk

Currency risk is another market risk the state debt portfolio is exposed to. From 2011 onwards the Ministry will not only monitor this risk: it will actively manage it as well. The key indicator the Ministry will use to manage this risk is **the proportion of total state debt accounted for by foreign-currency debt**. The strategic limit declared by the Ministry for 2011 and beyond is **15% + 2 percentage points**. Accordingly, in the short term the maximum share of the total state debt represented by foreign-currency debt is 17%. This limit, however, is only applied to the short-term bridging of a sudden depreciation of the domestic currency, i.e. long-term overstepping of the 15% limit is not possible.

The foreign-currency debt's share on total state debt has risen to 9.7%, which is also the expected value as of the end of 2010.

Table 15: Share of debt's foreign-currency exposure denominated in euro relative to total foreign-currency exposure (in %)

Year	2005	2006	2007	2008	2009	2010
Foreign-currency state debt	0.1	0.7	0.6	4.6	8.6	9.7
Share € on foreign-currency state debt	79.5	5.9	6.2	85.5	85.0	83.0

Source: Ministry of Finance

The Ministry also monitors the state debt's foreign-currency exposure denominated in euro relative to total foreign-currency exposure. This ratio is shown in the Table 15. The euro became the dominant currency in the overall foreign-currency exposure in 2009. This trend is also apparent in 2010, when the share of overall foreign-currency exposure represented by euro-denominated foreign-currency exposure is expected to reach 83%. In the long term the Ministry does not envisage any significant change in the relative shares of currencies in the state debt's foreign-currency exposure.

7 – Technical and institutional goals of debt management

A – Development of the government bonds market through MTS

An effective and transparent domestic government bonds market is a necessary condition for the state's issuance activity and for ensuring smooth funding in the long term. In view of the fact that approximately 80% of the state debt is funded on the domestic market, transparent bond price formation on the secondary market is also an important factor determining the interest costs of servicing the debt and the future tax burden.

> **Supporting and developing the institutional framework for an effective secondary market is thus one of the implicit key goals of state debt management in all developed countries.**

A transparent and functional secondary market is a necessary condition for supporting market liquidity and it also increases the probability of broadening a pool of investors interested in CZK government bonds, because the market liquidity is one of the key factors influencing foreign investors' decisions.

The secondary government bonds market in the Czech Republic does not practically exist compared to the situation in more developed European Union countries. This is partly a consequence of the financial crisis and partly a consequence of an institutional framework lacking credibility and transparency. Changing this adverse state of affairs is dependent on several closely related fundamental factors:

(1) the implementation and operation of a standardised national electronic platform for government bonds trading and price formation on the secondary market;

(2) the rules of conduct of participants in the primary and secondary markets;

(3) the Ministry's rules of conduct on the primary and secondary markets;

(4) transparent evaluation of the performance of participants in the primary and secondary markets and a clearly defined motivation scheme.

The absence of a unified national electronic platform for the secondary government bonds market is the main obstacle standing in the way of achieving the stated implicit goal of state debt management and it complicates the standardisation of trading relationships between the Ministry in the role of a key national issuer and the individual market participants.

> **The Ministry has identified the implementation of the MTS platform for government bonds trading on the domestic secondary market as its key technical strategic goal for 2011.**

This goal is the upshot of analysis work, comparisons with the current international best practice and an agreement with the existing primary dealers of the Czech government bonds. Achieving this goal will also make it possible to enlarge the set of direct participants to include non-Czech domestic market markers.

This solution is the most effective way to stabilise and standardise the domestic market environment and to integrate it into the pan-European electronic trading system for government bonds and other related instruments.

The system also enables incontestable real-time monitoring of the conduct of market participants and compliance with the defined rules as a basis for the subsequent evaluation of their performance and performance bonus entitlement. The **MTS (*Mercato Telematico Secondario*)** is currently implemented under the patronage of national debt managers and ministries of finance in 13 European Union countries and Israel and is used by all significant global and European financial institutions, which are also the Ministry's counterparties in financial operations.

Figure 25: MTS platform in the European Union countries in 2010

Source: Ministry of Finance, MTS Group

The technical and organisational solution for implementing MTS in the Czech Republic will be determined by agreement between the Ministry, the Czech National Bank and the existing, or possibly also potential future primary dealers – the market makers.

The most effective alternative in terms of cost and implementation time has currently proved to be the founding of a separate Czech market bond division of the central London-based EuroMTS Ltd., which will provide the necessary infrastructure. This division will be managed by representatives of the Ministry along with representatives of primary dealers through an established **MTS Management Committee**, which will completely supersede the Czech Bond Dealers Club as the guarantor of the Czech bonds market. This committee's principal task will be to implement, update and monitor the market rules on:

(1) the conditions governing membership of the trading system and the group of primary dealers;

(2) the criteria for benchmark bonds;

(3) market makers' quoting obligations;

(4) on how transactions are settled;

(5) the code of conduct for primary dealers and other members of the system;

(6) monitoring of the market conduct of primary dealers, the Ministry and other members.

With the implementation of MTS, a standardised structure of primary dealers will be defined, leading to substantial modifications of the present rules for selling government bonds. Membership of the MTS system and active secondary market making according to defined rules will be one of the main conditions for inclusion in the group of primary dealers that will operate as **market makers** and will have exclusive access to primary auctions of government bonds and the Ministry's operations on the secondary market such as buy-backs, switches, direct secondary sales, lending facility or repo operations. Active market making on the secondary market will be rewarded according to a new price motivation structure for bond purchases in primary auctions.

Market makers will also be the Ministry's preferred counterparties for public foreign issues, private placements and derivatives operations. Market makers will also have the exclusive right to take part in regular meetings with Ministry representatives, on a quarterly basis at least, and to participate *inter alia* in preparing government bond issuance calendars and proposing alternative instruments for funding the government's borrowing requirements.

Besides market makers, **market takers** will also be permitted, i.e. mainly participants in the secondary MTS market in the role of recipients of bond prices and buyers of government bonds in primary auctions through market makers.

The new rules will also categorically define the Ministry's conduct on the secondary government bonds market in a way ensuring the absolute transparency of operations both ex ante and ex post. The new rules will also govern the Ministry's conduct in primary auctions in a way ensuring that, in the existing conditions of uncertainty on financial markets, the issuer will have greater flexibility in responding to the level of demand and the relative development of prices, based on clearly defined quantitative criteria and limits.

In connection with the implementation of MTS and the definition of the rules of conduct applying to the Ministry, market makers and market takers on the primary and secondary markets in government bonds, there will also be a major overhaul of the **methodology for regular evaluation of the performance and activity of the individual participants**. This methodology will be put in place after mutual discussion and the quantitative criteria and calculation methodology will be available to all participants in the system. Their performance and activity will be evaluated on a monthly basis.

The Ministry declared the evaluation of the performance of direct participants in the primary and secondary government bonds markets on 1st December 2005 in the Funding and Debt Management Strategy for 2006 and formalised further in *The Principles of Cooperation and Evaluation of the Activity of Primary Dealers of Czech Government Bonds*, which was published in the Financial Bulletin no. 11-12 on 15th December 2006.

Based on an index of overall performance, an ordered list of 5 best-rated institutions is published quarterly. The rating is based on four basic groups: *A. Primary domestic government bonds market* with a weight of 50%; *B. Secondary domestic government bonds market* with a weight of 15%; *C. Secondary NewEuroMTS Eurobonds market* with a weight of 15%; and *D. Operations on the secondary market with the Ministry* with a weight of 20%. Each group comprises quantitative evaluation criteria.

The calculation methodology and mathematical construction of the individual criteria have not been published by the Ministry. The absence of an electronic platform for the secondary market means that the group B evaluation depends on primary dealers' regular reports about their secondary market activity. The Ministry has no way of reliably verifying the information sent in and the market makers' obligation laid down in Section 6 (3) (d) of the rules for primary sale of medium-term and long-term government bonds, for example, cannot be monitored and evaluated at all in practice.

The new evaluation methodology will be based on three groups: **A. Primary market**, **B. Secondary market** and **C. Other activities**. The strengthening of the secondary market's importance will also be supported by lessening the differences between the weightings of groups A and B, active market makers will be evaluated relative to performance in primary auctions of government bonds. The quantitative criteria for group B will be based mainly on the available statistical and monitoring tools of the MTS system.

> **1st July 2011 is the target date for the launch of the MTS electronic secondary market and the effective date of the new rules governing the primary and secondary government bonds markets.**

B – Retail government bonds

The structure of the Czech Republic's state debt in terms of its holders is characterised by a low proportion by global standards of households and non-profit organisations. This discrepancy stems from the hitherto concentration of the state's issuance activity on the domestic market on the institutional sector of financial institutions and from the absence of a government bond product with typically retail characteristics. Such products are utterly standard in a number of developed countries, for example Canada, Germany, Austria the United States of America, Sweden or Hungary and Poland.

Table 16: The structure of CZK government bonds holders in 2001 to 2010 (%)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Households and non-profits	1,3	0,2	0,1	0,2	0,3	0,3	0,3	1,4	1,4	1,2
Domestic financial institutions	89,1	92,2	90,7	85,5	82,2	81,3	80,6	82,4	82,4	77,1
Foreign institutions	8,1	6,5	7,9	13,4	16,3	17,0	17,4	13,4	13,4	16,6
Other institutions	1,5	1,2	1,3	0,9	1,2	1,5	1,7	2,7	2,7	5,2

Source: Central Securities Depository, Prague Securities Centre, Ministry of Finance

The Minister of Finance therefore decided to recommence the preparations for a system of direct sales of government bonds to households and non-profit organisations and its implementation during 2011, with full-scale operation expected in 2012. The Ministry's goal is to offer the first series of these bonds in the second half of 2011 with a view to testing small investors' demand for these bonds and testing the technical functionality of the selected distribution channels.

A consistent long-term retail bond programme will thus be planned within the Funding and Debt Management Strategy for 2012. Sales of these bonds in 2011 are not expected to exceed CZK 10 billion and therefore not to impact on issuance and risk parameters of the Funding and Debt Management Strategy for 2011.

The long-term objectives of including retail bonds among the permanent state funding instruments are:

(1) presenting an opportunity for safe and advantageous investments in the state debt for the segment of households and non-profit organisations and diversifying the investor base;

(2) strengthening the government's fiscal responsibility through a direct financial relationship between citizens' assets and the state's liabilities as a counterbalance to the existing tax relationship;

(3) expanding the range of products available for capital pillar of pension saving scheme in line with the proposed reform of the pension system.

The decreasing central government's gross borrowing requirement in the medium-term outlook can easily be covered through the existing funding channels; the intention to offer retail government bonds is therefore not driven by a shortage of other funds.

The basic framework of the implementation project that will be launched at the beginning of 2011 can be defined in the following areas.

Technical and operational area

The Ministry will open a separate set of records of book-entered government retail bonds on the basis of Section 35 (1) (d) of Act No. 218/2000, on the budgetary rules. These records will be opened and maintained in the **Central Securities Depository** ("CSD"), which will ensure the functionality and operation for the Ministry, which is a standard participant in the CSD, by expanding the existing client services. In this context the Ministry will lay down **Operational Rules** for the separate records. These records will be kept strictly separate from existing operations the Ministry performs in the CSD when managing the state debt. This will ensure that the administration of clients' special accounts comprising solely by retail government bonds is completely transparent.

Distribution infrastructure and promotion

Functioning distribution channels for retail government bonds are a key component of the sale system. The Ministry is planning **to use the widest possible distribution infrastructure available to ensure the highest long-term efficiency of the whole system**.

The distribution network can thus involve participants of the CSD, who dispose of technical instruments for communication with CSD systems and can therefore access the retail government bonds records. The direct participants in primary auctions of government bonds are concerned, nevertheless, the Ministry is going to offer cooperation also to other nonbank financial institutions, which perform client asset management and are able to widen their sale capacity. Agreements between the Ministry and CSD participants on the sale of retail government bonds will be concluded bilaterally, including commercial terms and conditions. The CSD participants the Ministry concludes this agreement with will be able to provide the full service associated with opening an account in the separate records, providing statements from this account, settling purchases and sales of retail government bonds, handling inheritance proceedings etc. for any retail client.

At the same time the Ministry will also analyze the possibilities of using alternative distribution channels, particularly the **CzechPoint** network of contact points and **electronic distribution**.

Indicative conditions of retail government bonds

The issue terms and financial details will be specified in cooperation with the institutions that will according to the agreement with the Ministry ensure the distribution and in close coordination with the Czech National Bank. The Ministry assumes to offer two basic types of bonds according to the maturity; first type with 1 – 2 years and the second with 5 – 6 years maturity.

Development and possible broadening of the offer by additional types of retail bonds will be based on target group of holders' response, on analysis of holders' preferences and in accord with current market development in future years.

Table 17: Indicative conditions of retail government bonds

	Type A	Type B
Maturity	1 - 2 years	5 - 6 years
Listed on Prague Stock Exchange	NO	NO
Unrestricted third party assignment	NO	NO
Face value per item	CZK 1	CZK 1
Minimum amount per purchase order	CZK 1,000	CZK 1,000
Maximum amount per purchase order	Unrestricted	Unrestricted
Prepayment by holder	NO	After 1 year
Maximum prepayment amount per person and period (month/quarter)	-	YES (to be set)
Coupon type	Discount	Declared fixed or variable rate
Coupon payment	Maturity date	a) Date of coupon payment or prepayment b) Reinvestment
Reinvestment of Coupon	NO	YES
Reinvestment of Principal	YES	YES
Tax preference	NO	NO
Charges for asset account opening and administration and for transactions	NO	NO
Purchase order acceptance	30 - 60 days before issue date	30 - 60 days before issue date or date of coupon payment

Source: Ministry of Finance

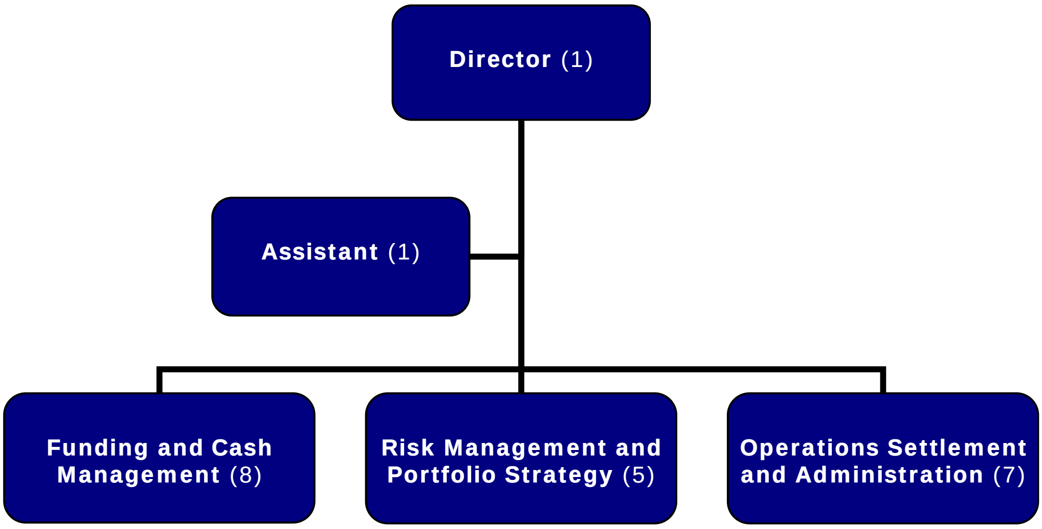
C – New organisational arrangement of state debt management

The state debt and financial assets management department ("Department") is an integral part of the Ministry of Finance's organisational structure without any formally defined autonomy. A similar institutional arrangement can be found in Italy, Japan, Canada, Poland, Slovenia and Spain, for example. In Australia, Belgium, the Netherlands and New Zealand state debt and liquidity are managed through debt agencies, but these also formally remain part of the finance ministry's organisational structure.

The department was established in the existing structure by decision of the minister of finance as of 1st October 2005 based on the recommendation of an external organisational, functional, personnel and information audit in the Public Budgets Section. In connection with the gradual expansion of new activities and financial operations in line with international best practice and the completion of the implementation of the WallStreet Suite (formerly Trema Suite) information system this arrangement proved ineffective and also unsuitable for the planned further developments in this area.

The minister of finance therefore decided on a new organisational structure as of 1st January 2011 as part of the process of making the management of the state debt more effective. The new organisational structure is consistent with the recommendations of international financial institutions (International Monetary Fund, World Bank, OECD) and is currently applied both in developed countries and in developing countries that have implemented standard capacities for the management of state debt, financial assets and Treasury liquidity on the basis of project consultancy. This form of organisation is typical regardless of whether the functions of state debt management are classified as an integral part of the finance ministry or as separate agencies or offices.

Figure 26: New structure of the state debt and financial assets management department



Source: Ministry of Finance

The reorganisation is a starting point for more effective distribution of existing activities and concentration of closely related agendas in the implementation and subsequent administration of operations connected to the funding of the state and the management of state financial assets. The principal objective of the reorganisation is to achieve a clear division of the functions and responsibilities of individual staff members within the framework of the traditional workflow of Front Office (F/O) – Middle Office (M/O) – Back Office (B/O) that is characteristic of financial market operations regardless of whether they are linked to the management of state assets, Treasury liquidity or management of the state debt or other liabilities of the state.

The change in the organisational structure also creates a unified output point (B/O) for the related process of operations accounting, which is handled by another department of the ministry. The clear delegation of the roles of individual employees and department managers also makes it possible to manage operational risks more effectively and perform regular process checks and will simplify the process of internal and external audit of financial operations.

Since the department handles standard operations on the financial market and bank transactions, this structure also tallies with the practice of bank institutions and large corporations. A similar structure can be found in central banks for the area of management of state foreign exchange reserves and other financial operations of central banks, including the Czech National Bank.

The new organisational structure also puts in place a transparent user structure for the WallStreet Suite financial information system employed; its modularity and access rights are fully consistent with international practice and with the nature of the banking and financial market operations performed by the state and the handling of the related workflow (F/O – M/O – B/O). After the change in the organisational structure department managers will also be categorically and indubitably responsible for the operation and development of these three basic system modules; this will help make the administration of the information system more effective in its existing state and in connection with the planned re-definition and development of the project for the Treasury integrated information system.

Funding and Cash Management (F/O) will be responsible for the execution of all operations on the primary and secondary markets; it handles domestic issues and auctions of government bonds, public issues on the foreign market, private placements of government bonds, derivatives operations, repo and depo operations when managing Treasury liquidity, investment operations when administering the assigned portfolios, direct loans from international institutions and direct sales of bonds to the European Investment Bank. It also handles the primary communication with financial market participants and institutional and retail investors and also with the Czech National Bank, with which it cooperates primarily when organizing auctions of government bonds, managing Treasury liquidity and developing the primary and secondary government bond markets in the Czech Republic.

Risk Management and Portfolio Strategy (M/O) will be responsible for devising the state funding strategy and the integrated management of the state debt portfolio and state financial assets. It measures and manages financial and credit risks related to the integrated portfolio, sets limits for them and monitors compliance. It analyses alternative funding strategies in terms of the relationship between the expected costs and risks and ensures the optimization of state funding at minimal cost at a given level of risk. It models yield curves, performs quantitative financial research and provides comprehensive systemic support for the performance and subsequent settlement of operations within the department.

Operations Settlement and Administration (B/O) will be responsible for verifying, settling and archiving financial operations performed in the F/O department; it handles all payment operations and administration of bank accounts, timely payouts of coupons and repayments on the state debt and other cash flows associated with the operation of the department; it sees to the comprehensive administration of the State Debt and State Financial Assets Operations budget headings and prepares the related budgetary documentation; it prepares materials for financial operations accounting; it performs statistical work and record-keeping and takes part in the administration of state receivables.

Starting on 1st January 2011 the department will have an internationally standardised and recognised organisational structure that is also flexible enough to allow it to take on the management of other financial assets or liabilities of the state financial balance sheet in future and sufficiently flexible from the point of view of the development of functions of the budgetary payments system in the context of the Treasury project and from the point of view of the implementation and operation of sales of retail government bonds.

D – Financial Research: Benchmark Yield Curve

Ministry initiated the study of internal benchmark government bond yield curve in 2010. Starting construction of the curve was the application of the **Svensson model** that describes, according to the Ministry, Czech government bond market the best. The model is in line with practice in developed financial markets. The yield curve finds application wherever it is needed to determine a theoretical price of a bond, i.e. for example when setting the coupon rate of new bond issues in primary auctions, determining the price for buy-backs, switches and operations of the Ministry on the secondary bond market.

Another important use of benchmark yield curve is determination of the market yield of non-conforming retail government bonds.

The Czech yield curve of government bonds is not directly observable in the market. As a model closest to Czech bond market, Svensson model was chosen (see Svensson, Lars, E.O: *Estimating and Interpreting Forward Interest Rates*: Sweden 1992-1994, Working Paper No. 4871). This is a parametric model that extends the Nelson and Siegel model by another two parameters. With added parameters, the model describes the shape of the yield curve better and is still robust to outliers.

The zero-coupon or spot rates are described by following parametric function:

$$i(m;b) = \beta_0 + \beta_1 \frac{1-\exp\left(-\frac{m}{\tau_1}\right)}{\frac{m}{\tau_1}} + \beta_2 \left[\frac{1-\exp\left(-\frac{m}{\tau_1}\right)}{\frac{m}{\tau_1}} - \exp\left(-\frac{m}{\tau_1}\right)\right] + \beta_3 \left[\frac{1-\exp\left(-\frac{m}{\tau_2}\right)}{\frac{m}{\tau_2}} - \exp\left(-\frac{m}{\tau_2}\right)\right],$$

where m is the time to maturity and b=(β0,β1,β2,β3,τ1,τ2) is vector of parameters. The parameters can be estimated by minimizing the difference between the theoretical and observed yields to maturity of coupon bonds, i.e. between $\hat{Y}_i(b)$ and Y_i:

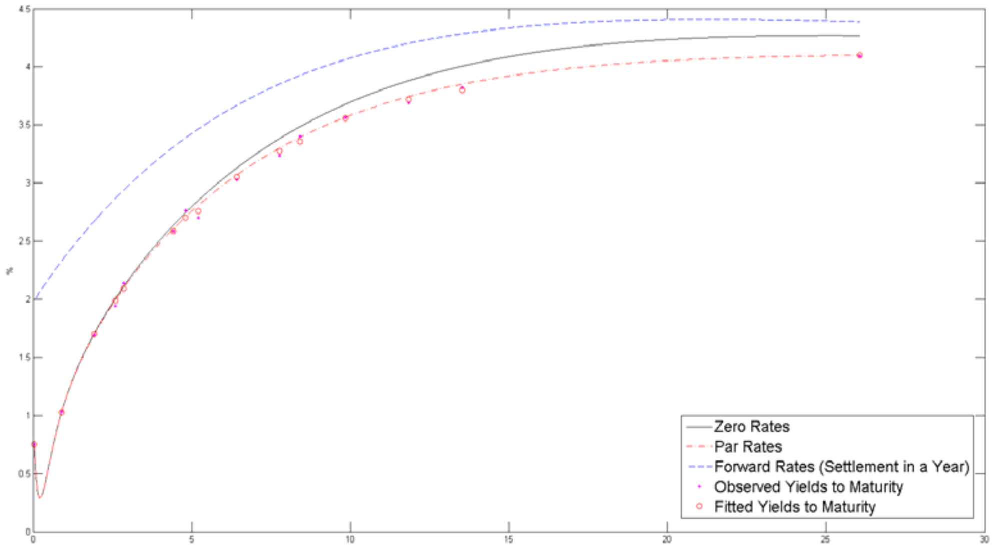
$$b = \arg\min_b \sum_{i=1}^{N} \left[\hat{Y}_i(b) - Y_i\right]^2 .$$

Having estimated spot (zero-coupon) rates, par (coupon) and forward rates can be easily determined. Application of the Svensson model provides get zero-coupon yield curve first. Then coupon and forward (arbitrary settlement) yield curves are provided which are based on zero-coupon yield curve.

The Czech government bond coupon yield curve as of 11th November 2010 is shown in following figure. The figure further shows the zero-coupon yield curve and the forward yield curve with settlement in one year. The observed market yields of Czech government bonds and corresponding estimated yields and are also shown in the figure.

Measures of estimation quality takes very low values (square root mean squared error of yields equals to 0.0329, square root mean squared error of prices equals to 0.1905 and mean absolute error of yields is equal to 0.0626). The resulting estimate errors are consistent with errors in the estimation showed by Svensson. The model gives a very accurate yield curve, which is also sufficiently smooth.

Figure 27: Estimate of zero-coupon, coupon and forward yield curve of the Czech government bonds as of 11th November 2010



Source: Ministry of Finance

The table shows the Czech government bonds used for estimation of yield curves together with their bid price on 11th November 2010 at approximately 12:00 CET. Erste Bank bid quotes are primarily used since trade is executable at that price.

Table 18: Prices of Czech government bonds as of 11th November 2010 used for yield curves estimation

Bond	Maturity date (dd.mm.yyyy)	Coupon	Price
4.10/2011	11.04.2011	4.10	101.26
6.55/2011	05.10.2011	6.55	104.90
3.55/2012	18.10.2012	3.55	103.50
3.70/2013	16.06.2013	3.70	104.40
2.80/2013	16.09.2013	2.80	101.80
3.80/2015	11.04.2015	3.80	105.00
3.40/2015	01.09.2015	3.40	102.80
6.95/2016	26.01.2016	6.95	120.35
4.00/2017	11.04.2017	4.00	105.55
4.60/2018	18.08.2018	4.60	109.20
5.00/2019	11.04.2019	5.00	111.50
3.75/2020	12.09.2020	3.75	101.50
4.70/2022	12.09.2022	4.70	109.50
5.70/2024	25.05.2024	5.70	119.50
4.20/2036	04.12.2036	4.20	101.65

Source: Bloomberg

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This publication was prepared on the basis of information available as of 30 November 2010. The Ministry reserves the right to respond flexibly in the course of 2011 and with the help of its instruments to the actual development of the gross borrowing requirement of the government in the area of the state budget, extra-budgetary funds, health insurance and the settlement of exposed state guarantees. The fulfilment of the planned funding programme and the declared strategic interests will depend primarily on the developments on the domestic and foreign markets in terms of the minimising of the costs of debt servicing and financial risk management.

This publication is also available online at:

www.mfcr.cz/statnidluh

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