The Public Finance Sector
DEBT MANAGEMENT STRATEGY
in the years 2011-14

Ministry of Finance

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DEBT MANAGEMENT STRATEGY
for the Public Finance Sector
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I. INTRODUCTION

Pursuant to Article 75 of the Public Finance Act of August 27, 2009 the Minister of Finance is obliged to prepare each year a 4-year strategy on managing the State Treasury (ST) debt and influence the public debt as a whole. This document is presented by the Minister of Finance to the Council of Ministers for approval and then submitted to the Sejm together with the justification of the draft Budget Act.

In respect of the requirements of Article 70 of the Public Finance Act of June 30, 2005 the time frame of the Strategy has been extended from three years to four years; therefore, this Strategy covers the years 2011-2014.

Public debt management is conducted at two levels:

- in a broader sense, debt management is part of the fiscal policy and covers decisions on what portion of State expenditures is to be financed by debt and hence, what the level of public debt should be (this aspect is discussed in documents devoted to the government economic programme which are updated on a yearly basis, especially in the justification of the draft Budget Act and the Update of the Convergence Programme);
- in a narrower sense, debt management means determining the way of financing the State borrowing requirements and shaping the debt structure by selecting markets, instruments and dates of issuance.

Debt Management Strategy for the Public Finance Sector in the Years 2011-2014 contains forecasts of public debt levels which are consistent with the fiscal policy assumptions of the draft Budget Act for 2011 however, its objectives and tasks refer to the narrower sense of public debt management.

Table 1. Public debt and its servicing costs – key forecasts of the Strategy

Item	2009 (execution)	2010	2011	2012	2013	2014
1. Public debt						
a) PLN bn	669.9	750.8	811.4	873.9	922.5	964.8
b) relative to GDP	49.9%	53.2%	54.2%	54.3%	53.7%	52.7%
2. General Government Debt						
a) PLN bn	684.1	783.0	854.6	930.5	989.5	1,054.2
b) relative to GDP	50.9%	55.4%	57.1%	57.8%	57.6%	57.6%
3. State Treasury debt servicing costs (cash basis)						
a) PLN bn	32.2	34.9	38.4	43.0	45.7	47.1
b) relative to GDP	2.4%	2.5%	2.6%	2.7%	2.7%	2.6%

Under the adopted assumptions, the debt-to-GDP ratio is expected to increase and exceed the threshold of 50% in 2010. According to the Public Finance Act, exceeding the 50% threshold in 2010 shall necessitate the adoption of a budget deficit-to-revenues ratio in the Budget Act for the year 2012 not higher than that assumed in the budget for the year 2011. This restriction will have an impact on the budgets of subsequent years.

Between 2010 and 2012 the debt-to-GDP ratio is expected to remain close to the 55% threshold. It means considerable risk that this threshold could be exceeded and sanctions arising from the Public Finance Act could be imposed. Having regard to the considerable proportion of foreign financing in the ST debt, the exchange rate of the zloty at the end of relevant years is expected to be of considerable importance for the level of this ratio. This ratio is predicted to fall to 52.7% in the years 2013-2014.

The drop of the ST debt-to-GDP ratio is expected to be accompanied by an increase of the *general government* debt-to-GDP ratio to 57.8% in 2012 and its subsequent stabilisation. Under the adopted assumptions, no threat is expected for this ratio to exceed the 60% threshold stipulated in the Treaty of Maastricht during the term of this Strategy.

The ST debt servicing costs-to-GDP ratio is expected to remain at the level of 2.6%-2.7% during the term of this Strategy.

This *Strategy* is to a large extent a continuation of the strategy drawn up last year. The objective of minimisation of the long-term debt servicing costs subject to risk constraints remains, as well as three interconnected tasks: to increase the liquidity, efficiency and transparency of the Treasury securities (TS) market.

The following has been assumed for the years 2011-2014:

- the flexible approach towards shaping the financing structure in terms of choosing the market, currency and instruments shall be maintained, to the extent that cost minimisation is achieved, subject to risk limitations and avoiding distortions of monetary policy;
- the domestic market shall remain the main source of financing the State budget borrowing requirements; the share of foreign financing will be maintained at the level of 20-30%; the euro market will retain its strategic role in foreign issuance;
- large and liquid fixed rate issue programmes, both in the domestic and the euro market, shall be a priority of the issuance policy;
- efforts to increase the average maturity of the domestic debt shall be continued, while its duration, which reached an acceptable level from the point of view of the interest rate risk, shall be maintained in the range of 2.5-4.0 years;
- in the case of foreign debt, current levels of neither refinancing risk nor interest rate risk constrain the objective of minimising the debt servicing costs.

The layout of the *Strategy* has not changed significantly. There are seven Annexes with additional information to the main body of the *Strategy*, including a glossary.

II. CHANGES IN VOLUME AND STRUCTURE OF PUBLIC DEBT

Financing the State budget borrowing requirements involves incurring public debt and bearing costs of its servicing. The essence of debt management is shaping the structure of debt to minimise servicing costs in the long run while at the same time keeping risk at an acceptable level.

Subsequent subchapters present recent changes in the volume of public debt, the structure and servicing costs of the ST debt as well as the volume of contingent liabilities resulting from guarantees and sureties.

II.1. Volume of public debt and its servicing costs

Changes in the volume of public debt in the years 2001-2010 resulted mainly from changes in the ST debt. The growth of the nominal value of debt was the result of a relatively high level of State budget borrowing requirements, decreasing revenues from privatisation and changes in the exchange rate of the Polish zloty. At the same time, high rates of the GDP growth and improvement in the public finance in years 2004-2007 contributed to the stabilisation of the debt-to-GDP ratio at the average level of about 47%, i.e. below the first threshold set in the Public Finance Act of 50%. Significant strengthening of the zloty in 2007 enabled a temporary decrease of this ratio to below 45% of GDP. In the years 2008-2009 the debt-to-GDP ratio rose again, mainly as a result of considerable increase of the public finance sector borrowing requirements caused by economic slowdown. In 2009 and over the first half of 2010 public debt rose respectively by PLN 72.1 bn and PLN 51.3 bn (of which ST debt by PLN 61.6 bn and PLN 56.7 bn).

Chart 1. Volume of public debt in the years 2001-2010[1]

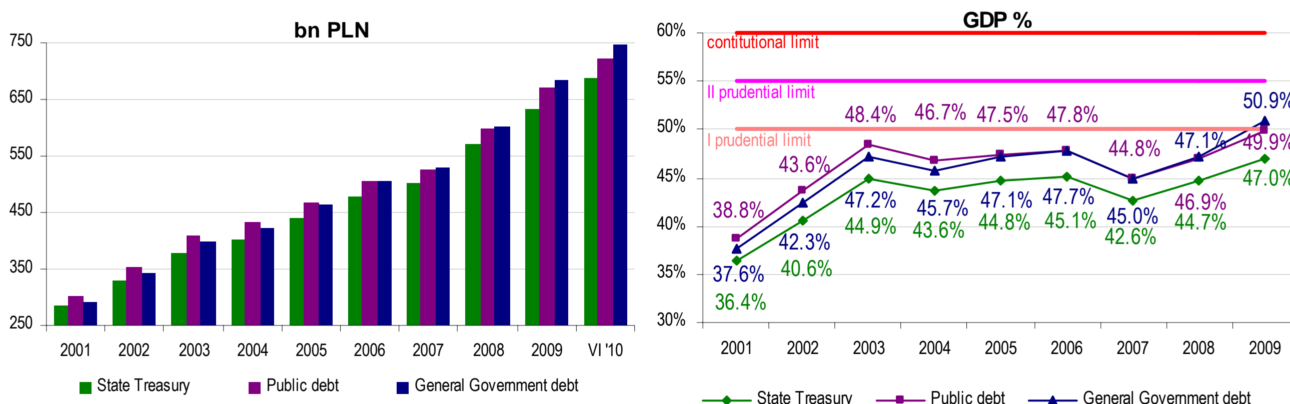
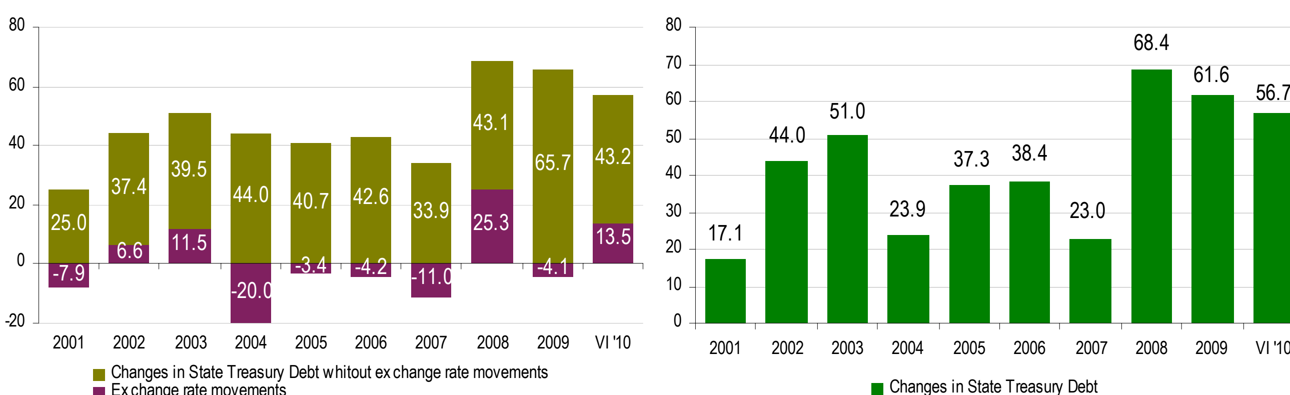


Chart 2. Influence of FX rate movements on the State Treasury debt volume in the years 2001-2010 (PLN bn)



[1] Detailed data on public debt volume are presented in annex 7.

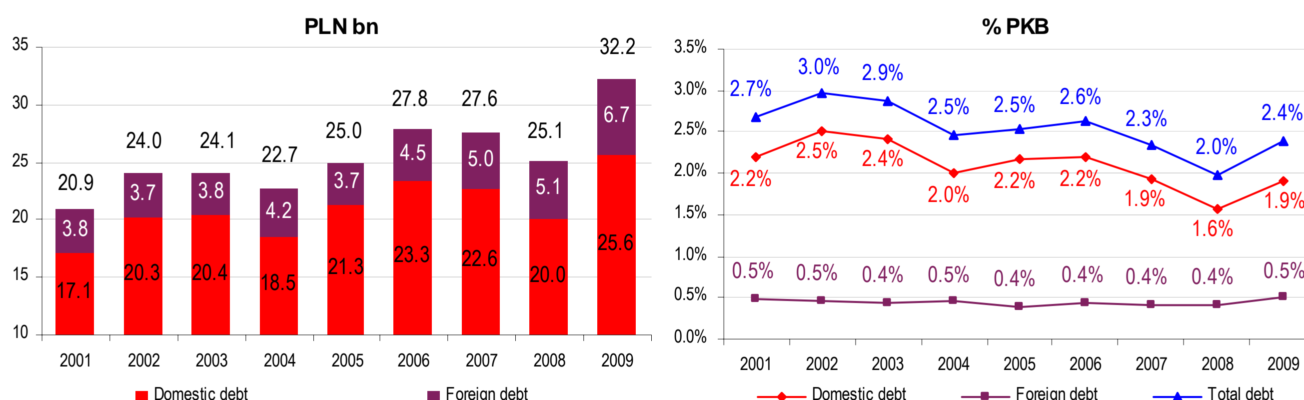
The general government debt-to-GDP ratio (EU methodology), at the end of 2009 at 50.9%, is lower than the ratio for the EU as a whole (73.6%) and for the Eurozone (78.7%) [2].

Table 2. Factors influencing changes of the ST debt- to-GDP (%)

Item	2001	2002	2003	2004	2005	2006	2007	2008	2009
Debt-to-GDP ratio	**36.4**	**40.6**	**44.9**	**43.6**	**44.8**	**45.1**	**42.6**	**44.7**	**47.0**
Change of the ST debt-to-GDP ratio	0.6	4.1	4.4	-1.4	1.2	0.4	-2.5	2.2	2.2
1. State budget borrowing requirements, including:	3.5	5.0	4.4	4.8	4.2	4.1	2.8	3.4	4.3
1.1. State budget primary balance	1.5	1.9	1.5	2.0	0.3	-0.3	-1.0	-0.1	-0.6
1.2. ST debt servicing costs	2.7	3.0	2.9	2.5	2.5	2.6	2.3	2.0	2.4
1.3. Pension reform costs*	0.0	0.0	0.0	1.1	1.3	1.4	1.4	1.6	1.6
1.4. Net proceeds from privatization	-0.8	-0.2	-0.4	-0.8	-0.3	0.0	-0.1	-0.1	0.0
1.5. Other borrowing requirements **	0.2	0.3	0.4	0.0	0.3	0.4	0.2	0.0	1.0
2. Changes not resulting from State budget borrowing requirements:	-0.8	0.7	1.9	-2.2	-0.3	-0.3	-0.7	2.0	0.3
2.1. FX rate movements	-1.0	0.8	1.4	-2.2	-0.3	-0.4	-0.9	2.0	-0.3
2.2. Other factors ***	0.2	-0.1	0.5	0.0	0.1	0.1	0.2	0.0	0.6
3. Changes in other ST debt	-0.5	-0.2	-0.2	0.0	-0.1	-0.2	-0.1	0.0	0.0
4. Nominal GDP growth	-1.6	-1.3	-1.7	-4.0	-2.6	-3.2	-4.5	-3.3	-2.4

**) Funds transferred to Social Security Fund (FUS) as compensation for contributions transferred to OFE.*
***) Mainly: changes of balance of granted loans and prefinancing.*
****) Changes of debt caused by budget account balance, TS discount, TS capitalisation and indexation, off-budget drawings, written off debt, conversion of FUS to OFE debt for securities.*
Attention: In comparison to preceding Strategy the budget account balance classification has been changed, previously it was classified as the element of state budget borrowing requirements, actually it is classified as the element of changes not resulting from State budget borrowing requirements.

Chart 3.ST debt servicing costs in the years 2001-2009

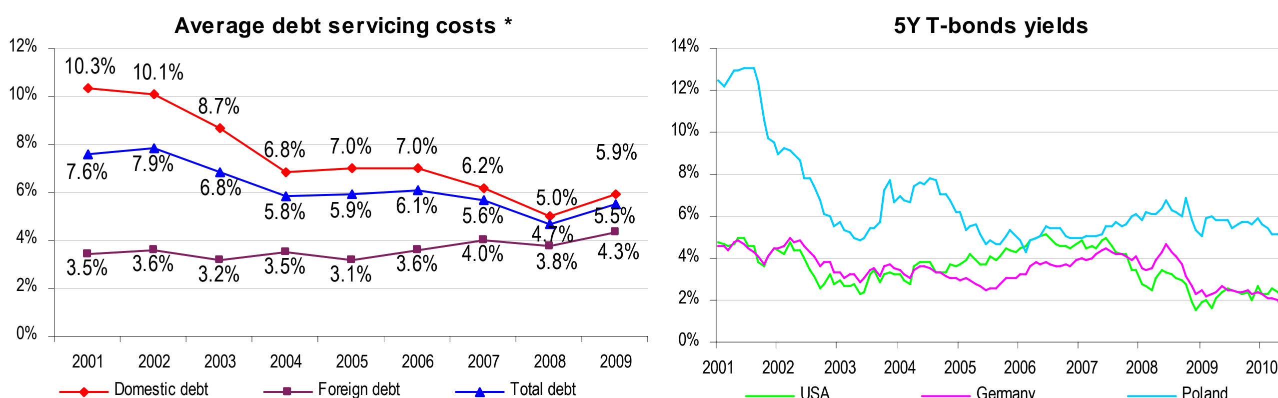


Changes in the debt servicing costs were the result of growth of the ST debt, changes in interest rates levels and exchange rate movements. To eliminate the destabilising effect of variable debt servicing costs on the State budget, activities aimed at smoothing the distribution of debt servicing costs over time were undertaken. These were:

- derivatives – in use since the end of 2006;
- coupons of Treasury bonds offered in the wholesale market set at the level close to their yields to lower the burden of discount cost cumulating at maturity;
- switching and buy-back auctions, in use since 2001, with the primary goal to reduce refinancing risk, but also allowing for the redistribution of debt servicing costs over time.

[2] The main differences between Polish and EU methodology result from matured payables included in liabilities, which constitute public debt according to Polish methodology and National Road Fund (KFD) debt included in public debt only in EU methodology. Differences between these both methodologies are presented in Annexe 6 while data concerning deficit and debt of EU Member States are presented in Annexe 3.

Chart 4. Market interest rates and average servicing costs of domestic and foreign ST debt



**) Average servicing costs of the ST debt were calculated as a ratio of debt servicing costs in a given year to the arithmetic average of debt volume at the end of given and previous year*

Foreign debt servicing costs were much lower than those of domestic debt, which, to a lower extent, resulted from the spread between interest rates on the domestic market and major foreign markets and, more importantly, from a limited though increasing since 2009 share of foreign debt in total ST debt.

The ST debt servicing costs-to-GDP ratio, after a significant fall in the years 2003-2004, grew slightly in the years 2005-2006 and again significantly fell in the years 2007-2008, mainly as a result of high GDP growth rate against a fall of nominal costs. In 2009 this relation grew primarily as a result of a significant increase of debt and lower GDP growth.

II.2. Structure of the State Treasury debt

Changes in the ST debt structure were the result of implementing the *Strategy's* objective, i.e. minimisation of debt servicing costs over a longer time horizon subject to risk constrains. The issuance policy and other operations on debt kept the risk connected with the ST debt structure on the safe level.

a) Refinancing risk

The domestic debt refinancing risk was systematically reduced since the year 2004 and was relatively stabilised since 2007. The risk reduction was a result of:

- the importance of medium and long-term bonds in financing the borrowing requirements until 2008; the share of bonds with the maturity of 5 years or more in total sales of bonds in regular auctions accounted for 58.9% in 2001 and 81.5% in 2008 respectively[3]. Their share fell to 51.6% in 2009 and subsequently rose to 57.0% during the first half of 2010. The sale value of medium and long term bonds reduced in favour of T-bills and 2-year bonds mainly as a result of a decreased demand for those instruments in connection with the financial crisis and increasing risk aversion. Changes in the structure of demand for Treasury securities resulted mainly from flows effected by foreign investors on the domestic market (outflow of PLN 18.6 bn in 2008 and inflow of PLN 25.9 bn in 2009 and PLN 42.8 bn by August 2010 respectively);
- changes in the amount of T-bills:
  - a fall of both the nominal value from PLN 35.2 bn to PLN 22.6 bn as well as their share in domestic Treasury securities from 20.0% to 5.9% in the years 2001-2007;
  - a temporary increase in the years 2008-2009 (to the maximum of PLN 64.3 bn, i.e. 14.3% of the debt in domestic Treasury securities in July 2009), and subsequently a fall to PLN 39.7 bn (8.0% of debt in domestic Treasury securities) in mid-2010. The increase in the outstanding amount of T-bills was a result of a return to the use of those instruments as a source of financing the borrowing requirements. During the second half of 2009 the issuance of T-bills was considerably reduced and the relative stabilisation on the financial market and the return of foreign investors to the domestic market lead to an increase in the demand for bonds.

[3] Including switching and supplementary auctions.

- significant role of switching auctions. In 2002 T-bonds with short residual maturities with the face value of PLN 9.6 bn were bought back, for 2009 and the first half of 2010 the figures were PLN 32.2 bn and PLN 19.3 bn. Short and medium-term T-bonds constituted a dominant share of all the T-bonds issued in the switching auctions (83.3% and 95.6% in 2009 and in the first half of 2010 respectively).

Chart 5. Residual maturity of the ST debt in the years 2001-2010

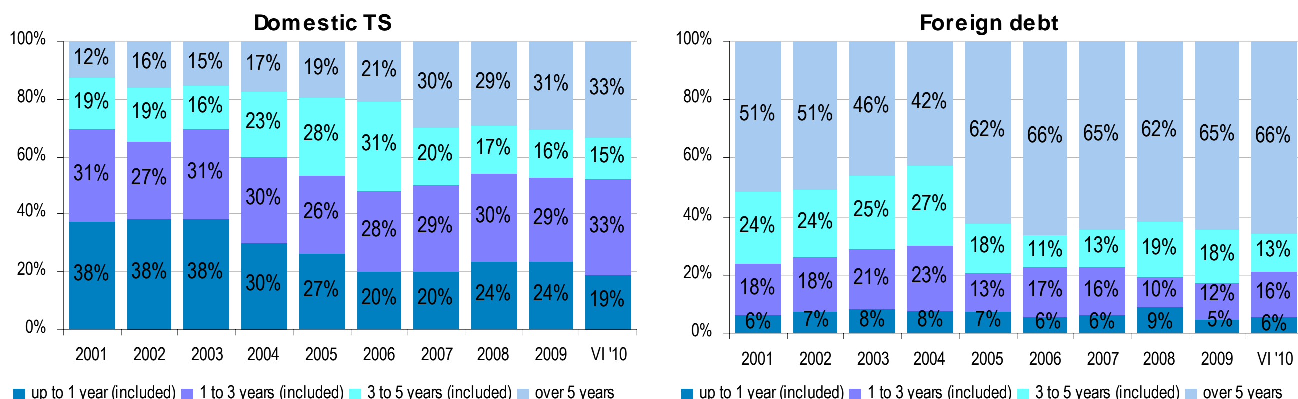
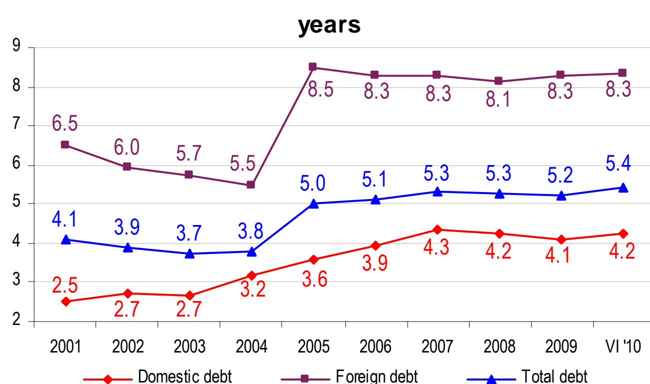


Chart 6. ATM of the ST debt in the years 2001-2010



In comparison to the domestic debt, the refinancing risk of foreign debt is significantly lower. It was significantly reduced in 2005 when the Paris Club debt was partly repaid before maturity and refinancing by long-term T-bonds. Since then, the average term to maturity (ATM) of foreign debt has remained at a relatively stable level above 8 years. The increase of the ATM in 2009 was a result of final repayment of the Paris Club debt and incurring a long-term loan at the World Bank.

A regular, since 2003, increase of the ATM of the total ST debt originated from a stable growth of the ATM of domestic debt, which has a dominant share in total debt, and a significant increase of the ATM of foreign debt in 2005. The ATM of the ST debt is lower than the EU average[4]. In 2009 many EU states reported a decrease in the ATM as a result of changes of the issuance policy triggered off by the financial crisis. This lead to an increase in borrowing requirements financed to a large extent with short-term debt with low interest rates.

b) Exchange rate risk

The share of foreign currency debt in total ST debt, excluding a slight increase in 2005, had been regularly decreasing and reached 23.3% at the end of the Q3, 2008 and subsequently it increased to 28.2% in mid 2010.

The share of currencies other than the euro was reduced. Since mid 2006, the share of the debt in the euro has remained in the range of 70%-75%. At the end of June 2010 it reached 69.8%, which was a result of considerable weakening of the euro against the dollar with more

[4] Lower ATM may be observed in Finland (4.1), Hungary (4.4) and Slovakia (4,6). Detailed data regarding the ATM and duration in individual EU Member States are presented in Annexe 5.

intensive ST activities both on the euro market and on other major markets than in previous years.

The increase of the share of debt in foreign currencies in the years 2008-2010 was the result of:

- flexible approach to implementing the objective of minimising the debt servicing costs in the area of exchange rate risk constraints and allowing for a gradual increase of foreign financing justified with striving towards domestic market stabilisation, diversifying sources of raising capital and taking advantage of the possibility to incur low-interest loans at international financial institutions (the IFI),
- significant volatility of the exchange rate of the Polish zloty, including strong appreciation between the end of 2001 to mid 2008 (when the euro and dollar exchange rates decreased by 5% and 47% respectively), and strong depreciation in Q4, 2008 and Q1, 2009 (when the euro and dollar exchange rates increased by 40% and 67% respectively) as well as a appreciation beginning in the second half of 2009,
- strategic importance of the euro as a prospective domestic currency (adopting the euro will results in immediate drop of the exchange rate risk).

Chart 7. Currency composition of the ST debt

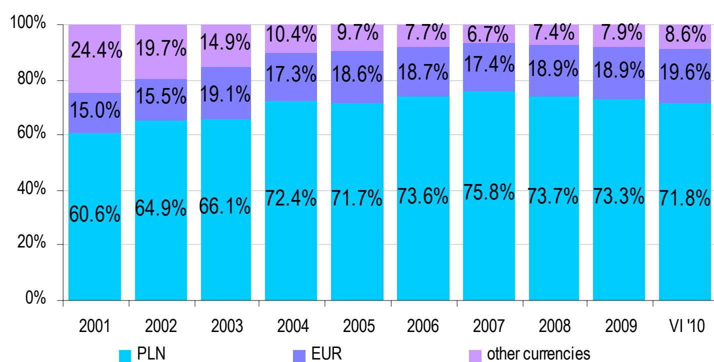
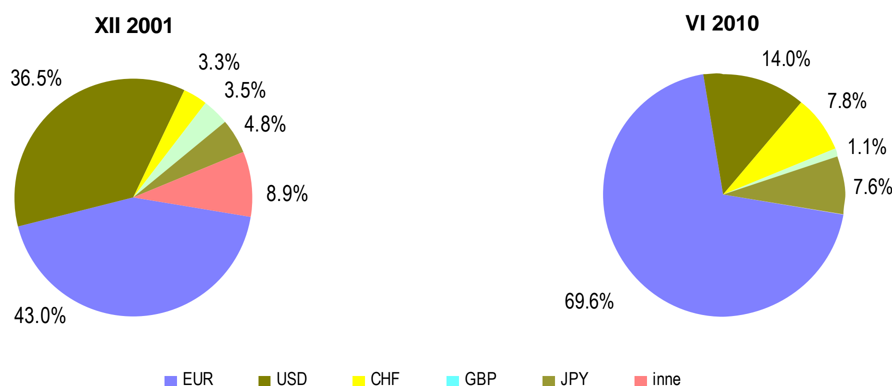


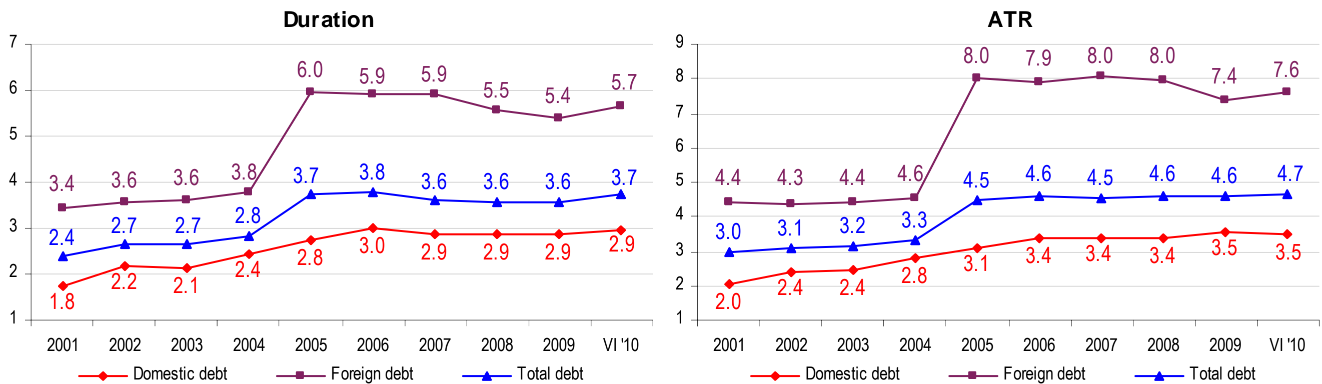
Chart 8. Currency composition of the ST foreign debt



c) <u>Interest rate risk</u>

Due to the dominant role of fixed-rate instruments in new issuance, changes in the interest rate risk of both domestic and foreign debt were similar to changes in the refinancing risk over recent years.

Chart 9. Duration and ATR of the ST debt in the years 2001-2010



Duration of the ST debt is one of the lowest ones across the EU[5]. As in the case of the refinancing risk, the interest rate risk of the foreign ST debt remains at an acceptable level.

II.3. Evaluation of implementing the Strategy's objective in 2009 and the first half of 2010

In 2009 and the first half of 2010, debt management was conducted in accordance with *The Debt Management Strategy for the Public Finance Sector in the Years 2009-2011* approved by the Council of Ministers in September 2008 and *Debt Management Strategy for the Public Finance Sector in the Years 2010-2012* approved in September 2009.

Table 3 presents the evaluation of implementing the Strategy's objective along with risk constraints in 2009 and the first half of 2010.

[5] Detailed data regarding the ATM and duration in EU Member States are presented in Annexe 5.

Table 3. Evaluation of implementing the Strategy's objective in 2009 and over the first half of 2010

I. Strategy's objective		
Debt servicing costs minimisation	Evaluation*	Implementation
	High	**1. Selection of instruments** The domestic market was core to financing the borrowing requirements (in 2009 the face value of TS issuance amounted to PLN 159.6 bn on the domestic market and PLN 25.6 bn in foreign markets, additionally PLN 10.7 bn were drawn from international financial institutions, in the first half of 2010 – PLN 99.0 bn, PLN 18.6 bn and PLN 0.2 bn respectively). Main factors taken into account when deciding about the financing structure were: • situation in global financial markets. In 2009 the crisis in financial markets lead to a recession in major global economies. Continuing high risk aversion, especially in Q1, contributed to capital flows towards safe investments and considerable volatility and depreciation of many currencies against the major global currencies. From Q1, the situation began to gradually improve in both the currency market and the TS market. Subsiding panic in the financial market and systemic risk stabilisation enabled investors to return to fundamental evaluation of individual economies, including the Polish one. The Polish zloty and the TS market were further improved by the availability of the flexible credit line (FCL) at the amount of ca. USD 20.5 billion for Poland by the International Monetary Fund in May 2009.In Q2, 2010 concerns about the financial standing of Greece, Spain and Portugal as well as consequent threats to the stability of the whole Euro zone caused the global business sentiment to worsen leading to an increase of risk aversion and a considerable weakening of the euro against the dollar. The sentiment on global markets was improved by: an agreement between Greece, the Eurozone countries and the IMF (EUR 110 bn worth of aid for Greece) as well as an agreement on a stabilisation package (EUR 750 bn for the Eurozone countries struggling with excessive debt) concluded in May 2010 by the IMF and the EU; • situation in the domestic market. In 2009 the National Bank of Poland (NBP) reduced the basic interest rate by a total of 150 basis points to 3.5% in July in relation to crisis escalation at the end of 2008 and faltering economic activity. Additionally, due to a considerable decrease of inter-bank market liquidity being a result of the crisis, the NBP reduced the compulsory reserve rate by 50 basis points to 3%. In Q1, 2009 TS yields increased considerably along the whole yield curve as a result of increasing risk aversion, subsequently yields began to stabilise though the spread between the short and the long end of the yield curve widen over time. The demand for TS focused primarily on the short end of the yield curve, however, since the middle of the year, as the situation in the financial market improved, it began to move towards instruments with longer maturities. In 2009 the ST debt in T-bills fell by PLN 2.9 bn and by PLN 7.8 bn over the first half of 2010. Since Q2, 2009 a steady inflow of foreign investors was observed whose involvement in domestic TS increased between the beginning of 2009 until the end of June 2010 by PLN 49.7 bn (by PLN 66.6 bn until the end of August 2010). To a large extent that was a result of the debt crisis in Greece and concerns about the solvency of other issuers. The Greek crisis showed that credit risk in individual Eurozone countries was diversified and that it resulted from structural problems of the economies of some of those countries. Main factors contributing to an inflow of foreign investors since 2009 include a positive evaluation of the macro-economic foundation and the fiscal situation of Poland when compared to the other EU states, a higher level of interest rates when compared to issuers having a similar credit risk valuation, anticipation of appreciation of the Polish zloty and the cheap money policy implemented by the ECB and the FED;

- distribution over time of state borrowing requirements, including those connected with the redemption of large series of bonds. In 2009 state borrowing requirements net amounted to PLN 57.5 bn as compared to PLN 39.0 bn specified in the Budget Act and PLN 56.7 bn specified in the amendments to the Budget Act approved in July 2009. In the first place, higher borrowing requirements resulted form an increase of the budget deficit, a higher prefinancing balance, a loan granted to the Social Insurance Fund and lower than expected privatisation proceeds. In the first half of 2010 borrowing requirements net amounted to PLN 42.2 bn while the deficit totalled at PLN 36.8 bn (51.2% and 72.5% of the values adopted in the Budget Act respectively);
- flexible approach to instrument selection and striving towards diversification of markets and currencies in relation to restrictions on the domestic market absorbency.

The most important activities connected with foreign debt included:

- benchmark issues on the strategic euro market (5-year bonds with the face value of EUR 1.75 bn in February 2009, 10-year and 15-year bonds with the face value of EUR 0.5 bn and EUR 0.41 bn respectively in October 2009, 15-year bonds with the face value of EUR 3 bn in January 2010 and 7-year bonds with the face value of EUR 1.25 bn in March 2010);
- maintaining Poland's presence in other major markets, including the first since 2005 benchmark issue in the US dollar (10-year bonds having the face value of USD 3.5 bn in July 2009), issues of bonds in the yen (3-year and 5-year bonds having the total face value of JPY 44.8 bn in November 2009) and in the Swiss franc (5-year bonds having the face value of CHF 750 mln in September 2009 and 4-year bonds having the face value of CHF 475 mln in March 2010);
- loans drawn from international financial institutions (a total of EUR 2.6 bn in 2009 and over the first half of 2010, of which from the World Bank of ca. EUR 2 bn, two drawings in January and August 2009).

Raising funds in foreign markets was continued in Q3, 2010 with an issue of 5-year bonds on the US market having the face value of USD 1.5 bn and an issue of 4-year bonds on the Swiss market having the face value of CHF 150 mln as well as drawing a loan of EUR 1.0 bn from the World Bank.

2. Efficiency of the TS market

Main activities aimed at cost minimisation included:

- the policy providing for issuance of liquid benchmark bond series in the domestic market was continued. At the end of June 2010, 13 bond series (of which 12 with a fixed interest rate) exceeded the threshold of EUR 5 bn in the domestic market. Concentration on issuance constituted an important factor facilitating the rise of liquidity in the secondary bond market. The average liquidity ratio[6], having decreased to 111.2% in 2009 due to the crisis in the financial markets then increased to 141.0% over the first half of 2010;
- the policy of issuing liquid benchmark bonds in the strategic euro market was continued, (5 years in 2009, 7 and 15 years in 2010);
- publishing the supply on TS auctions, beginning from December 2008, in the set ranges aimed to improve the issuance flexibility in the changing market environment and simultaneously maintaining the TS market transparent;
- adjusting the level and structure of TS supply to the current market situation taking into account expectations of market players.

[6] Liquidity ratio – the quotient of the monthly value of transactions involving bonds to the debt month-end.

II. Constraints - quantitative

Constraint	Evaluation*	Implementation	Measure	Value		
				2008	2009	VI 2010
Refinancing risk	High	• Flexible approach to financing in the environment of high demand changes • Debt reduction in T-bills beginning from Q4, 2009 (as a result of changes in the TS supply structure, the issuance policy and auctions for the buy-back of T-bills having the value of PLN 3.5 bn in 2009), • Increase in the issuance of medium-term and long-term bonds over the first half of 2010. • High importance of switching auctions • An increase in 2010 of the ATM of domestic debt to the level of the end of 2008 in spite of unfavourable market conditions • Safe level of foreign debt refinancing risk	ATM (in years) - domestic debt - foreign debt - total debt	 4.23 8.11 5.27	 4.08 8.27 5.22	 4.22 8.35 5.40
			Share in domestic TS: - securities maturing within 1 year - Treasury bills	 23.6% 12.0%	 23.9% 10.3%	 19.0% 8.0%
Exchange rate risk	Satisfactory	• Share of foreign debt within the range set in the Strategy (20-30%) • Share of the euro in foreign debt at the end of June 2010 within the 70% target set in the Strategy • Increasing importance of long-term non-market financing at international financial institutions	Share of foreign debt in total ST debt	26.3%	26.7%	28.2%
			Share of euro-denominated debt in foreign debt	71.8%	70.6%	69.6%
Interest rate risk	High	• Duration of domestic debt remained in the 2.5-4.0 year range set in the Strategy • Flexible TS supply in reply to changes in financial markets • Foreign debt risk remained at a safe level and did not restrain the costs minimisation objective	Duration (in years) - domestic debt - foreign debt - total debt	 2.86 5.55 3.58	 2.88 5.39 3.59	 2.95 5.67 3.75
			ATR (in years) - domestic debt - foreign debt - total debt	 3.38 7.96 4.60	 3.53 7.37 4.57	 3.50 7.59 4.67

III. Constraints – non-quantitative		
Constraint	Evaluation*	Implementation
Liquidity risk	High	Main instruments used in liquidity risk management included: • switching auctions (their main purpose was to reduce refinancing risk connected with redemptions of large issues), • interest-bearing zloty deposits in the NBP – deposits having the total value of PLN 199 bn and PLN 83 bn in 2009 and over the first half of 2010 respectively, • zloty deposits where Bank Gospodarstwa Krajowego ("BGK") acted as an intermediary, including buy-sell-back transactions and interbank deposits. Transactions having the total value of PLN 491 bn and PLN 213 bn were conducted in 2009 and over the first half of 2010 respectively. • FX swap transactions, launched in December 2009, enabling temporary usage of owned currencies with the aim of raising funds in the Polish zloty. EUR/PLN and USD/PLN transactions having the value of EUR 1.5 bn and USD 0.2 bn were conducted in 2009 and EUR/PLN transactions having the value of EUR 1.6 bn were conducted over the first half of 2010. These transactions facilitated reduction of TS supply in the domestic market. • maintaining funds in interest-bearing accounts in the NBP and in interest-bearing currency deposits. Deposits having the total value of EUR 11.5 bn and EUR 1 bn were opened in 2009 and over the first half of 2010 respectively. • interest-bearing currency deposits in BGK – deposits having the value of EUR 8.7 bn were conducted in 2009, • temporary usage of the European Commission funds in order to finance borrowing requirements (EUR 1.2 bn in 2009), • short-term loans in commercial banks. Transactions having the value of PLN 0.4 bn were conducted in 2009. • introduction of deposit transactions in the euro with debt management agencies as a new instrument improving thus the efficiency of depositing temporarily free cash and creating an opportunity to raise short-term funds on attractive conditions, • temporary short-term T-bills issuance during the times of substantial borrowing requirements connected with redemptions of bond issues having a significant face value, • T-bills buy-back auctions (its main purpose was to reduce refinancing risk) in use since August 2009. Liquid assets of the State budget (on average: PLN 7.1 bn in 2009 and PLN 6.3 bn in the first half of 2010 of zloty deposits as well as the equivalent of PLN 5.7 bn and PLN 6.7 bn respectively of foreign currency deposits) ensured safety in the execution of budgetary flows. In May 2009 redemption of the DS0509 benchmark series with the initial outstanding debt of PLN 28.6 bn took place (PLN 9.4 bn after switching auctions), in March 2010 benchmark series PS0310 was redeemed with the initial debt of PLN 29.6 bn (PLN 11.8 bn after switching auctions).
Credit risk	High	• Deposits in BGK, secured with TS, did not generate any credit risk. • For unsecured deposits the system of credit limits is in place. • Credit risk connected with derivatives is limited by selection of counterparties with high credit rating (it is necessary to have ISDA Master Agreement or a Framework Agreement signed with MF to make deals) and limitation imposed on the total value of transactions concluded with individual counterparties aiming at diversifying the credit risk. Creditworthiness of potential transaction partners is monitored daily, in case of significant increase in credit risk further transactions are suspended. • The so called collateral deposit mechanism, aiming at risk reduction, was implemented in new Framework Agreements signed with domestic banks.
Operational risk	Satisfactory	• Debt management conducted in one department in the Ministry of Finance. • Appropriate technical infrastructure for conducting market transactions. • Safety of information connected with debt management.

		• Integrated database of the ST debt.
Distribution of debt servicing costs over time	Satisfactory	• Smooth distribution of servicing costs was taken into account when deciding about new issues of TS. Coupons of new issues were set close to their yields. • Switching auctions of bonds maturing in the subsequent year and T-bill buy-back auctions contributed to smooth distribution of costs. • Transactions involving derivatives conducted in 2008 and 2009 contributed to the reduction of servicing costs by PLN 0.9 bn in 2009. Between November and December 2009, transactions with the total value of PLN 4.8 bn were conducted resulting in decrease in debt servicing costs by PLN 0.3 bn in 2009 and increase in costs in 2010. The chief objective of the transactions was to facilitate transactions involving a buy-back of PS0310 bonds in switching auctions, which reduced the bond refinancing risk in 2010.

**) According to the following scale: high, satisfactory, moderate, low.*

II.4. Volume and structure of debt of public finance sector units other than the State Treasury

At the end of 2009, the debt of units other than the ST constituted 9.3% of the debt of the public finance sector before consolidation (7.1% after consolidation) as compared to 6.6% (5.4%) at the end of 2008 (8.3% and 6.2% in mid 2010 respectively). The local government sub-sector debt, in particular of local government units, had the highest share in this part of the debt. The social security sub-sector debt had been steadily decreasing until 2008 and increased again in 2009. Detailed data regarding the debt of public finance sector units are presented in Annexe 7.

Chart 10. Debt of public finance sector units other than ST before and after consolidation by sectors (PLN bn)

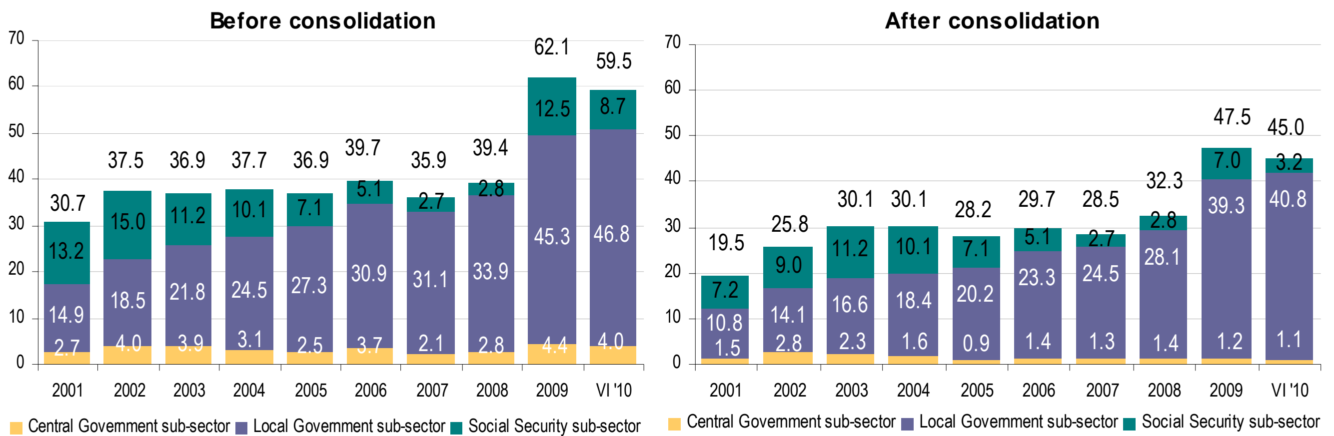


Chart 11. Share of debt of public finance sector units other than ST before and after consolidation in public finance sector debt and as a GDP ratio

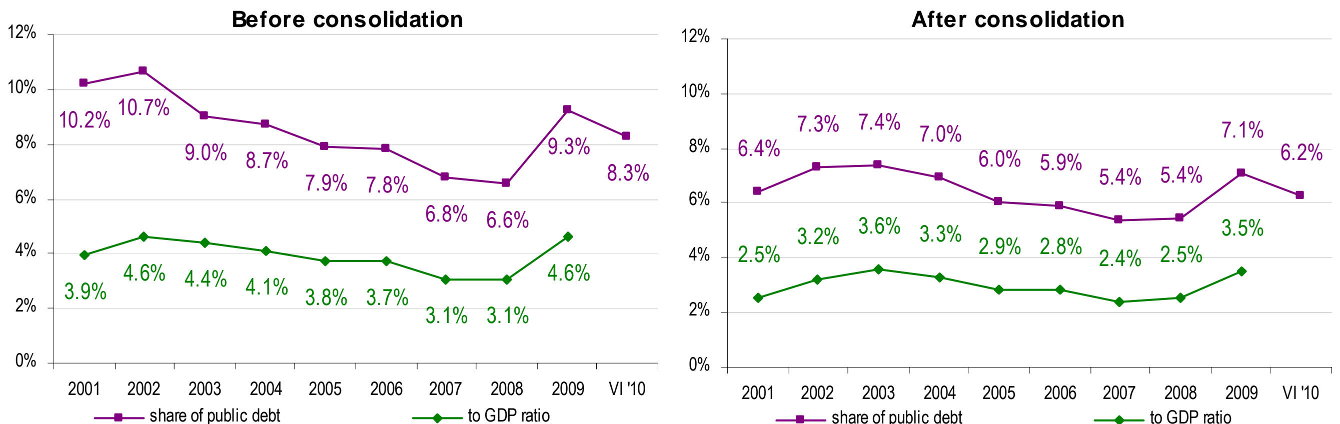
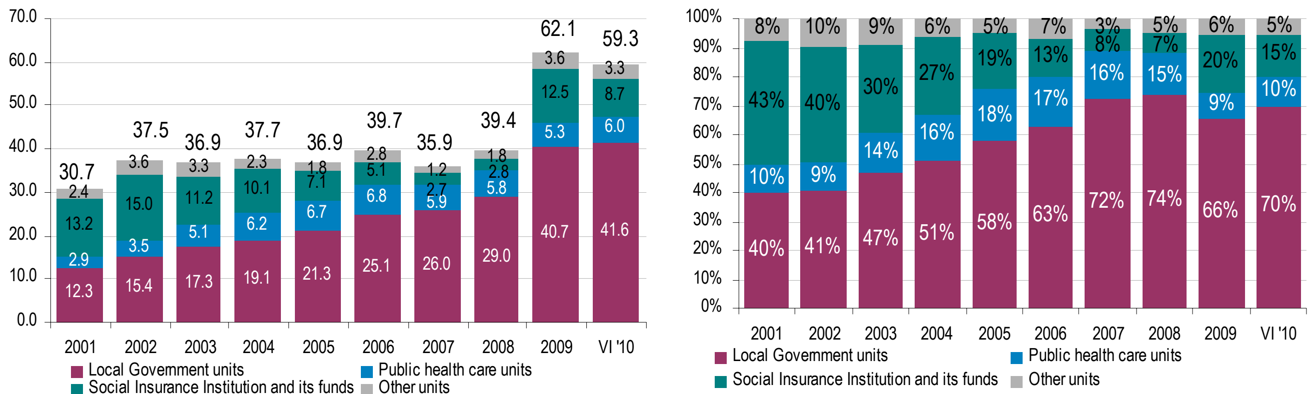


Chart 12. Debt of public finance sector units other than ST before consolidation (PLN bn)

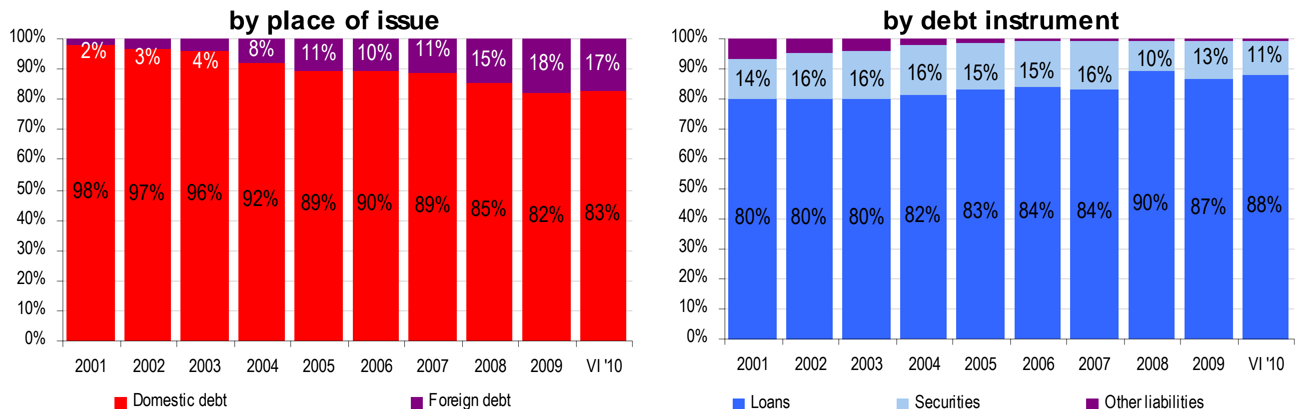


Further in this subchapter the debt of public finance sector units other than the ST before consolidation is analysed.

1) Local government units debt

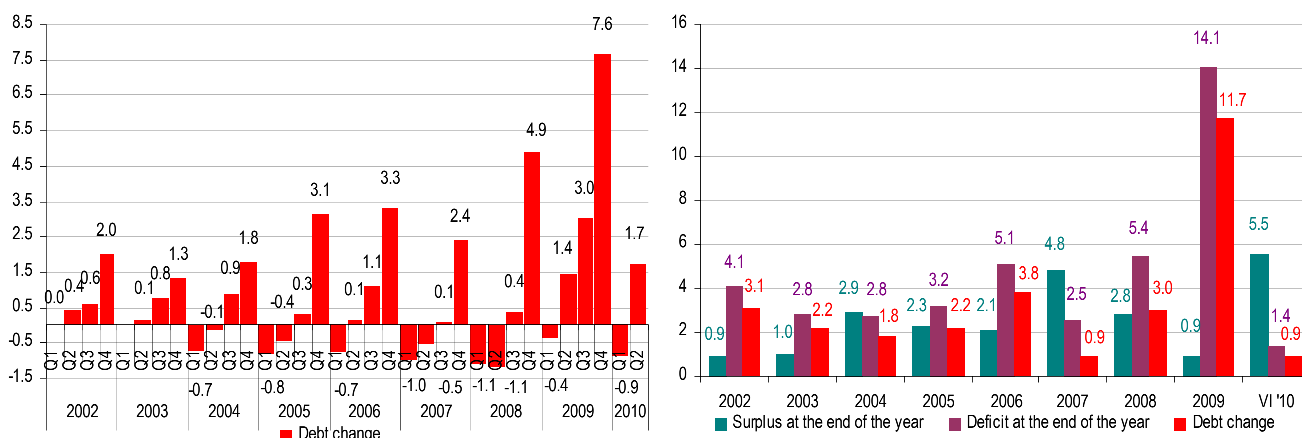
The debt of local government units and their associations was systematically increasing and at the end of 2009 stood at PLN 40.7 bn as compared to PLN 29 bn at the end of 2008 (PLN 41.6 bn at the end of June 2010). Domestic debt predominated though the share of foreign debt had constantly risen and at the end of 2009 stood at ca. 17.7% (17.5% in mid 2010). Credits and loans constituted the biggest share of the debt of local government units and their associations.

Chart 13. Structure of debt of local government units and their associations



In 2009 local government units and their associations achieved a budget deficit of PLN 13.2 bn as compared to PLN 2.6 bn in 2008 (surplus of PLN 4.1 bn in mid 2010). The balance of local government units consisted of: deficits of individual units in the total amount of PLN 14.1 bn and surpluses in the total amount of PLN 0.9 bn (PLN 5.5 bn and PLN 1.4 bn in mid 2010 respectively). Their debt increased by PLN 11.7 bn (40.3%) in 2009 and by PLN 0.9 bn, i.e. 2.2% in the first half of 2010. Lack of a clear connection between the balance of local government units and the change of debt results from aggregating local government units with a different budget situation. The tendency to incur liabilities especially in the last quarter of a year has been maintained, which is connected with strong seasonal patterns of local government budget balances.

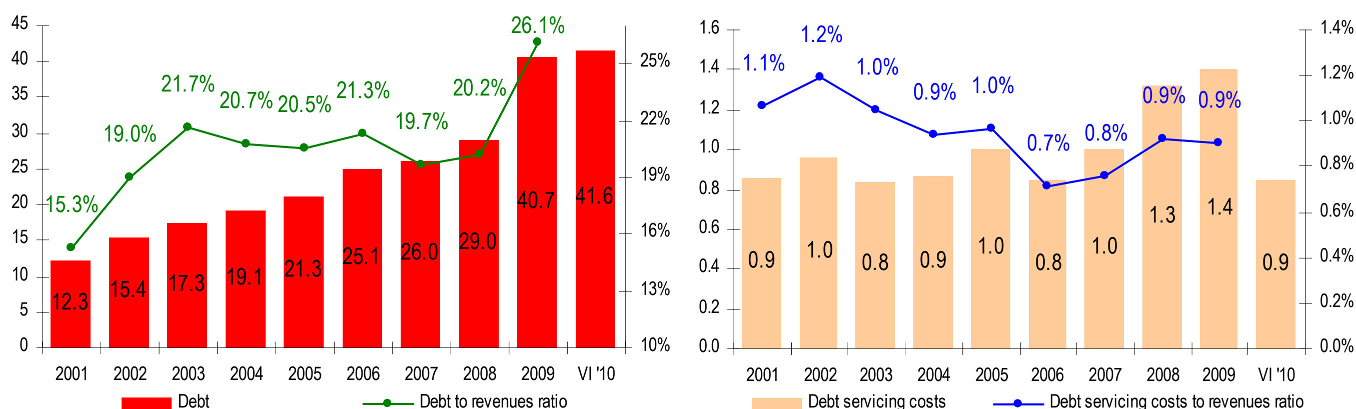
Chart 14. Balance of local government units and their associations and changes in their debt (PLN bn)



The ratio of total debt of local government units to their revenues (debt-to-revenue ratio) is significantly under the legal constraint of 60%. In 2009 it stood at 26.1% and as compared to 2008 was higher by 5.9 pp. The debt-to-revenue ratio exceeded 60% in 17 local government units (as compared to 2 units in 2008). The most significant increase in the number of units having the debt-to-revenue ratio above 60% occurred among municipalities (12 units).

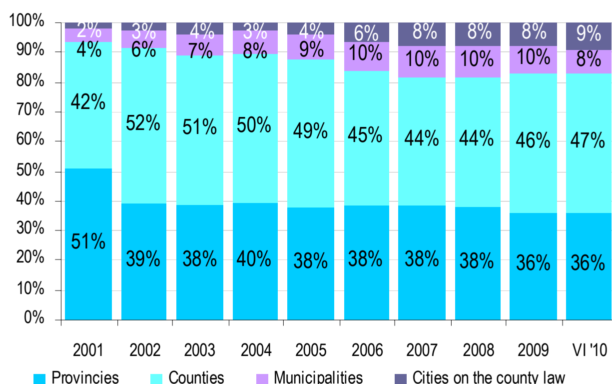
In 2009 the highest average debt-to-revenue ratio occurred in cities with the county status (37.2%) and the lowest ratio occurred in counties (19.5%). The ratio exceeded 60% in two cities with the county status. In comparison to 2008, this ratio increased in all the groups of local government units. In 2009 debt servicing costs of local government units and their associations stood at PLN 1.4 bn, i.e. 0.8% of total expenditures) and they were higher by 6.4% than in 2008.

Chart 15. *Debt, debt to revenues, costs of debt, costs of debt to proceeds of local government units and their associations*



The majority of total liabilities of local government units are the liabilities of cities with the county status (46.5% in 2009 and 47.2% in mid 2010). In the years 2002-2009 the share of municipalities liabilities remained at a stable level of ca. 36-39% (this share fell to 36% in mid 2010) while the share of provinces and districts increased (from 2% to 9% and from 4% to 8% respectively).

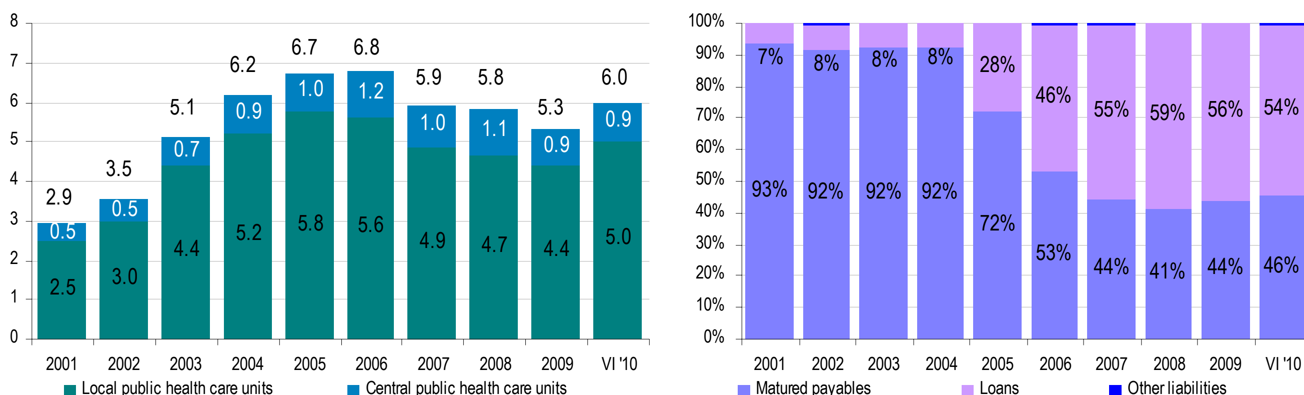
Chart 16. The structure of debt of local government units and their associations according to levels of local governments



2) Debt of independent public health care units

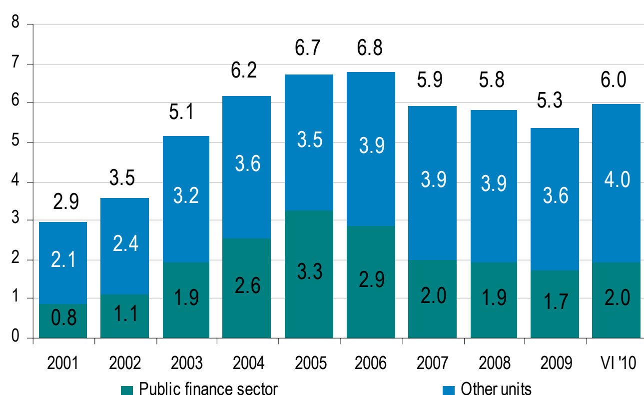
At the end of 2009, the independent public health care units debt stood at PLN 5.3 bn as compared to PLN 5.8 bn in 2008 (it stood at PLN 6.0 bn in mid 2010). Since 2007 loans have been the predominant component of their debt. Matured payables resulting from payment arrears continued to have a significant share in the debt. Changes in the structure of debt in the years 2005-2008 resulted from limiting the increase of liabilities and undertaking remedial procedures at the same time.

Chart 17. Debt volume and structure of independent public health care units



In the years 2006-2009 the independent public health care units debt to the public finance sector decreased and at the end of 2009 stood at ca. PLN 1.7 bn (PLN 2.0 bn in mid 2010). This especially was a result of the restructuring of independent public health care units, partly written off loans from the state budget granted under the Act of 2005 and a decrease of liabilities to the Social Insurance Institution.

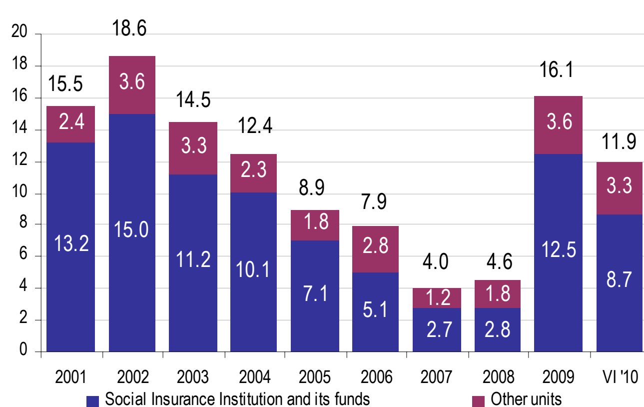
Chart 18. Debt of independent public health care units to public finance sector and other units (PLN bn)



3) Debt of other units

In the years 2001-2009, the highest indebted units were the Social Insurance Institution and funds managed by it, which was almost exclusively the results of liabilities incurred by the Social Insurance Fund. In the years 2003-2008 the debt of the Social Insurance Fund had been systematically decreasing as a result of repayment of loans at commercial banks and conversion of matured payables to ST bonds. At the end of 2009 the debt of the Social Insurance Fund stood at PLN 12.5 bn. The debt consisted of a loan from the state budget (PLN 5.5 bn), loans at commercial banks (PLN 4 bn) and matured payables (PLN 3 bn). In mid 2010 the liabilities of the Social Insurance Fund stood at PLN 8.7 bn while the amount of liabilities with respect to commercial banks decreased (to PLN 1.5 bn). The increase in the debt of the Social Insurance Fund was a result of a considerable imbalance of the fund resulting from slow increase of revenues caused by the reduction of the disability pension contribution in the years 2007-2008, economic slowdown and a significant increase of expenditures related to disability pension and retirement benefits.

Chart 19. Debt of public sector units other than State Treasury, local governments units and independent public health care units (PLN bn)



The matured payables of the Social Insurance Fund resulted mainly from arrears in payments of retirement contributions to the open pension funds in the years 1999-2002. Since November 2003 to the end of 2008 these liabilities along with accrued interest were taken over by the ST and converted to Treasury bonds. The remaining part of the matured payables of the Social Insurance Fund resulted mainly from unduly collected contributions and current contributions not yet settled or transferred untimely to the open pension funds. In comparison to 2008, matured payables increased by ca. PLN 0.2 bn (it stood at PLN 1.7 bn in mid 2010).

The other units debt constituted an insignificant share of public debt and was shaped mainly by the debt of government agencies to the ST (PLN 2.7 bn at the and of 2009, i.e. 0.4% of the debt of the public finance sector before consolidation, and PLN 3.3 bn in mid 2010).

II.5. Guaranties and sureties granted by public finance sector entities

The activity of the ST in granting guaranties and sureties has not created any serious threats to the public finance so far. Limitations on guarantees and sureties granted by the ST were set in the Budget Act for 2009 at the value of PLN 55.0 bn of which PLN 21.1 bn was used.

At the end of 2009 over 80% of contingent liabilities under guarantees and sureties granted by the ST belonged to the low-risk group. At the end of 2009 nominal value of contingent liabilities stood at ca. PLN 48.9 bn, i.e. 3.6% of the GDP as compared to PLN 31.5 bn, i.e. 2.5% of the GDP at the end of 2008. The increase of contingent liabilities resulted from guarantees granted for the development of road infrastructure.

In 2009 the ST granted guarantees in the total value of PLN 22 bn, of which:

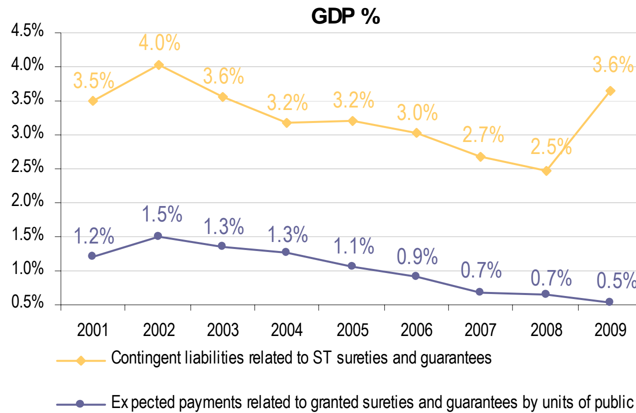
- PLN 12.4 bn on repayment of bonds (of which guarantees at the amount of PLN 11.4 bn on bonds issued by BGK for the State Road Fund),
- PLN 3.9 bn on repayment of loans (of which guarantees at the amount of PLN 2.8 bn on loans incurred by BGK for the State Road Fund),

- PLN 5.8 bn on payment of funds by the State Road Fund in BGK for a public-private partnership.

Simultaneously, expected payments resulting from guarantees and sureties decreased by PLN 1.1 bn in nominal terms and at the end of 2009 in relation to the GDP stood at 0.5%. The long-term risk ratio for the whole portfolio of guarantees and sureties decreased from ca. 26% to 15%.

In mid 2010 the liabilities under guarantees and sureties granted by the ST stood at PLN 71.4 bn.

Chart 20. Contingent liabilities and expected payments under guarantees and sureties granted by the ST



The value of contingent liabilities of local government units under sureties decreased from PLN 6.8 bn at the end of 2008 to PLN 4.9 bn at the end of 2009 and subsequently increased to PLN 5.2 bn in mid 2010.

III. ASSUMPTIONS OF THE STRATEGY

III.1. Macroeconomic situation in Poland

Major macroeconomic factors influencing changes of the nominal value of public debt are the borrowing requirements (including the deficit of the public finance sector) and changes in the exchange rate of the zloty. Changes in the debt-to-GDP ratio are also influenced by the real GDP growth and changes in prices. The main factors having a direct impact on debt servicing costs include interest rates, exchange rates and, to a lesser extent, inflation. The credit rating of Poland, which remained at the level of A- at all the three major rating agencies[7] since March 2007, also influenced costs of financing the borrowing requirements.

1. GDP growth

In 2009 the Polish economy proved exceptionally resistant to the consequences of the global financial crisis and was one of few OECD economies to report economic growth (by 1.7%). Based on the current shape of the Polish economy and an expected improvement of the results of the major trading partners, it may be assumed that GDP growth rate will increase to 3.0% in Poland in 2010. Domestic demand will be the major factor driving growth in 2010, which is connected to an expected increase in consumer demand and investments. The continuing increase of foreign demand with moderate appreciation of the zloty will contribute to a gradual recovery of the economy. Moreover, it is expected that private investments will pick up after the slowdown in the years 2009-2010. As a result, as compared to 2010, GDP growth will increase by ca. 0.5 pp reaching 3.5% in 2011. In the years 2012-2014 the actual GDP growth rate is predicted to increase considerably as compared to the years 2010-2011 being the highest in 2012 and subsequently decreasing gradually towards the long-term average.

2. Fiscal deficit

In 2009 the deficit of the general government sector stood at 7.1% of the GDP, which constituted growth by 3.4 pp on the year 2008 exceeding considerably the threshold of 3%. The figure deteriorated in each sub-sector by not less than 1.0 pp of the GDP. Such a high level of deficit of the general government sector resulted from the deficit of the sub-sector of local government institutions (mainly in Q4, 2009) which stood at a whopping PLN 15.8 bn, i.e. 1.2 pp of the GDP and the deficit of the National Road Fund, which is connected with the implementation of the *National Road Construction Programme 2008-2012*.

On May 13, 2009 Poland was once again put under the excessive deficit procedure by the European Commission while the ECOFIN Council announced under Article 104 of the Treaty establishing the European Community – the EC Treaty, that excessive deficit was observed in Poland and it recommended that it should be reduced below the reference value by 2012.

3. Inflation

It was assumed that prices of consumer goods and services would increase by 2.0% throughout 2010. In 2011 inflation growth is expected to remain at a level similar to this year's one reaching 2.3%. The relatively low inflation growth will result from still restricted pressure for higher wages, continuously low actual consumption growth among households and effects of the appreciation of the zloty. The planned increase of the VAT rates will contribute to the growth of prices even though its impact on price growth should be partially smoothed by other factors (such as appreciation of the zloty or reduction of margins). In the case of food prices, this impact is expected to be neutral due to various changes of VAT rates on individual groups of foodstuffs. In the years 2012-2014 the objective of the monetary policy of the NBP will be to stabilise the growth rate of consumer prices at the inflation target level, which will enable Poland to satisfy the inflation convergence criterion. Over this period, inflation is predicted to remain at a level similar to the inflation target of 2.5%.

4. Exchange rate of the zloty

Between 2010 and 2011, as sentiments on global financial markets improve and the global economy gradually returns to the path of growth, the zloty is expected to appreciate, supported by such factors as relatively robust foundations of the Polish economy, including much lower

[7] In the case of Moody's agency A2 rating approximately corresponds to A- for Standard&Poor's and Fitch. For government debt rating of the EU Member States see Annexe 4.

external imbalance and an influx of foreign director investments. Over this period increased of the NBP interest rates as part of tightening the monetary policy are expected to contribute to further appreciation of the zloty. Further appreciation of the zloty is expected in subsequent years.

5. Interest rates

Based on the predicted course of inflation processes in the mid term, it was assumed that changes in the cost of money of the central bank will remain subject to the implementation of the permanent inflation target. The reference rate is predicted to stand at 3.5% on average in 2010. The extent of interest rate changes will depend on potential increase of the inflation pressure amid continuing economic recovery.

Table 4. Macroeconomic assumptions of the Strategy

Item	2009	2010	2011	2012	2013	2014
Real GDP growth (%)	101.7	103	103.5	104.8	104.1	104
GDP in current prices (PLN bn)	1,343.7	1,412.1	1,496.3	1,608.9	1,716.8	1,829.5
Average CPI (%)	103.5	102	102.3	102.5	102.5	102.5
PLN/USD - yearly average	3.1	2.9	2.9	2.8	2.7	2.7
PLN/EUR - yearly average	4.3	3.9	3.7	3.6	3.5	3.5

6. Investor base development

The level of development of the domestic financial market, the investor base in particular, is an important factor influencing the management of debt. In the environment of free capital flows, a well-developed and deep domestic market enables an absorption of external shocks and neutralises outflows of foreign capital.

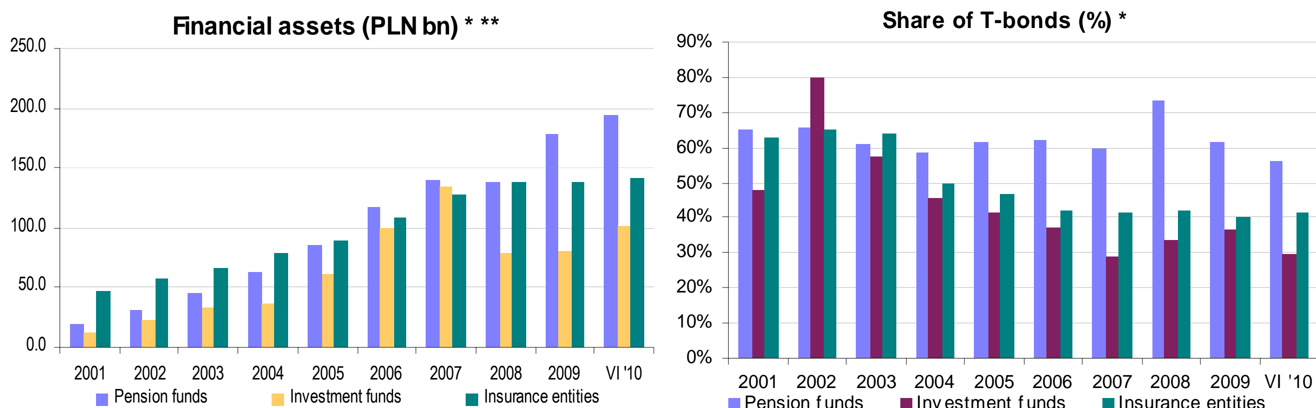
The recent decade brought dynamic growth in assets managed by domestic institutional investors. By mid 2008 that was predominantly a result of the boom on the stock market. Due to a relatively low level of interest on deposits, the focus was shifted from bank deposits towards investment funds and other financial products bearing potentially much higher rates of return.

The tendency reversed in 2008 in wake of the crisis in financial markets. The value of assets of non-banking financial institutions dropped significantly. The biggest drops, by ca. PLN 60 bn worth of assets, were recorded by investment funds, predominantly due to the slump on the Warsaw Stock Exchange and considerable redemption of units. Increasing yields of deposits played an additional role. Since 2009 assets of domestic investment funds returned to the path of growth due to such factors as a revival on the stock market and a better investment climate.

Main factors influencing the growth of value of assets managed by non-banking financial institutions include:

- the pension reform introduced in 1999, accompanied by setting up Open Pension Funds (OFE). Assets of these funds are growing quickly due to inflow of prospective pensioners' contributions;
- dynamic development of the insurance market (systematic growth of assets);
- conditions on the Polish stock market which are one of the factors determining the investment preferences of households.

Chart 21. Non-banking financial institutions assets and share of TS



**) In case of insurance companies data as of the end of March 2010.*

***) In case of investment funds and pension funds there are presented net financial assets (assets diminished by liabilities).*

Since 2005 the non-banking sector has been in possession of over a half of TS issued on the domestic market. Development of the domestic non-banking market contributes to increasing stability of demand for TS and, due to the long-term nature of investments by a majority of institutions active in this sector, to spurring demand for long-term instruments.

Chart 22. Domestic ST debt by holder

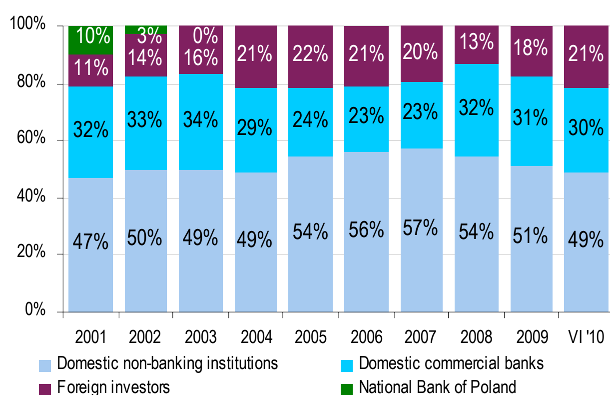
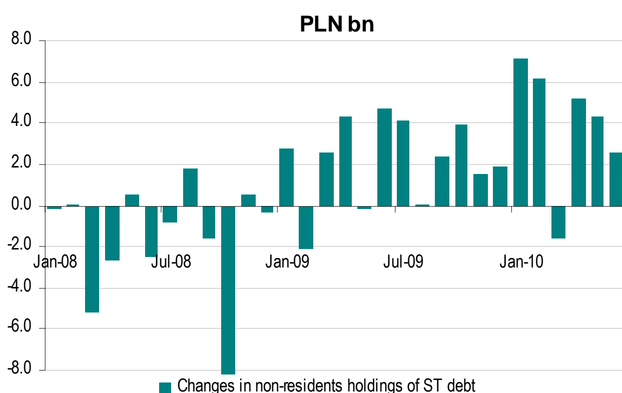


Chart 23. Changes in non-residents holdings of ST debt



Foreign investors also play an important role in financing the borrowing requirements of the state budget on the domestic market. The demand observed among this group is highly volatile and depends on the international situation. After a significant outflow of foreign investors from the TS market in 2008, as a result of which their share in domestic debt shrank from ca. 20% to ca. 13%, the gradual return of this group of investors since 2009 lead to an increase in their involvement in the domestic market to record-high levels, both in absolute terms and in terms of the share in ST domestic debt (respectively PLN 124.6 bn, i.e. ca. 25% at the end of August

2010). The perception of Poland by foreign investors will have a strong impact on the conditions of financing the borrowing requirements of the state budget within the timeframe of the Strategy.

III.2. International situation

The global economy is in the process of emerging from deep recession. Q1, 2009 still involved a high degree of uncertainty, however, the economic recovery in the global market picked up over the second half of 2009. Still, it does not change the fact that in 2009 the three major economies, i.e. the US, the Eurozone and Japan recorded significant drops of their GDPs (by 2.4%, 4.1% and 5.2% respectively). According to forecasts issued by the European Commission, in 2010 the GDP in the EU will increase by 1.0% (by 0.9% in the Eurozone). However, the condition of public finance is deteriorating. The thirteen states comprising the Eurozone are under the excessive deficit procedure. The first half of 2010 saw the global economy revive to a higher extent than originally predicted driven by the implementation of the macroeconomic policy. Robust growth was observed in global trade and industrial production. However, the economy did not improve smoothly. The developed markets made up for the losses suffered during the recent recession at a considerably lower pace than the emerging markets. The GDP growth in the Eurozone is expected to reach 1.5% in 2011, i.e. still below the long-term objective. Further increase of the growth rate is expected in subsequent years.

The most important aspects of the international situation, from the TS debt management point of view, include:

- the situation on the interest rate markets for the currencies in which liabilities will be incured, predominantly on the euro and US dollar markets;
- perception of the credit risk of the Polish government and liquidity preferences of purchasers of Polish bonds active on the global market, influencing the level of premium with respect to core markets;
- considerable increase of borrowing requirements of numerous countries resulting from a loss of budget revenues caused by adverse economic conditions on the global market and from economy stimulus measures undertaken by individual governments. In spite of measures undertaken by some countries with the aim of reducing borrowing requirements (caused by the debt crisis in Greece and concerns about the fiscal standing of other Eurozone states), the effects of lower TS supply will be more visible in the long term rather than in the short term.

1. Euro market (EUR)

In response to the deepening recession on the market, the European Central Bank continued to reduce the base interest rate to the level of 1%. Since then it has been maintained at this level and it is not predicted to increase considerably in the nearest future.

2. American market (USD)

In 2009 the budget deficit of the US rose to ca. 10% of the GDP due to lower tax revenues and expenditures aimed at reviving the economy. The second half of 2009 brought gradual stabilisation on the financial market, due to strong fiscal and monetary stimulus measures among others. Since December 2008 the FED has been maintaining the base interest rate in the range of 0.00% - 0.25% assuring that the interest rates would be maintained close to zero level for a longer period of time. Moreover, the FED undertakes actions aimed at improving liquidity on the financial market, also by continuing the purchase of TS issued by the US. Market expectations do not comprise any considerable increase of the interest rates in the nearest future.

3. Japanese market (JPY)

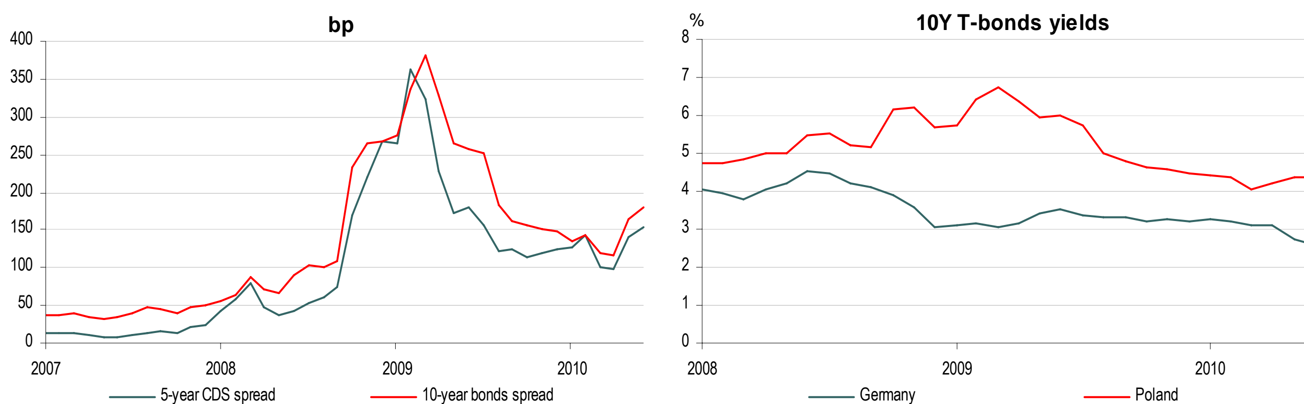
The Japanese economy is recovering from the recession very slowly due to high public debt, deflation and low internal demand hindering further growth. Japan has one of the highest public debts among industrialised countries. According to the International Monetary Fund, in 2009 it stood at ca. 218% of the GDP. This debt results from huge expenditures aimed at stimulating the economy in the 1990s as well as stimulus measures aimed at combating the recession in 2008. Since December 2008 the Central Bank has maintained the interest rates at the rate of 0.1% with the chief objective of stimulating the economy. The economy is not predicted to grow in the nearest future.

4. Credit spreads

Considerable changes in investors' behaviour on debt markets are one of the consequences of the global financial crisis. Uncertainty arising from an unknown scale of losses and its impact on the financial standing of potential counterparts results in a significant decrease of liquidity and rising risk aversion among investors. At the turn of 2008 and 2009 clear capital outflows from smaller markets were observed as they cannot manage to assure suitable liquidity to markets of bigger issuers. It caused a significant rise of credit spreads between yields of bonds of big issuers with high creditworthiness and yields of Treasury bonds of smaller issuers, especially those perceived as emerging markets or those which have only recently ceased to be qualified as such, including Poland.

Gradual rebuilding of trust on global financial markets over H2, 2009 enabled markets to return to price differences in economic foundations of individual countries. The spread between yields of Polish and German 10-year Treasury bonds denominated in the euro decreased from over 300 bp at the beginning of 2009 to ca. 150 bp in mid 2010. Taking into consideration the decrease of interest rates on core markets, the cost of market financing in the euro decreased when compared to the level from before the crisis. At the same time, in wake of the Greek crisis, market valuation of the credit risk of a substantial number of EU states increased, including those comprising the Eurozone, which was also reflected in the reduction of ratings of some countries[8].

Chart 24. 5-year CDS spreads for Poland and 10-year yields of Polish and German euro denominated Treasury Bonds



[8] Credit risk assessment of the EU Member States, including credit ratings and CDS pricing are presented in Annexe 6.

IV. DEBT MANAGEMENT STRATEGY OBJECTIVE IN THE YEARS 2011-2014

The objective of the Strategy, superior to all debt management activities, will remain to be **the minimisation of the long-term debt servicing costs subject to constraints on the level of:**

a) refinancing risk,
b) exchange rate risk,
c) interest rate risk,
d) State budget liquidity risk,
e) other risks, in particular credit risk and operational risk,
f) distribution of debt servicing costs over time.

There are two levels on which the cost minimisation objective is applied:

- **the choice of instruments,** cost minimisation within the timeframe of the longest maturities of debt instruments with a significant share in debt volume, through the optimal choice of markets, debt management instruments, structure of financing borrowing requirements and issuance dates;
- **increasing the efficiency of the TS market** contributing to the lowering of TS yields. It means aiming at spreads between TS issued by Poland and EU countries with the highest credit ratings to reflect only differences in creditworthiness and not barriers and restrictions in the organisation and infrastructure of the TS market.

The scope of implementing the cost minimisation objective remains unchanged as compared to the previous year's Strategy. This provides for possible flexibility in choosing the market, currency and instrument type. The choice of the financing structure should take into account the assessment of the market situation (level of interest rates and shapes of yield curves on respective markets as well as expected exchange rates) and result from comparing long-term funding costs, subject to constraints resulting from acceptable levels of risk.

The wealth of experience in debt management indicates the significance of flexibility and diversification of sources of financing borrowing requirements. At times of turmoil in the financial markets, it is prudent to use instruments adequate to market situation. The possibility to select the market and the currency allows for appropriate distribution of incurring liabilities over time as well as increasing the level of liquid funds at times of transitional market turmoil and, as a result, lowering the overall cost of raising capital.

The domestic market will remain the main source of financing the State budget borrowing requirements. The supply of domestic instruments will be designed in a way preventing the occurrence of excessive increase of yields in respective segments of the yield curve. Due to the considerable levels of the borrowing requirements of the State budget expected in the years 2011-2014, the role of funding raised on international markets will still be high. Therefore, financing the borrowing requirements of the budget in foreign currencies should:

- ensure diversification of sources of funding through Poland's access to the investor base on major financial markets,
- take into account foreign currency borrowing requirements including repayment of principal instalments and interest on foreign debt,
- strengthen the position of Poland on the euro market, which is of strategic importance due to the perspective of full integration under the EMU,
- take advantage of opportunities provided by access to financing on attractive conditions at international financial institutions,
- stabilise the domestic market by ensuring security of financing the State budget borrowing requirements should temporary disturbances on the domestic market occur,
- allow buying and selling currencies at the NBP as an instrument for managing the foreign currency borrowing requirements of the State budget and utilising funding raised on foreign markets for financing borrowing requirements in the domestic currency while taking into account monetary policy considerations and its economic rationale.

Minimisation of long-term debt servicing costs will be subject to constraints related to the debt structure. Therefore, the following has been assumed:

a) refinancing risk
   - aiming at an increase of the role of medium and long-term instruments in financing the State budget borrowing requirements on the domestic market at a pace contingent on investors' demand,
   - aiming at even distribution of redemptions and interest payments of domestic and foreign debt in subsequent years,
   - reaching the ATM of domestic debt at the level of at least 4.5 years within the Strategy's timeframe,
   - the current level of foreign debt refinancing risk does not restrain cost minimisation;

b) exchange rate risk
   - maintaining the acceptable range of the share of foreign currency debt in total debt in the period preceding the entry to the Eurozone to 20-30% in connection with increased volatility of foreign currency exchange rates and the need to maintain a flexible approach in incurring liabilities,
   - possibility to use derivatives in managing the exchange rate risk in order to create an adequate currency structure of debt and finance borrowing requirements of the State budget,
   - maintaining within the Strategy's timeframe an effective (i.e. taking derivative transactions into account) share of the euro as the future domestic currency in foreign currency debt at the level of at least 70%;

c) interest rate risk
   - keeping duration of the domestic debt in the range of 2.5-4.0 years,
   - possibility of separating the management of the interest rate risk from the management of the refinancing risk by using floating-rate bonds, inflation-linked bonds and derivatives,
   - the current level of foreign debt interest rate risk does not restrain cost minimisation;

d) State budget liquidity risk
   - keeping a safe level of State budget liquid assets while managing them effectively,
   - utilisation of free cash of selected public finance sector units, including state special purpose funds, in managing State budget liquidity,
   - the level of liquid assets will be the product of the State budget's demand for funds and the smoothening of TS supply within a year, taking into account seasonal considerations as well as current and expected market situation,
   - possibility to use liquid foreign currency funds in managing liquidity in the zloty,

e) other risks, in particular credit risk and operational risk
   - concluding transactions involving derivatives with domestic and foreign entities with high creditworthiness,
   - use of instruments limiting credit risk and solutions allowing for its diversification when concluding transactions involving derivatives,
   - diversification of credit risk generated by uncollateralised transactions,

f) distribution of debt servicing costs over time
   - aiming at smooth distribution of yearly debt servicing costs with the use of available instruments, especially switching auctions and derivatives,
   - setting bond coupons at levels close to their yields over the sales period.

V. STRATEGY TASKS IN A FOUR-YEAR HORIZON

The major tasks for implementing the Strategy's objectives are:

1. Increasing liquidity of the TS market,
2. Increasing efficiency of the TS market,
3. Increasing transparency of the TS market.

As the financial market develops constantly, the tasks of the Strategy are of long-term nature and cover measures implemented on a continuous basis. The tasks of the Strategy are to a large extend inter-connected, i.e. individual actions may contribute to the implementation of more than one task.

Ad 1. Increasing liquidity of the TS market

Increasing liquidity of the TS market in general and of TS issues in particular contributes to eliminating the spread that investors require in case of insufficiently liquid TS, i.e. those with high costs for pulling out of investment, as well as to increasing the demand from investors interested in liquid investments only. Both of these factors contribute to decreasing TS yields and hence to the minimisation of TS debt servicing costs. Market liquidity is of key importance in the context of Poland's planned entry to the Eurozone, which requires consistent implementation of adjusting measures in the period preceding the adoption of the euro. In the period covered by the Strategy the following measures are planned:

- Continuation of issuing large benchmark bonds on the domestic market ensuring sufficient liquidity on the secondary market. The policy of issuing medium and long-term fixed-rate bond series until their value reaches at least EUR 5 bn equivalent, adopted in 2003, remains in force. Bond issues will be granted sufficient liquidity by using such instruments as TS issuance calendar, switching auctions and supplementary auctions. Buy-back auctions of less liquid bond issues are also possible.

  EUR 5 bn has been adopted as a reference value at the current stage of development of the domestic TS market and is considered sufficient to provide sufficient liquidity for large institutional investors and not yet generating excessive refinancing risk at maturity. In the period covered by the Strategy it will be possible to increase the unit value of benchmark bonds above PLN 30 billion. In mid 2010 there were 13 bond series (of which 12 fixed-rate ones) exceeding the EUR 5 bn equivalent.
- Large liquid bond issues on the euro market, contributing to the development of the Polish yield curve. In mid 2010 there were 4 bond issues of EUR 3 bn or more, of which one exceeded EUR 5 bn.
- Adapting the issuance policy, including sale, switching and buy-back auctions to market circumstances, in particular to the demand in different segments of the TS market.

Ad 2. Increasing efficiency of the TS market

Increasing efficiency of the TS market covers activities aimed at minimising debt servicing costs at the second of two levels stated in Chapter IV. It includes both the primary and the secondary market. The following actions are planned:

- Adjusting the timing of issuance on the domestic and foreign market to market and budgetary conditions, taking into account actions aimed at increasing transparency of the TS market;
- Increasing the role of participants of the PD system in the development of the TS market and in debt management operations – the areas where primary dealers are at least as competitive as other participants of the financial market, concluding transactions and choosing partners will be made with preferences resulting from their participation in the PD system taken into account;
- Removing technical and legal obstacles on the domestic and foreign TS market, in particular actions aiming at enabling the settlement of transactions on TS issued on the domestic market by internationally recognised clearing houses (Clearstream and Euroclear in particular);

- Direct meetings with investors on the domestic and foreign market along with consultations with TS market participants in order to exchange information efficiently as well as taking investors' need into account in the process of implementing the Strategy, including:
  - regular meetings with banks participating in the PD system,
  - meetings with non-banking sector investors,
  - meetings with foreign investors and foreign banks,
  - ad hoc meetings and phone consultations with investors;
- Broadening the investor base, also by regular meetings with foreign investors in the form of non-deal roadshows on key foreign markets with the aim of:
  - building and maintaining relations with key foreign investors,
  - separating specific issues of foreign bonds from promotional activities (roadshows) enabling issuance at best possible timing, regardless of marketing readiness,
  - promotion of Polish TS issued both on the domestic and foreign markets;
- Active participation in conferences and seminars for investors;
- Broadening the channels of electronic communication, in particular with foreign investors.

Ad 3. Increasing transparency of the TS market

Measures taken to increase the transparency of the TS market allow to limit uncertainty connected with its functioning and acquire reliable information on current market prices as well as help formulate expectations to of future market prices. Both predictability of the issuance policy and transparent secondary market contribute to transparency of the market as a whole. The following measures are planned within the Strategy's timeframe:

- Transparent issuance policy, including announcing TS issuance calendars, yearly, quarterly, and monthly plans of TS supply on domestic and foreign markets as well as supply offers for individual TS auctions;
- Promoting the electronic market through appropriate PD system regulations in accordance with competitiveness and transparency rules, mainly the obligations imposed on dealers and candidates concerning quoting benchmark bonds, maintaining specific spreads and participation in the fixings of TS.

VI. INFLUENCING THE PUBLIC FINANCE SECTOR DEBT

Pursuant to Article 74 of the Public Finance Act of August 27, 2009, the Minister of Finance holds control over the public finance sector in respect to the rule which states that the public debt must not exceed 60% of the annual GDP.

In the case of other public finance sector units, which are autonomous in incurring liabilities, the influence on their level of debt is indirect and stems from regulations of the Public Finance Act. First and foremost, they include constraints imposed on the manner of incurring liabilities by local government units as well as prudential and remedial procedures, which are applied to the public finance sector units when the public debt-to-GDP ratio exceeds the thresholds of 50%, 55% and 60%.

VI.1. Changes in legal regulations

The most important legislative change that will influence financial operations of the public finance sector units is the draft amendment to the Public Finance Act and other acts. In the area of influencing the public finance sector debt the draft amendment will introduce the following changes as compared to the currently ruling act:

- change in the scope of the public finance sector by including the State Forests National Forest Holding in the sector;
- strengthening the State budget liquidity management system by:
  - the obligation to deposit free cash of special purpose state funds, executing agencies and other selected public finance sector units on the account of the Minister of Finance,
  - the possibility of local government units and other public finance sector units to invest free cash as deposits maintained by the Minister of Finance;

These measures constitute a comprehensive change aimed at increasing the efficiency of managing the assets of the public finance sector. They will result in a reduction of the borrowing requirements by utilised free cash of public finance sector units as well as in a reduction of the public debt and ST debt servicing costs. However public finance sector units maintain independence of managing funds required for the implementation of their tasks. It has been assumed in the Budget Act for 2011 that the implementation of the amendment to the Public Finance Act will reduce the State budget borrowing requirements by ca. PLN 19.8 bn;

- imposing an expenditure rule in order to achieve permanent stability of public finance consisting in:
  - constraining growth of discretionary expenditures (i.e. flexible ones) and new expenditures legally determined to the inflation rate increased by 1 percentage point during the effective period of the excessive deficit procedure (the excessive deficit procedure was opened for Poland on the 7th July2009),
  - stabilising the deficit of the general government sector at the level of the medium-term objective, i.e. 1% of the GDP after close of the excessive deficit procedure.
- strengthening the prudential and remedial procedures whenever the public debt-GDP ratio has exceeded 55% by:
  - transitional increase of the effective rates of the goods and services tax,
  - transitional exclusion of certain reliefs and exemptions from the personal income tax,
  - a review by the Council of Ministers of the regulations with the aim of submitting proposals of additional legal solutions designed to influence the level of State budget revenues,
  - restricting the possibility to incur new liabilities by government administration authorities for preparing investments co-financed with EU funds.

Under the Public Finance Act of August 27, 2009, rules regarding balanced current budgets of local government units will come into force in 2011 while a system of individual constraints on

incurring debt will come in force in 2014 under which the individual amount of debt to incur will be depended on their capacity to repay it[9].

VI.2. Assumptions of the strategy of granting sureties and guarantees

Granting sureties and guarantees by the public finance sector units, especially by the TS, entails the risk of generating debt servicing costs when sureties or guarantees are executed. Sureties and guarantees constitute potential debt, which can become public debt if they are executed.

In order to reduce risk stemming from granting ST guarantees and sureties while preserving advantages of using them as an instrument of the State's economic policy, the following principles, also in force in last year's Strategy, should be maintained:

- Concentrating on granting sureties and guarantees to support development-oriented investments in infrastructure, protection of the environment, creating new jobs, regional development, residential building, railway, especially those co-financed with EU funds (loans and bonds secured or guaranteed by the ST should help to acquire the EU structural funds), but also to support other investments that may arise from possible new support programmes using sureties and guarantees in compliance with the EU rules.
- The ratio of expected guarantees and sureties granted by the ST to GDP should not exceed 1.4%.
- Limiting the role of sureties and guarantees particularly risky for the ST, which are granted on the basis of special-purpose, so called "sectoral", acts.

According to the Act on sureties and guarantees granted by the ST and some other legal persons, the Budget Act determines each year the total amount to which guarantees and sureties can be granted by the ST.

Contingent liabilities under the ST sureties and guarantees are expected to increase in the Debt Management Strategy for the Public Finance Sector time horizon. At the end of 2010 their ratio to GDP may exceed the 4.5% threshold adopted in the Strategy of granting sureties and guarantees. The limit for 2010 in the adopted Budget Act is set at PLN 55 bn while the limit in the draft Budget Act for 2011 is set at PLN 40 bn. It is assumed that the risk of payments resulting from the ST sureties and guarantees will not increase.

The scale of usage of the guarantees and sureties granted by the ST will result from the continuation of investments in infrastructure and initiatives supporting the Polish economy. The highest contribution to the increase of contingent liabilities will have sureties and guarantees granted by the ST to the following entities:

- Bank Gospodarstwa Krajowego for:
  - bonds issuance in favour of the National Road Fund (KFD) in order to finance road infrastructure construction;
  - bonds issuance and incurring of credits and loans with the aim of supporting Polish export;
- entities involved in the construction of motorways within the concessionary mechanism (concessionaires), ST guarantees for payment of funds from the KFD at an amount required for repayment of liabilities from credit incurred at domestic and international financial institutions and issued corporate bonds.

VI.3. Debt of public finance units other than the State Treasury

Under the adopted assumptions, the nominal debt of public finance units other than the State Treasury will increase in the Strategy time horizon from PLN 72.5 bn to PLN 107.3 bn before consolidation and from PLN 54.7 bn to PLN 92.5 bn after consolidation. This increase will be the result of:

- systematic increase of the debt of local government units and their associations,
- stabilisation of debt of independent public health units,

[9] The rules and limits regarding incurring liabilities by local government units are discussed in Annexe 2.

- gradually improving results of the Social Insurance Fund,
- stabilisation of debt of other units in central and local sector.

The debt of the other sector before consolidation-to-GDP ratio in the Strategy's time horizon is expected to stand at ca. 5.9% while the debt after consolidation will increase from 3.9% at the end of 2010 to 5.1% in 2014. The share of this group of units in the total debt of the public finance sector is expected to stand at ca. 11% before consolidation and to increase from 7.3% to 9.6% after consolidation.

Chart 25. Debt of public finance sector units other than State Treasury

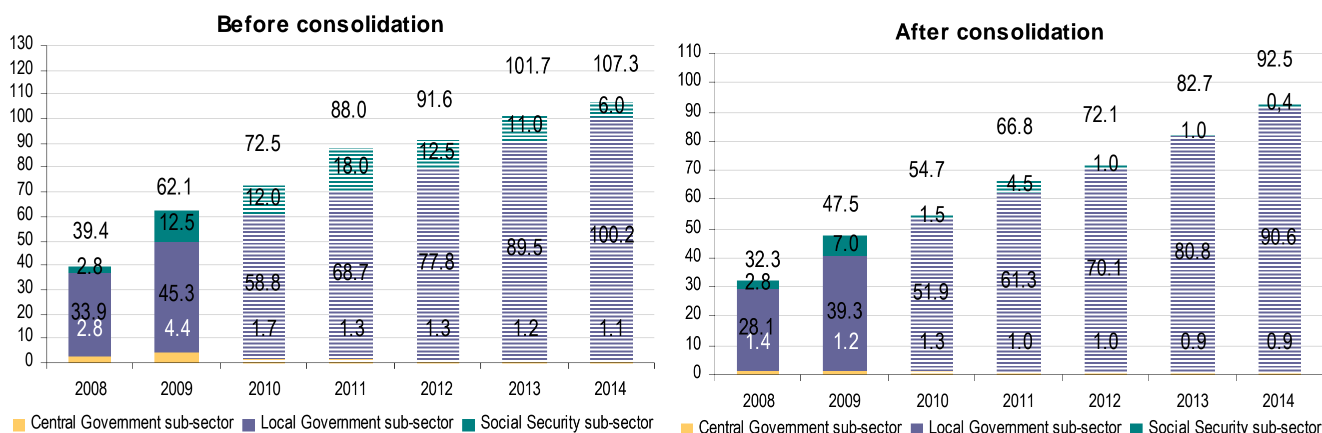
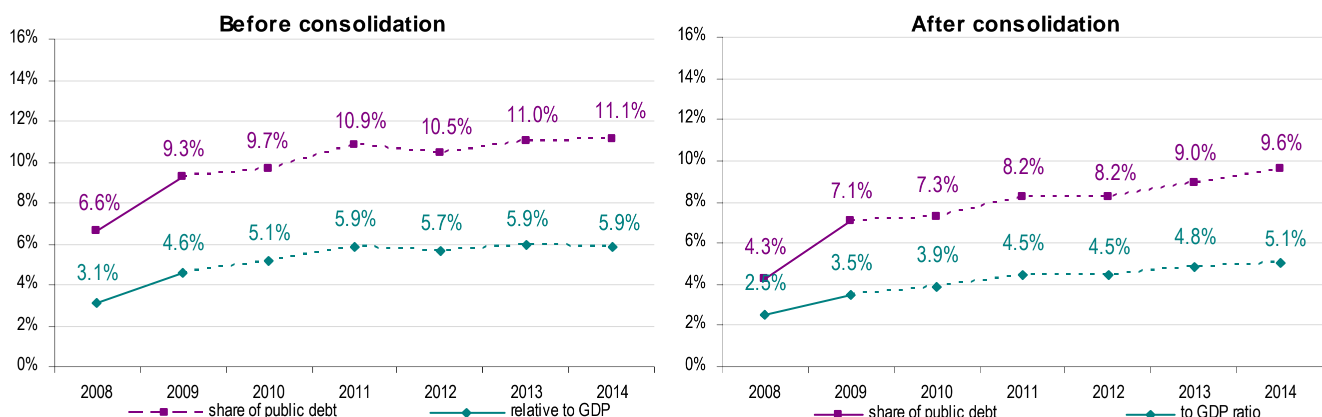


Chart 25. Debt of the public finance sector units other than ST before and after consolidation – ratio to GDP and share in total debt of public finance sector



1) Debt of local government units

It is assumed in the Strategy that the debt of local government units and their associations will be systematically increasing and will be a result of deficits and surpluses of individual units. Borrowing requirements of local government units will be first of all the effect of high expenditures connected with the execution of infrastructure projects, including those co-financed with the EU funds within the Financial Perspective 2007-2013. Like in previous years, the majority of debt will be generated by cities with the county status and municipalities.

The dominant instrument of financing the borrowing requirements of local government units will still be loans at commercial banks in the domestic market. The debt resulting from municipal bonds, especially those issued by large units, will increase. The significance of the foreign debt resulting from both bonds issued in international markets and loans incurred at international financial institutions is likely to increase further.

The rule of balanced current budgets of local government units influencing the extent of incurring new liabilities will come into force since 2011. Until 2013 local government units will incur liabilities on the rules defined in the Public Finance Act of June 30, 2005, which is no longer in force. The rules of incurring liabilities defined in the Public Finance Act of August 27, 2009 aimed at preventing local government units from excessive indebtedness will come into force since 2014.

2) Debt of independent public health care units

Under the adopted assumptions, the debt of independent public health care units before consolidation will be stabilised in the Strategy's time horizon. The debt of local government units will continue to dominate in the structure of liabilities of independent public health care units.

Changes in the debt will be the result of:

- restructuring of the existing debt of independent public health care units – on principles supporting healing the financial situation of individual units, taking into account the interest of creditors, founding bodies of independent public health care units and the ST,
- current financial results of individual units.

Loans will remain the prevailing debt component.

3) Debt of other units

The debt of other public finance sector units before consolidation in the Strategy's time horizon will be the result of:

- changes of debt of other state legal persons, mainly agricultural agencies,
- gradually improving results of the Social Insurance Fund,
- stabilisation of the debt of higher state schools, state and local cultural units, the Polish Academy of Sciences and organisational units established by it.

Loans granted within the public finance sector will predominate in the debt of other public finance sector units.

VII. EXPECTED EFFECTS OF IMPLEMENTING THE STRATEGY

The expected effects of implementing the Strategy cover forecasts of:

- the volume of public debt and its servicing costs,
- the volume of contingent liabilities resulting from granted guarantees and sureties,
- changes in risk related to public debt.

These are the expected results of the implementation of the Strategy's objectives with adopted macroeconomic and budgetary assumptions. The most important threats to implementing the Strategy have also been presented in this chapter.

VII.1. Volume of debt and its servicing costs

Under the adopted assumptions, the public debt-to-GDP ratio is expected to increase and exceed the threshold of 50% in 2010. According to the Public Finance Act, exceeding the 50% threshold in 2010 shall necessitate adopting a deficit-to-GDP ratio in the Budget Act for the year 2012 not higher than that adopted in the Budget Act for the year 2011. This restriction will have an impact on the budget deficits of subsequent years.

Between 2010 and 2012 the debt-to-GDP ratio is expected to remain close to the 55% threshold. It means considerable risk that this threshold could be exceeded and sanctions arising from the Public Finance Act could be imposed. Having regard to the considerable proportion of foreign financing in the ST debt, the exchange rate of the zloty at the end of relevant years is expected to be of considerable importance for the level of this ratio. This ratio is predicted to fall to 52.7% in the years 2013-2014.

The drop of the ST debt-to-GDP ratio is expected to be accompanied by an increase of the *general government* debt-to-GDP ratio to 57.8% in 2012 and its subsequent stabilisation. Under the adopted assumptions, no threat is expected for this ratio to exceed the 60% threshold stipulated in the Treaty of Maastricht within the timeframe of this Strategy.

The increase in the ST debt servicing costs will first of all results from an increase of debt volume. The ST debt servicing costs-to-GDP ratio will increase to 2.7% in the years 2012-2013 and then decline to 2.6% in 2014.

Table 5. Forecasts of the public debt volume and the ST debt servicing costs

Item	2009	2010	2011	2012	2013	2014
1. State Treasury Debt						
a) PLN bn	631.5	706.5	763.7	827.5	870.1	905.8
domestic	462.7	516.4	557.9	611.1	636.8	656.6
foreign	168.8	184.9	205.7	216.4	228.1	244.1
b) relative to GDP	47.0%	50.0%	51.0%	51.4%	50.7%	49.5%
2. Public Debt						
a) PLN bn	669.9	750.8	811.4	873.9	922.5	964.8
b) relative to GDP	49.9%	53.2%	54.2%	54.3%	53.7%	52.7%
3. General Government Debt						
a) PLN bn	684.1	783.0	854.6	930.5	989.5	1054.2
b) relative to GDP	50.9%	55.4%	57.1%	57.8%	57.6%	57.6%
4. State Treasury debt servicing costs (cash basis)						
a) PLN bn	32.2	34.9	38.4	43.0	45.7	47.1
b) relative to GDP, including	2.4%	2.5%	2.6%	2.7%	2.7%	2.6%
- domestic debt	1.9%	1.9%	2.0%	2.1%	2.1%	2.0%
- foreign debt	0.5%	0.6%	0.6%	0.6%	0.6%	0.6%

Chart 27. Public debt-to-GDP ratio

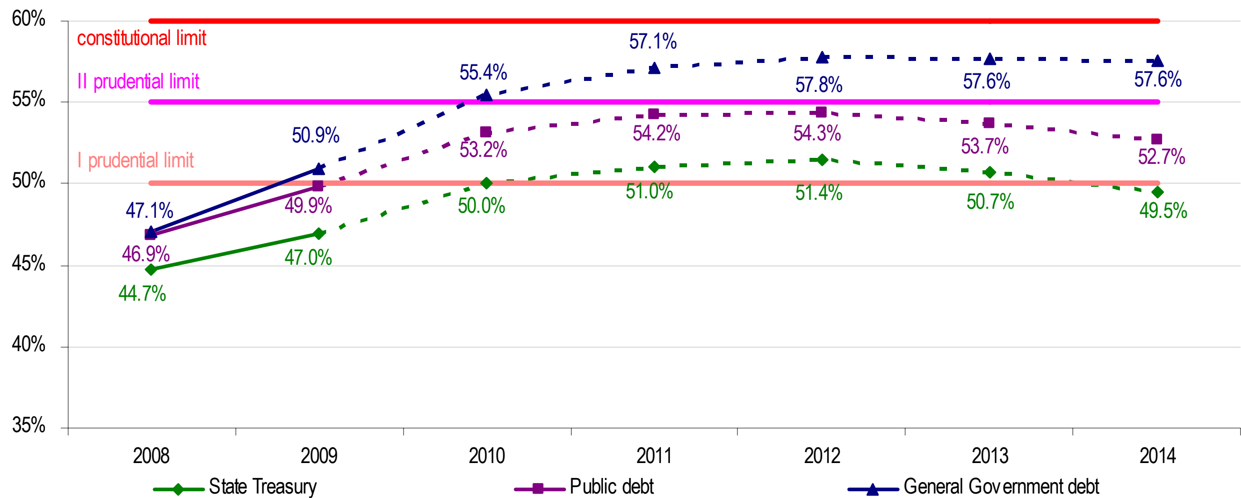


Chart 28. ST debt servicing costs-to-GDP ratio

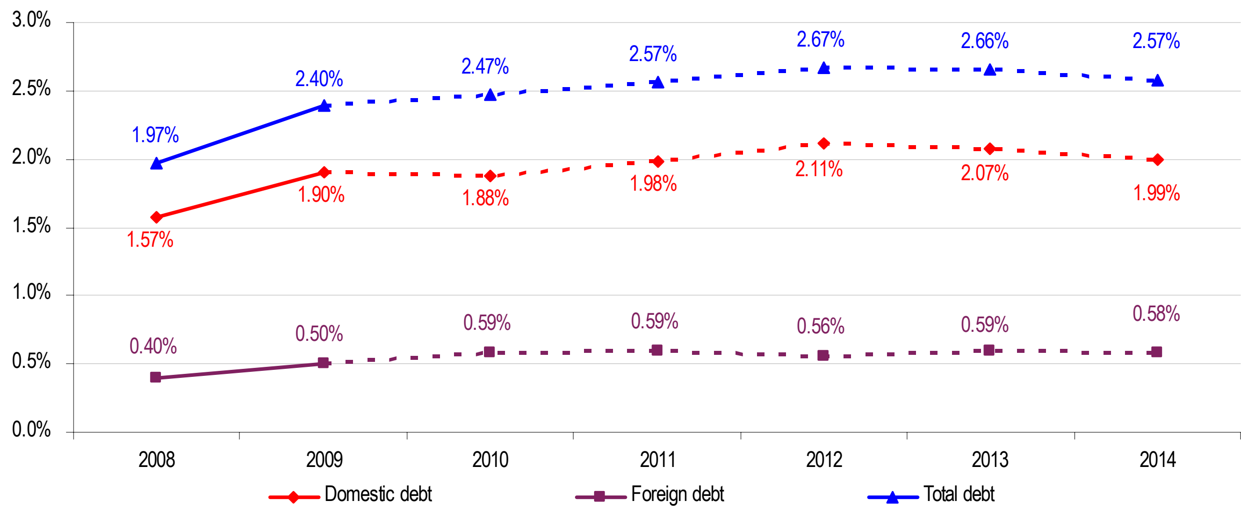


Chart 29. Sensitivity of public debt-to-GDP ratio to changes in assumptions

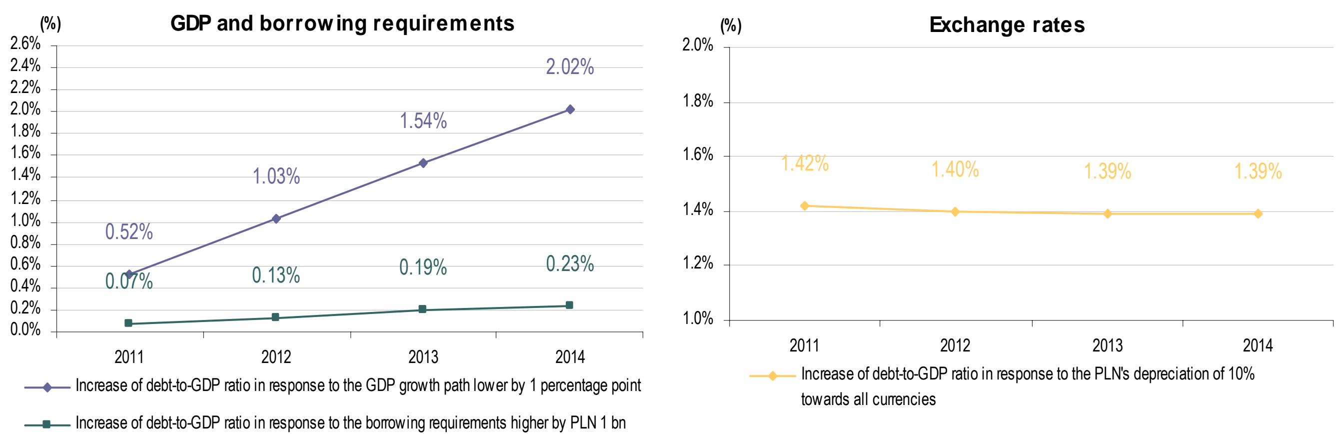
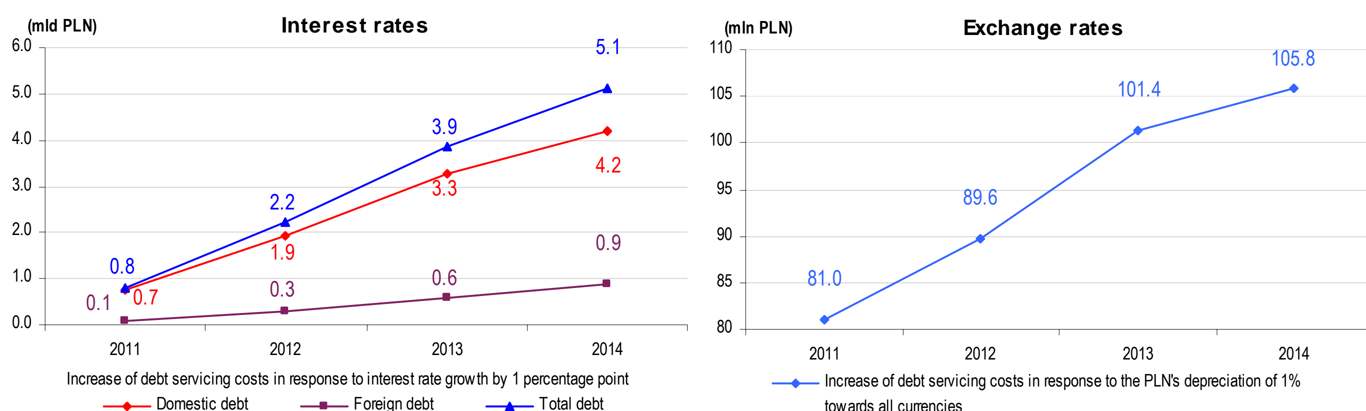


Chart 30. Sensitivity of public debt-to-GDP ratio to changes in assumptions



<u>Contingent liabilities (guarantees and sureties)</u>

It is expected that the ratio of ST contingent liabilities resulting from granted guarantees and sureties to GDP will exceed 4.5%. At the same time, payments resulting from granted guarantees and sureties will remain at a safe level and will not exceed the threshold of 1.4% GDP set in the strategy of granting sureties and guarantees.

Table 6. Forecasts of contingent liabilities and risk-weighted payments resulting from guarantees and sureties granted by the ST and the public finance sector units

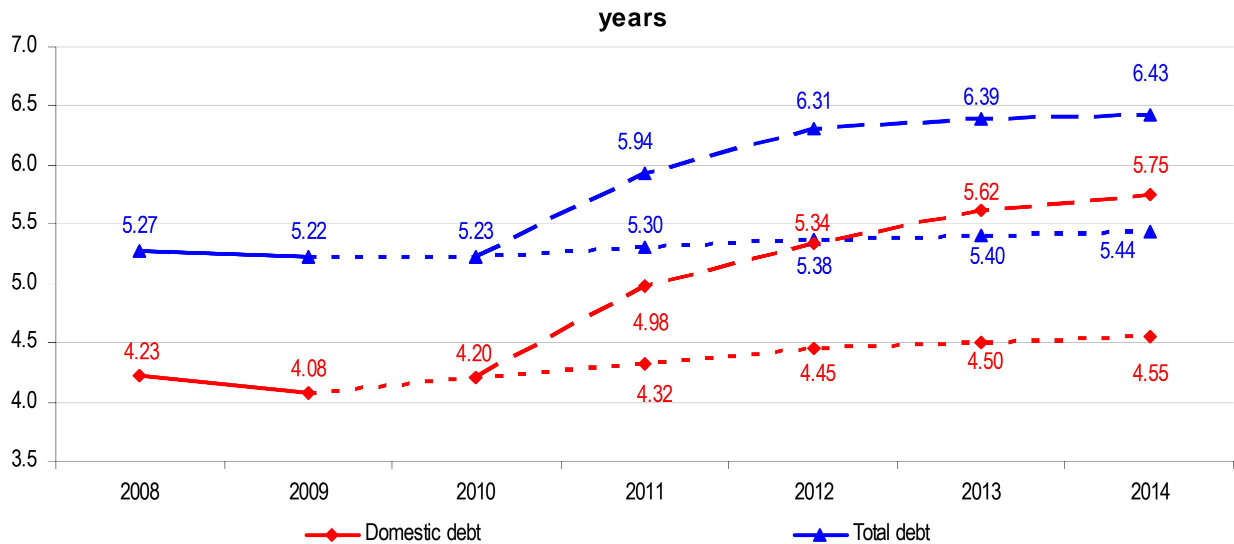
Public finance sector		2010	2011	2012	2013	2014
Contingent liabilities	PLN bn	95.6	126.5	138.3	138.9	140.6
	relative to GDP	6.77%	8.45%	8.60%	8.09%	7.68%
Risk-weighted payments	PLN bn	7.0	5.8	6.5	6.8	6.6
	relative to GDP	0.50%	0.39%	0.40%	0.40%	0.36%
State Treasury		**2010**	**2011**	**2012**	**2013**	**2014**
Contingent liabilities	PLN bn	92.5	123.4	135.2	135.9	137.6
	relative to GDP	6.55%	8.25%	8.40%	7.92%	7.52%
Risk-weighted payments	PLN bn	6.8	5.6	6.4	6.7	6.5
	relative to GDP	0.48%	0.37%	0.40%	0.39%	0.36%

VII.2. Structure of the State Treasury debt

It is forecast that within the timeframe of the Strategy:

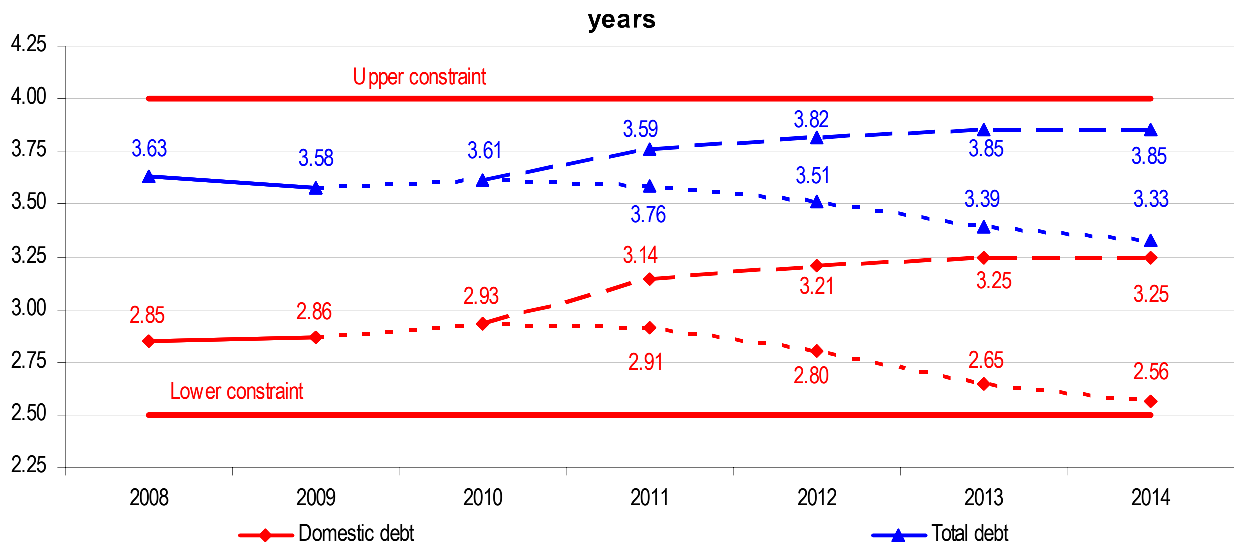
- the refinancing risk will be reduced – the ATM of the domestic marketable debt of the ST will increase, depending on the adopted financial strategy, to ca. 4.6-5.8 years, while the ATM of the total ST debt will fall in the range of ca. 5.4-6.4 years.

Chart 31. ATM of the ST debt



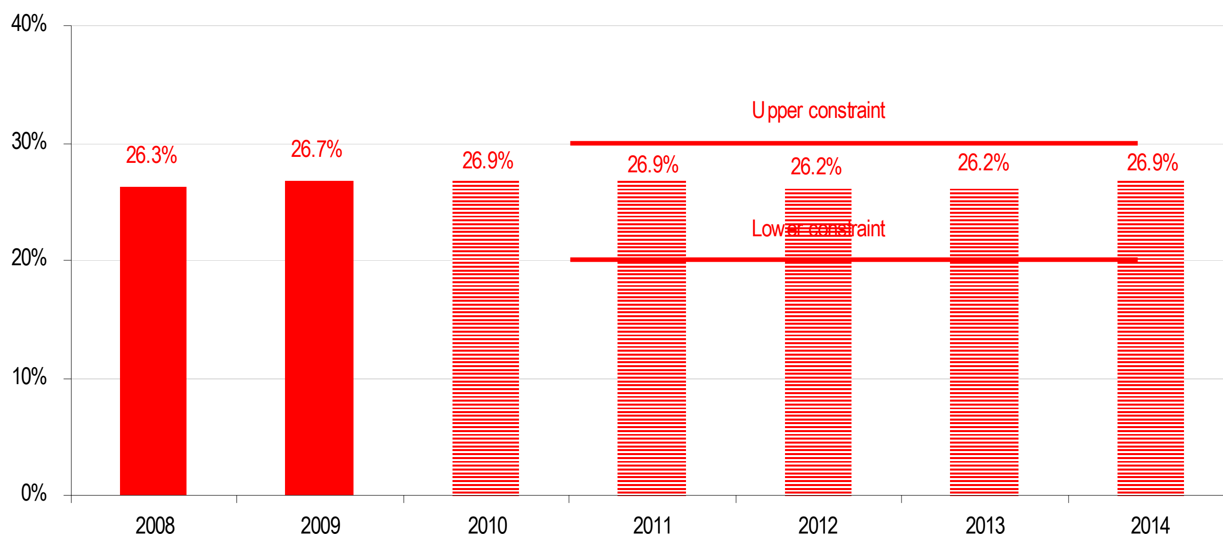
- the interest rate risk will remain in the range set in the Strategy, depending on the adopted financing structure of the duration of the domestic marketable debt will remain within the range of ca. 2.6-3.3 years as compared to ca. 2.9 years predicted for the end of 2010 while that of the total debt in the range of ca. 3.4-4.0 years.

Chart 32. Duration of the ST debt



- the average share of foreign debt will reach ca. 26.6%, while variations from the basic scenario are possible within the range of 20-30% adopted in the Strategy in connection with a flexible approach to foreign financing.

Chart 33. Share of foreign debt in the ST debt



VII.3. Threats to Strategy implementation

The main threats to the implementation of the Strategy at hand are primarily connected with:

1) an alternative to the assumed development of the macroeconomic situation in Poland, in particular the decrease of the GDP growth rate, higher interest rates as well as volatility of exchange rates;
2) development of the situation in the world's economy, including:
   - obstacles for major economies to emerge from the recession as well as the financial crisis,
   - more withdrawal of lending capital towards investments on basic markets resulting from concerns about the fiscal standing of issuers from the Eurozone and aversion of global investors' to risk;
3) the risk that over the Strategy timeframe the public debt-to-GDP ratio will exceed the threshold of 55% and that the ratio of the general government sector debt to GDP will exceed the threshold of 60%, as a result of:
   - higher borrowing requirements of the State budget depending on the situation of the Polish economy among others,
   - the amount of free cash of the sector of public finance units at the disposal of the Ministry of Finance in relation to the planned amendment to the Public Finance Act,
   - a lower exchange rate of the zloty as compared to that assumed in the Strategy,
   - a considerable increase in debt of public finance sector units other than the ST, of local government units in particular,
   - distribution of risk between the public partner and the private partner in public-private partnerships,
   - the necessity to execute sureties or guarantees granted by public finance sector units.

   Outlays on infrastructure projects co-financed with the UE funds will constitute a challenge in all the three areas.
4) uncertainty connected with the timeframe set for Poland's entry to the Eurozone and its impact on the exchange rate and interest rates.

Annex 1. Glossary

ATR (*average time to refixing*) – the measure of interest rate risk related to the public debt. *ATR* is interpreted as the average period, expressed in years, for which the debt servicing costs are set. The larger the share of short-term and floating rate instruments, the higher the interest rate risk and the lower ATR. ATR was introduced in 2005 as a complementary to duration measure of the interest rate risk that covers debt both with indexed and non-indexed principal. The *ATR* of domestic marketable TS is calculated according to the following formula:

$$ATR = \frac{\sum_{r \in R} rNZ_r + \sum_{t \in T} tNS_t + \sum_{j \in J} \frac{1}{12} NI_j I_0}{\sum_{r \in R} NZ_r + \sum_{t \in T} NS_t + \sum_{j \in J} NI_j I_0}$$

where:

r – payment date of the nearest fixed coupon for floating-rate instruments,

t – maturity date for fixed-rate instruments,

j – maturity date for inflation-linked instruments,

R – set of all payment dates of the nearest fixed coupons for floating-rate instruments,

T – set of all maturity dates for fixed-rate instruments,

J – set of all maturity dates for inflation-linked instruments,

NZ_r – face value of floating-rate instruments,

NS_t – face value of fixed-rate instruments,

NI_j – (non-indexed) face value of inflation-linked instruments,

I_0 – current indexation coefficient of inflation-linked instruments' face value.

Average maturity *(*also *ATM – average time to maturity)* – the measure of public debt refinancing risk. Average maturity is the average period, expressed in years, after which the issued debt will be redeemed. The further the maturity dates, the lower the refinancing risk and the higher the average maturity. Average maturity of domestic marketable TS is calculated according to the following formula:

$$ATM = \frac{\sum_{t \in T} tN_t I_0}{\sum_{t \in T} N_t I_0}$$

where:

t – maturity date,

T – set of all maturity dates,

N_t – face value paid at time t,

I_0 – current indexation coefficient of inflation-linked instruments' face value (for non-indexed Treasury Securities $I_0 = 1$).

Benchmark

1. (*issue*) the large amount of TS issue with a liquid secondary market. Yields of benchmark bonds are a reference point for yields in a given maturity segment. In the *Strategy* it was assumed that all new issues of fixed-rate bonds, except for two-year bonds (used for the medium-term liquidity management) should achieve a benchmark status. The minimum face value of the issue ensuring the liquidity was set at an equivalent of EUR 5 billion on the domestic market and EUR 5 billion on the Euro market. On other markets the value of the benchmark depends on issuer's preferences connected with refinancing risk and standard of market's development.
2. *(portfolio)* target characteristics of the public debt portfolio, which constitutes a *reference portfolio* for the existing portfolio and specifies the direction of public debt management. The characteristics of the reference portfolio may include the share of particular currencies, interest rates and types of instruments, as well as the values of synthetic indicators which most often constitute the risk measures, e.g. the average maturity or duration.

Credit risk – associated with the risk that the other party of the transaction will fail to meet its obligations in whole or in part. The risk occurs as a result of transactions in assets. For the entity managing the debt such a situation occurs when financial derivatives are used, swaps in particular. Credit risk also occurs in liquid assets management, e.g. through making deposits with banks and purchase of securities.

Credit risk is managed mainly by choosing partners with high creditworthiness (measured by their ratings) and by setting limits for total transaction size for partners, dependent on their credit credibility and type of transaction.

Duration[10] – the measure of vulnerability of debt servicing costs to changes of interest rates and thus the measure of interest rate risk related to public debt. *Duration* is interpreted as the average period (expressed in years) of debt servicing costs adjustment to the change of interest rate levels. The higher the level of interest rates and the larger the share of short-term and floating-rate instruments, the higher the interest rate risk and the lower *duration* are.

$$Duration = \frac{\sum_{r \in R} \left[r \sum_{s \in S_r} \frac{CFZ_s}{(1+i_s)^s} \right] + \sum_{s \in S} \frac{sCFS_s}{(1+i_s)^s}}{\sum_{s \in S} \frac{CFZ_s}{(1+i_s)^s} + \sum_{s \in S} \frac{CFS_s}{(1+i_s)^s}}$$

where:

s – payment date (of interest or face value),

S – set of all payment dates (of interest or face value),

r – payment date of the nearest fixed coupon for floating-rate instruments,

R – set of all payment dates of the nearest fixed coupons for floating-rate instruments,

S_r- set of all payment dates for these floating-rate securities. which the nearest fixed maturitiy is r,

CFZ_s - payment (of interest or face value) for floating-rate instruments,

CFS_s – payment (of interest or face value) for fixed-rate instruments,

i_s – zero-coupon interest rate for term *s.*

Duration of total debt of State Treasury is weighted average of appropriate duration coefficients for every currency, where weights are marketable value of debt in particular currency.

Exchange rate risk – stems from the existence in the State Treasury debt instruments denominated and settled in foreign currencies. The exchange rate risk manifests itself in the vulnerability of the debt level and debt servicing costs to exchange rate fluctuations, which is a consequence of the floating exchange rate regime applied in Poland. The Zloty appreciation or depreciation against a given foreign currency results in a proportional increase or decrease (in the zloty terms) of debt volume and debt servicing costs denominated in this currency.

Financial derivatives – financial instruments, which depend on the value of other assets called basic instruments. They are used to change the risk profile of the parties concluding a transaction in financial derivatives, i.e. hedging against risk, change of one type of risk to another or an conversion of the cost into the risk (a trade-off – a decrease in costs and an increase in risk). The examples of financial derivatives most often used in public debt management include swaps and options.

Interest rate risk – risk that payments related to the debt servicing costs will change as a consequence of a change in interest rates. It stems from the necessity to finance the debt maturing in the future at unknown rates and from volatility of coupon payments of the floating-rate debt.

Operational risk – risk associated with the threat that the costs related to the debt management or the level of other types of risk will increase due to an inadequate to the scope

[10] In relation to previous Strategy the notation manner of duration formula has changed, which now precisely describes the calculation algorithm of the index value for floating rate bonds. In itself the calculation algorithm has not changed.

of tasks infrastructure, organization and control of the debt management. Operational risk is the type of risk most difficult to measure.

Limiting the operational risk is achieved by integration of public debt management procedures in one organizational entity, having its structure, infrastructure and procedures adjusted to efficient operations in the environments of state administration and financial markets

Option – the right (but not the obligation) to buy or sell a specified asset at an agreed price, which the issuer of the option is obliged to observe with respect to the holder of the option. The options may be separate financial instruments or they may be built into other instruments, e.g. an option to present savings bonds to the State Treasury for early redemption.

Place of issue criterion – the criterion of the division of public debt into domestic and foreign debt, according to which the domestic debt is the debt issued on the domestic market.

Potential debt – liabilities that are not public debt, but which can become public debt once a specific event takes place. Guaranties and sureties granted by the public finance sector units are a classical example of potential debt. In the case of execution of a guaranty or surety, the liabilities became payable and increase expenditures of an entity that granted them, thus increasing its borrowing requirements and public debt.

Primary Dealers – a group of institutions (banks) selected through a competition that have specific rights and obligations related to the participation in the primary and secondary TS market. The dealers act as intermediaries between the issuer and other entities in TS trading and have the exclusive access to the primary market.

Private placement – an issuance addressed to a selected investor or group of investors.

Refinancing risk – associated with debt issuance in order to finance the State borrowing needs resulting from the redemption of the existing debt. The risk applies to both the ability to redeem maturing debt and conditions on which it is refinanced (including in particular servicing costs generated by newly issued debt). The larger the payment related to the redemption of maturing debt and the closer the date of redemption, the larger the risk related to refinancing of this debt. The refinancing risk is influenced by the level of outstanding debt and its maturity profile. The extension of the debt maturity and the even distribution of debt redemption over time contribute to the reduction of refinancing risk.

Resident criterion - the criterion of the division of public debt into domestic or foreign debt, according to which the domestic debt is the debt owned by domestic investors (i.e. investors with the place of residence or registered seat in Poland).

Spread – the difference between yields of two securities. In narrower meaning credit *spread* (also credit margin) – the difference between yields of two securities with all the characteristics (especially maturity date) identical (or almost identical) except for issuer. Spread is often understood as a difference between yields of credit risk-burdened and credit risk free (or characterized by the lowest risk in the class) security.

State budget liquidity risk – risk associated with the loss of the state budget's ability to meet the current obligations and to timely execute budget expenditures. In order to reduce this risk the State budget should have an access to the adequate amount of liquid financial assets, enabling the independence from temporary events of crises which prevent or make difficult the acquisition of funds on the financial market at rational cost.

State budget liquidity risk is managed by keeping safe reserve of funds at the lowest possible level on one hand (by improving the process of state budget liquidity planning and monitoring) and on the other by the management of liquid assets in a way that they generate budget revenues which in the highest possible extent compensate for costs of keeping a given level of liquidity.

Swap – exchange of streams of payments with rules of calculating their value specified in advance, which takes place between the parties of the agreement. *Swap* is a financial instrument from the group of the so-called *financial derivatives. Swap* may be a separate financial instrument or it may accompany other instruments.

Annex 2. Legal regulations applied to public debt in Poland and the EU

Table 1. Public debt – basic legal regulations

Polish regulations	EU regulations
1. Constitution of the Republic of Poland ban on contracting loans and granting guaranties and sureties resulting in the public debt exceeding 3/5 of GDP (Article 216(5));	1. Treaty on the functioning of the European Union ➢ level of general government debt and restrictions applied to general government deficit constitute the criterion on the basis of which the Commission examines the compliance with budgetary discipline in Member States (Article 126) – specifies the so called Excessive Deficit Procedure (EDP);
2. Public Finance Act ➢ regulations on public debt: definitions, basic principles of issuing public debt and debt management, prudential and remedial procedures applied to public debt levels; ➢ definition of the scope of the public finance sector.	2. Protocol on the excessive deficit procedure annexed to the Treaty establishing the European Community and the Treaty on the functioning of the European Union ➢ definition of general government debt and reference value of debt to GDP ratio at 60%;
	3. Council Regulation on the application of the Protocol on the Excessive Deficit Procedure annexed to the Treaty establishing the European Community ➢ definition of general government debt with specification of categories of liabilities which constitute it;
	4. The European System of Accounts (ESA'95) ➢ definition of categories of financial liabilities; ➢ definition of general government sector.

Table 2. Limits on the public debt to GDP ratio in the current and the new Public Finance Act

Current Public Finance Act
I. Legal procedures regarding limits on public debt to GDP ratio
1) the ratio in year *x* is greater than 50%, and not greater than 55%: a) the state budget deficit to state budget revenue ratio in the draft budget act adopted by the Council of Ministers for the year x+2 cannot be higher than in the year x+1;
2) the ratio in year *x* is greater than 55%. and lower than 60%: a) the state budget for the year x+2 has to be at least balanced or the difference between state budget revenues and expenditures in draft budget act adopted by the Council of Ministers for the year x+2 must ensure the decrease in State Treasury debt to GDP ratio as compared to the ratio announced for the year x+1 ; b) budget deficit of local government unit minus cumulated budgetary surplus from previous years and liquid funds in budget resolution adopted for the year x+2 can only derive from expenditure connected with the execution of current tasks financed by the EU funds and non-returnable financial means from admitted help by EFTA member countries; c) in draft budget act adopted by the Council of Ministers for the year x+2: ➢ no increase in salaries of public sector employees is assumed, ➢ revaluation of pensions must not exceed CPI in the budgetary year x+1, ➢ ban of granting new loans and credits from the State budget is introduced, ➢ increase in expenditures of the Sejm (lower house of Polish Parliament), the Senate (upper house of Polish Parliament), Presidential Chamber of the Republic of Poland, Constitutional Tribunal, Supreme Chamber of Control (NIK), Supreme Court, Primary Administration Court, common courts of law and provincial administration courts, Spokesman of Citizen Rights, Spokesman of Child Rights, National Board of Radio and Television, General Inspector for the Security of Personal Data, The Institute of National Remembrance – Commission for the Prosecution of Crimes against the Polish Nation, National Electoral Office, National Labour Inspection must not be higher than expenditures in the government administration; d) the Council of Ministers make a review of: ➢ State budget expenditures financed by foreign credits, ➢ long- term projects; e) the Council of Ministers presents a remedial program ensuring a fall In the ratio of public debt to GDP;
3) the ratio in year x is equal to or greater than 60%: a) procedures predicted in points a, c, d in case of the ratio greater than 55%, and lower than 60% are in force; a) budgets of local government units for the year x+2 must at least be balanced;

Current Public Finance Act	
b) a ban on granting new sureties and guarantees by public finance sector entities is introduced; c) the Council of Ministers presents to the Parliament a remedial programme with the main objective to prepare and implement actions aimed at reducing the public debt-to-GDP ratio below 60%;	
II. Principles and limits on incurring liabilities by local government units	
a) Local government units can incur loans and issue securities for: ➢ repayment of earlier incurred liabilities resulting from securities and loans, ➢ covering temporary budget deficit of local government within the fiscal year, ➢ financing of planned budget deficits; ➢ preceding financing tasks financed by UE funds;	
b) Loans incurred and securities issued for covering temporary budget deficit of local government have to be paid off or redeemed in the same year as they were incurred or issued;	
c) Local government can only incur these liabilities of which servicing costs are borne at least once a year, while: ➢ discount of securities issued by local government cannot exceed 5% of their face value, ➢ capitalization of interest is inadmissible;	
d) For a local government unit, the ratio of total debt in a fiscal year to: ➢ instalments of loans and interest payable in this fiscal year, ➢ redemption of securities and interest payable on them, ➢ potential payments resulting from sureties and guarantees granted, to planned revenues cannot exceed:	
(in force until the 31st December 2013) ➢ in given budgetary year 15%, in case when public debt to GDP ratio exceed 55%, it cannot exceed 12%;	*(in force since the 1st January 2014)* ➢ in the budgetary year and any other year following the budgetary year the arithmetical average for last three years calculated as current revenues including proceeds from privatisation minus current expenditures to total revenues ratio;
e) The ratio of total debt at the end of a fiscal year to total revenues and of total debt at the end of quarter to planned revenues cannot exceed 60%;	
f) Limitations on debt of local government are not applied to issuing securities and incurring loans in connection with financial means specified in an agreement with an entity that disposes the EU structural funds or the Cohesion Fund.	
(in force since the 1st January 2011)	
	g) Assumed and executed current expenditures must not be higher than assumed and executed current revenues including liquid funds and budgetary surpluses from previous years;
	h) Executed current expenditures can be higher than executed current revenues including liquid funds and budgetary surpluses from previous years only by amounts which are connected with the execution of current tasks financed by EU funds and non-returnable financial means from admitted help by EFTA member countries in case of not receiving them in the given year.

Table 3. Main differences in general government debt – Polish (current act and new project on act) and EU definition

Polish regulations	EU regulations
public debt	**general government debt**
1) scope of the public finance sector	
➢ Public Finance Act defines limited catalogue of units included in the public finance sector;	➢ scope of general government sector is defined in ESA'95 [2)]; no limited catalogue of units is defined;
differences in the scope of sector depending on regulations	
a) funds formed within Bank Gospodarstwa Krajowego (BGK), f. ex. : the National Road Fund (KFD), the Railway Fund (FK)	

Polish regulations	EU regulations
public debt	**general government debt**
➢ are excluded from the public finance sector;	➢ are included in the general government sector [3];
2) liabilities which constitute public debt	
➢ securities (excluding shares); ➢ loans and credits (including securities whose disposal is limited); ➢ deposits; ➢ matured payables (i.e. liabilities due but not settled);	➢ securities other than shares excluding financial derivatives; ➢ loans [4]; ➢ cash and deposits;
differences in liabilities depending on regulations	
➢ matured payables;	- [5]
3) contingent liabilities	
differences in treatment of contingent liabilities in debt-to-GDP ratio	
➢ is not included; since 1st January 2006 in line with the Public Finance Act of 30 June 2005 the basic category of public debt to which all the limits apply is public debt without risk-weighted sureties and guarantees. New Public Finance Act does not incorporate changes to contingent liabilities;	➢ EU limitations do not take directly into account contingent liabilities generated by issued sureties and guarantees; ➢ when specific criteria are met (in line with ESA'95 rules) contingent liabilities should be treated as debt assumed by the entity which issued surety or guarantee;

1) Polish Central Statistical Office (GUS) is responsible for the scope of general government sector (in line with EU regulations).
2) Council Regulation No 2223/1995 on the European System of National and Regional Accounts in the Community. ESA'95 criteria apply first of all to functional activities of any entity and manner of their financing. Basic activity of a unit (i.e. redistribution of national income and wealth or being a non-market producer) is taken into account. In other cases 'the 50% rule' should apply (i.e. less than 50% of production costs is covered by sales).
3) According to Eurostat's guidelines in relation to classification of infrastructure enterprises, apart from liabilities of special purpose funds other investment expenditures incurred by units outside the sector which implement such investments could be included, when certain criteria regarding general government debt are met. (imputed loan)
4) Eurostat applies wider definition of loans, according to which as imputed loan should be defined f. ex. initial cash flows received from counterparty in swap transaction.
5) Matured payables are expenditure on accrual basis and thus are included in net borrowing/net lending calculated (balance of general government) in accordance with EU methodology.

Annex 2. Institutional framework for public debt management in the EU Member States

There exists no unified institutional model of State Treasury debt management in the EU Member States. Three basic types of organizational arrangements can be identified:

- the bank model - debt management in the central bank,
- the government model - debt management in a ministry (usually the Ministry of Finance or State Treasury),
- the agency model - debt management in a specialized institution (agency) whose fundamental (but sometimes not sole) task is debt management.

The bank model is the most strongly criticized one, as a potential conflict of interest may occur between monetary policy and public debt management. The central bank in such a situation may:

- treat debt management in an instrumental manner and concentrate on goals of monetary policy,
- be less inclined to increase interest rates in situations of inflationary risk (as this would increase costs related to debt) or it may even influence the interest rates or increase the market liquidity just prior to a TS auction in order to achieve better prices and lower financing costs.

In both cases the execution of tasks imposed on the central bank is not optimal. In addition, even if monetary policy and debt management are entrusted to different divisions and the so-called “Chinese Wall” is used, suspicions can arise that some information on interest rate levels unknown to the market may be used in debt management, thus reducing trust in the issuer and resulting in investors requesting an additional risk premium for Treasury securities.

An argument used by supporters of the solution of placing debt management within the central bank is their conviction that the central bank is better prepared for performing activities on the financial market than units remaining within the structure of a ministry.

The government model is used successfully in conditions typical for developing economies or economies undergoing transformations where development of the domestic financial market is low, though used also in some developed economies[11]. This is due to the significant ability of the government to influence the creation of appropriate legal and institutional infrastructure, necessary for the efficient functioning of the financial market. However, the disadvantages of this solution become increasingly visible in developed and stable economies:

- the threat of favouring short-term budgetary goals over long-term objectives of debt management, which may lead to an increase in both the risk associated with debt structure as well as the debt servicing costs in the long term,
- lack of sufficient flexibility as well as ability to react quickly enough to changes of market conditions (which is especially important if financial derivatives are used for debt management) arising from the significant bureaucracy of administrative entities,
- difficulties in recruiting and retaining appropriately trained specialists due to uncompetitive employment conditions for state administration employees as compared to those offered by financial sector companies (banks, investment funds, etc.).

The agency model dominates in the EU Member States. The term “agency” is a certain type of generalization (it does not mean a government agency as defined by Polish law) as specialized institutions involved in debt management in different countries vary significantly, both in respect to the scope of tasks entrusted to them as well as the level of their institutional independence. Their common feature though is their high level of autonomy in selecting methods used to fulfil the entrusted tasks. The advantages associated with entrusting debt management to specialized institutions include:

- the ability to select optimal solutions as well as to carry out long-term debt management objectives by limiting the risk of impact of short-term fiscal policy goals on management decisions,

[11] The government model is used in such countries as Spain or Italy.

- ensuring greater transparency of management operations through the use of better control and reporting mechanisms, thus increasing investor confidence and lowering costs of financing of borrowing needs,
- the need to prepare clear and unambiguous procedures enabling prompt decision making on market transactions (a necessary condition for efficient, active debt management),
- the ability to face competition from commercial financial institutions (recruitment and retention of highly qualified specialists).

The mandate of the agency is usually to carry out guidelines specified by the Minister of Finance and its activities are audited in order to ensure the compliance with these guidelines. Therefore, in the case of the agency model, preparation of the appropriate legislative and organizational solutions is very important in order to ensure good cooperation between the Minister of Finance who specifies the objectives and the agency that carries them out.

At present in 14 out of 27 Member States of the enlarged EU the agency model is applied (in 10 out of 16 Member States Eurozone).

Table 4. Institutions responsible for debt management in the EU Member States

	Country	**Model**	**Institution name**
Eurozone	Austria	**agency**	Österreichische Bundesfinanzierungsagentur
	Belgium		Agence de la Dette (Agentschap van de Schuld)
	Finland		Valtiokonttori
	France		Agence France Trésor
	Netherlands		Agentschap van het ministerie van Financiën
	Ireland		National Treasury Management Agency
	Malta		Debt Management Office
	Germany		Finanzagentur GmbH
	Portugal		Instituto de Gestão do Crédito Público
	Slovakia		Štátna pokladnica
	Cyprus	**government**	Υπουργείο Οικονομικών
	Greece		Γενικο Λογιστηριο Τοψ Κρατοψσ
	Spain		Ministerio de Ekonomia
	Luxemburg		Ministère des Finances
	Slovenia		Ministrstvo za finance
	Italy		Ministero dell'Ecomomia e delle Finanze
Other EU countries	Latvia	**agency**	Valsts Kase
	Sweden		Riksgäldskontoret
	Hungary		Államadósság Kezelő Központ Zrt.
	United Kingdom		Debt Management Office
	Denmark	**bank**	Dansk Nationalbanken
	Bulgaria	**government**	Министерство на финансите
	Czech Republic		Ministerstvo financí
	Estonia		Rahandusministeerium
	Lithuania		Finansų Ministeria
	Poland		Ministerstwo Finansów
	Romania		Ministerul Economiei şi Finanţelor

Annex 4. General government deficit and debt and yields on 10-year bonds in the EU Member States

	2008			2009		
	General government balance % GDP	General government debt %PKB	10-year interest rate[1] (%)	General government balance % GDP	General government debt %PKB	10-year interest rate[1] (%)
Italy	-2.7	106.1	4.68	-5.3	115.8	4.31
Greece	-7.7	99.2	4.80	-13.6	115.1	5.17
Belgium	-1.2	89.8	4.42	-6.0	96.7	3.90
Hungary	-3.8	72.9	8.24	-4.0	78.3	9.12
France	-3.3	67.5	4.23	-7.5	77.6	3.65
Portugal	-2.8	66.3	4.52	-9.4	76.8	4.21
Germany	0.0	66.0	3.98	-3.3	73.2	3.22
Malta	-4.5	63.7	4.81	-3.8	69.1	4.54
Austria	-0.4	62.6	4.36	-3.4	66.5	3.94
Netherlands	0.7	58.2	4.23	-5.3	60.9	3.69
United Kingdom	-4.9	52.0	4.50	-11.5	68.1	3.36
Cyprus	0.9	48.4	4.60	-6.1	56.2	4.60
Poland	**-3.7**	**47.2**	**6.07**	**-7.1**	**50.9**	**6.12**
Ireland	-7.3	43.9	4.53	-14.3	64.0	5.23
Spain	-4.1	39.7	4.37	-11.2	53.2	3.98
Sweden	2.5	38.3	3.89	-0.5	42.3	3.25
Finland	4.2	34.2	4.29	-2.2	44.0	3.74
Denmark	3.4	34.2	4.28	-2.7	41.6	3.59
Czech Republic	-2.7	30.0	4.63	-5.9	35.4	4.84
Slovakia	-2.3	27.7	4.72	-6.8	35.7	4.71
Slovenia	-1.7	22.6	4.61	-5.5	35.9	4.38
Lithuania	-3.3	15.6	5.61	-8.9	29.3	14.00
Latvia	-4.1	19.5	6.43	-9.0	36.1	12.36
Luxemburg	2.9	13.7	4.61	-0.7	14.5	4.23
Bulgaria	1.8	14.1	5.38	-3.9	14.8	7.22
Romania	-5.4	13.3	7.70	-8.3	23.7	9.69
Estonia	-2.7	4.6	-	-1.7	7.2	-
EU 27	**-2.3**	**61.5**	**-**	**-6.8**	**73.6**	**4.13**
Eurozone	**-1.9**	69.6	**-**	**-6.3**	**78.7**	**3.82**

[1] 10-year interest rate – average of average monthly 10-year Treasury Bond yields since last twelve months; average in December; Eurostat.
[2] data for Poland – Ministry of Finance, other data – Eurostat.

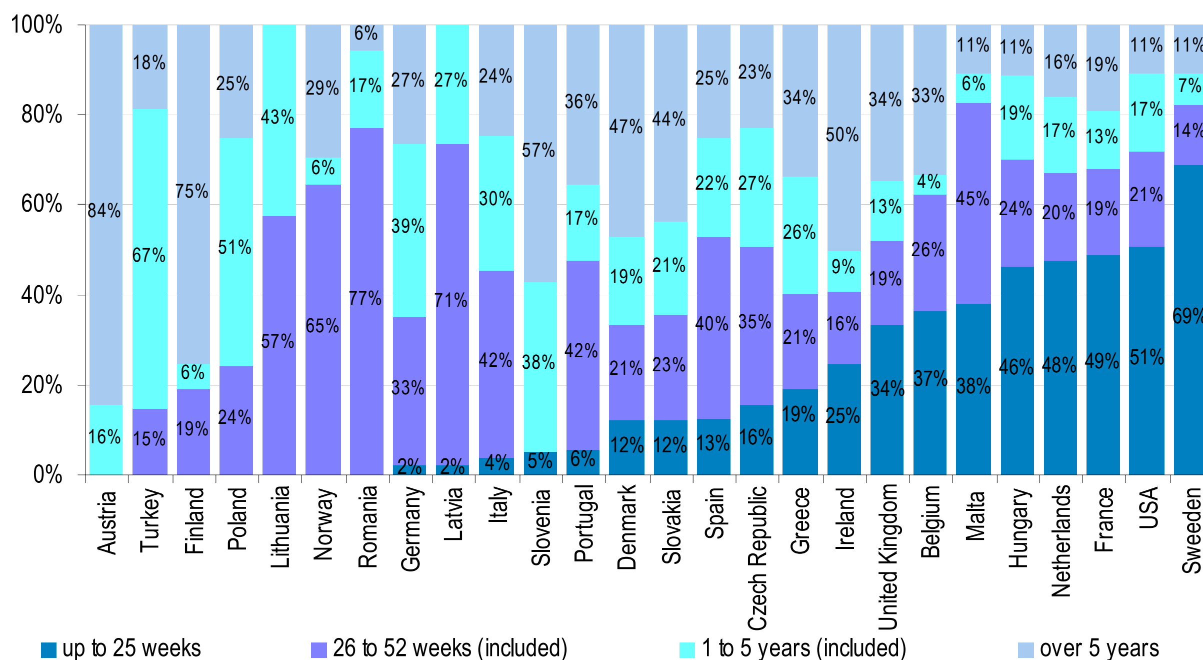
Annex 5. ATM and duration of public debt of EU Member States

Table 5. ATM and duration of public debt of EU Member States in 2009

	ATM			Duration		
	total	domestic	foreign	total	domestic	foreign
Austria	8.40	8.60	2.50	6.10	6.20	2.20
Belgium	5.94	5.96	0.25	3.87**	3.89**	0.10**
Czech Republic	6.50	*	*	4.2**	*	*
Denmark	8.20	9.70	2.70	10.50	6.70	0.20
Estonia	*	*	*	*	*	*
Finland	4.10	4.10	0.00	2.70	2.70	0.00
France	6.60	6.60	*	5.10**	5.10**	*
Greece	7.90	*	*	*	4.90	*
Spain	6.40	6.40	*	4.50	4.50	*
Netherlands	6.60	6.60	*	*	*	*
Ireland	6.70	*	*	6.00	*	*
Luxemburg	5.40	5.40	*	*	*	*
Germany	5.90	5.90	1.40	4.5**	4.5**	0.3**
Poland	**5.22**	**4.08**	**8.27**	**3.59**	**2.88**	**5.39**
Portugal	6.06	*	*	3.60	*	*
Slovakia	4.60	4.01	5.75	3.46	3.51	5.15
Slovenia	6.02	4.82	6.88	5.00**	4.32**	5.40**
Sweden	5.40	6.30	0.13	*	*	*
Hungary	4.42	3.93	5.03	2.88	2.56	3.29
United Kingdom	*	14.15	*	*	8.50	*
Italy	7.10	6.90	10.30	4.80	4.80	5.10

*) Not available.
**) Modified *duration*.
Source: OECD's Statistical Data Warehouse, www.oecd.int.

*Chart 1. Bond issuance in the domestic market in Poland and other countries regarding the maturity in 2010**



*) auctions and syndications since 1 January until 15 September 2010.

Annex 6. Government debt rating of EU Member States

Table 6. -term government debt rating in foreign currency of EU Member States

as of September 4, 2010

	Moody's	Standard&Poor's	Fitch
Austria	Aaa	AAA	AAA
Belgium	Aa1	AA+	AA+
Bulgaria	Baa3	BBB	BBB-
Cyprus	Aa3	A+	AA-
Czech Republic	A1	A	A+
Denmark	Aaa	AAA	AAA
Estonia	A1	A-	A ↑↑
Finland	Aaa	AAA	AAA
France	Aaa	AAA	AAA
Greece	Ba1↓↓↓↓↓↓	BB+↓↓↓↓	BBB-↓↓↓↓
Spain	Aaa	AA ↓	AA+↓↓
Netherlands	Aaa	AAA	AAA
Ireland	Aa2↓	AA- ↓	AA- ↓↓
Lithuania	Baa1↓	BBB	BBB
Latvia	Baa3	BB ↓	BB+
Luksemburg	Aaa	AAA	AAA
Malta	A1	A	A+
Germany	Aaa	AAA	AAA
Poland	**A2**	**A-**	**A-**
Portugal	A1 ↓↓↓	A- ↓↓	AA- ↓
Romania	Baa3	BB+	BB+
Slovakia	A1	A+	A+
Slovenia	Aa2	AA	AA
Sweeden	Aaa	AAA	AAA
Hungary	Baa1	BBB-	BBB
United Kingdom	Aaa	AAA	AAA
Italy	Aa2	A+	AA-

Source: International Financing Review, September 4, 2010

↓ ↑ - downgrade or upgrade of rating in comparison to previous Strategy.

Chart 2. 5-years CDS for Poland and other EU Member States

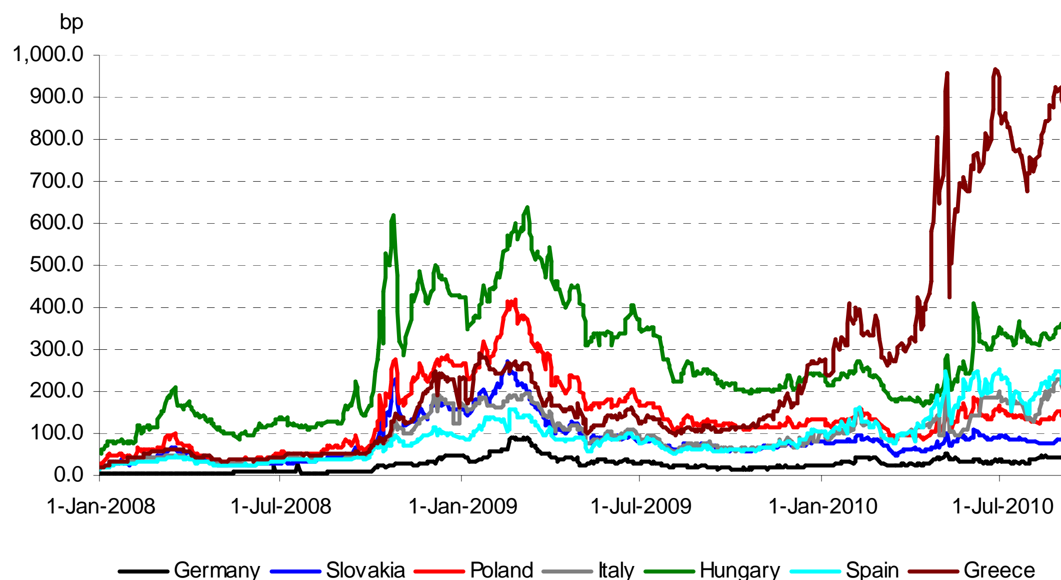
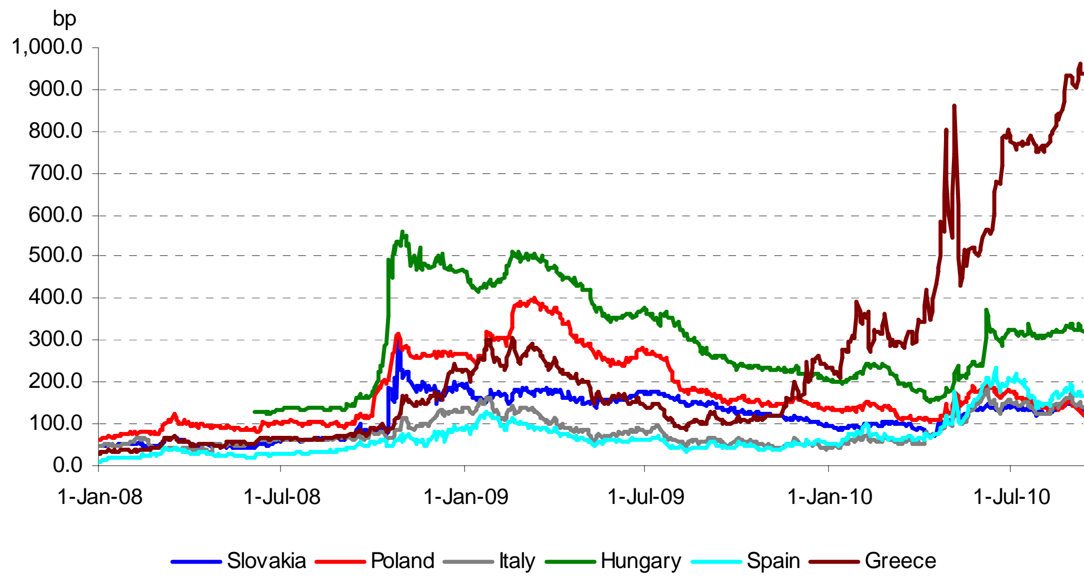


Chart 3. 10-year euro bonds spread to Bunds



Annex 7. Public Debt in Poland – statistical annex

Table 7. Public debt in the period 2001-VI 2010

	2001	2002	2003	2004	2005	2006	2007	2008	2009	VI 2010
1. State Treasury debt										
a) PLN bn	283.9	327.9	378.9	402.9	440.2	478.5	501.5	569.9	631.5	688.2
domestic *	185.0	219.3	251.2	291.7	315.5	352.3	380.4	420.2	462.7	494.3
foreign*	98.9	108.6	127.8	111.2	124.7	126.2	121.1	149.7	168.8	193.9
b) GDP %	36.4%	40.6%	44.9%	43.6%	44.8%	45.1%	42.6%	44.8%	47.0%	-
2. Public debt										
a) PLN bn	302.1	352.4	408.3	431.4	466.6	506.3	527.4	597.8	669.9	721.2
b) GDP %	38.8%	43.6%	48.4%	46.7%	47.5%	47.8%	44.8%	47.0%	49.9%	-
3. General government debt (EU methodology)										
a) PLN bn	293.0	342.1	397.9	422.3	462.7	505.1	529.3	600.8	684.1	745.1
b) GDP %	37.6%	42.3%	47.2%	45.7%	47.1%	47.6%	45.0%	47.2%	50.9%	-

**) place of issue criterion*

Table 8. GDP and exchange rate In the period 2001-VI 2010

	2001	2002	2003	2004	2005	2006	2007	2008	2009	VI 2010
1. Gross Domestic Product										
PLN bn	779.6	808.6	843.2	924.5	983.3	1 060.2	1 176.7	1 272.8	1 343.7	-
2. Exchange rate *(at the end of a period)*										
a) EUR	3.5219	4.0202	4.7170	4.0790	3.8598	3.8312	3.5820	4.1724	4.1082	4.1458
b) USD	3.9863	3.8388	3.7405	2.9904	3.2613	2.9105	2.4350	2.9618	2.8503	3.3946

Table 9. Number of indebted local government units with respect to the debt to proceeds ratio in the years 2008-09

	Group of units	Total number of units	Number of indebted units					
				Debt to proceeds ratio				
			total	i<10%	10%<i<30%	30%<i<50%	50%<i<60%	i>60%
XII 2008	Municipalities	2,413	2,273	832	1,109	306	24	2
	Cities with the county status	65	65	8	36	20	1	0
	Counties	314	306	110	152	40	4	0
	Provinces	16	16	8	3	5	0	0
	Total	**2,808**	**2,660**	**958**	**1,300**	**371**	**29**	**2**
XII 2009	Municipalities	2,413	2,272	579	1,111	504	64	14
	Cities with the county status	65	65	3	26	30	4	2
	Counties	314	311	72	171	64	3	1
	Provinces	16	15	6	8	1	0	0
	Total	**2,808**	**2,663**	**660**	**1,316**	**599**	**71**	**17**

Table 10. Debt of public finance sector before consolidation *

	Debt of public finance sector	2008		2009				2010			
		XII	Structure	Change XII 2008 - XII 2009		XII	Structure	Change XII 2009 - VI 2010		VI	Structure
		PLN mln	%	PLN mln	%	PLN mln	%	PLN mln	%	PLN mln	%
BEFORE CONSOLIDATION		**609,368.3**	**100.0%**	**84,240.8**	**13.8%**	**693,609.1**	**100.0%**	**54,094.4**	**7.8%**	**747,703.5**	**100.0%**
1.	Debt of central government sub-sector	572,696.2	94.0%	63,171.1	11.0%	635,867.3	91.7%	56,363.1	8.9%	692,230.3	92.6%
1.1.	State Treasury	569,945.9	93.5%	61,560.6	10.8%	631,506.5	91.0%	56,696.9	9.0%	688,203.4	92.0%
1.2.	State earmarked funds with legal personality	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1.3.	State higher schools	319.5	0.1%	-64.6	-20.2%	254.8	0.0%	44.0	17.3%	298.8	0.0%
1.4.	Research and development units	352.6	0.1%	79.4	22.5%	432.0	0.1%	-432.0	-100.0%	-	-
1.5.	Independent public heath care units	1,131.8	0.2%	-229.1	-20.2%	902.8	0.1%	40.5	4.5%	943.3	0.1%
1.6.	State culture units	39.2	0.0%	-12.5	-32.0%	26.7	0.0%	20.5	76.8%	47.2	0.0%
1.7.	Polish Academy of Science (PAN) and units established by it	9.4	0.0%	1.3	14.0%	10.7	0.0%	0.9	7.9%	11.6	0.0%
1.8.	Other State legal entities established under separate acts for public tasks execution with the exception of enterprises. banks and companies organized under commercial law	897.7	0.1%	1,836.0	204.5%	2,733.8	0.4%	-7.7	-0.3%	2,726.1	0.4%
2.	Debt of local government sub-sector	33,897.5	5.6%	11,384.6	33.6%	45,282.1	6.5%	1,530.8	3.4%	46,812.9	6.3%
2.1.	Local government units and their associations	29,029.1	4.8%	11,697.4	40.3%	40,726.6	5.9%	889.6	2.2%	41,616.2	5.6%
2.2.	Local earmarked funds with legal personality	129.7	0.0%	-47.7	-36.8%	82.0	0.0%	-82.0	-100.0%	0.0	0.0%
2.3.	Independent public health care units	4,676.9	0.8%	-250.8	-5.4%	4,426.1	0.6%	592.3	13.4%	5,018.4	0.7%
2.4.	Local cultural units	45.1	0.0%	-7.9	-17.5%	37.2	0.0%	44.3	118.9%	81.5	0.0%
2.5.	Other local legal entities established under separate acts for public tasks execution. with the exception of enterprises. banks and companies organized under commercial law	16.6	0.0%	-6.5	-38.9%	10.1	0.0%	86.6	855.3%	96.7	0.0%
3.	Debt of social security sub-sector	2,774.7	0.5%	9,685.1	349.1%	12,459.8	1.8%	-3,799.5	-30.5%	8,660.3	1.2%
3.1.	Social Insurance Institution (ZUS)	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
3.2.	Funds managed by Social Insurance Institution	2,774.7	0.5%	9,685.1	349.1%	12,459.8	1.8%	-3,799.5	-30.5%	8,660.3	1.2%
3.3.	Farmer's Social Insurance Institution (KRUS)	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
3.4.	National Heath Fund	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

**) preliminary data on September 10, 2010.*

Table 11. Debt of public finance sector after consolidation *

	Debt of public finance sector	2008		2009				2010			
		XII	Structure	Change XII 2008 - XII 2009		XII	Structure	Change XII 2009 - VI 2010		VI	Structure
		PLN mln	%	PLN mln	%	PLN mln	%	PLN mln	%	PLN mln	%
	AFTER CONSOLIDATION	**597,764.4**	**100.0%**	**72,112.0**	**12.1%**	**669,876.4**	**100.0%**	**51,335.2**	**7.7%**	**721,211.6**	**100.0%**
1.	Debt of central government sub-sector	566,883.0	94.8%	56,709.0	10.0%	623,592.0	93.1%	53,642.5	8.6%	677,234.5	93.9%
1.1.	State Treasury	565,461.6	94.6%	56,928.2	10.1%	622,389.8	92.9%	53,790.2	8.6%	676,179.9	93.8%
1.2.	State earmarked funds with legal personality	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1.3.	State higher schools	298.2	0.0%	-59.0	-19.8%	239.1	0.0%	48.9	20.4%	288.0	0.0%
1.4.	Research and development units	242.1	0.0%	-8.5	-3.5%	233.6	0.0%	-233.6	-100.0%	-	-
1.5.	Independent public heath care units	775.5	0.1%	-75.3	-9.7%	700.2	0.1%	26.3	3.8%	726.5	0.1%
1.6.	State culture units	20.3	0.0%	-5.6	-27.6%	14.7	0.0%	17.0	116.0%	31.7	0.0%
1.7.	Polish Academy of Science (PAN) and units established by it	5.5	0.0%	1.0	18.7%	6.5	0.0%	-1.7	-26.8%	4.7	0.0%
1.8.	Other State legal entities established under separate acts for public tasks execution with the exception of enterprises. banks and companies organized under commercial law	79.9	0.0%	-71.9	-89.9%	8.1	0.0%	-4.5	-56.3%	3.5	0.0%
2.	Debt of local government sub-sector	28,106.8	4.7%	11,217.9	39.9%	39,324.7	5.9%	1,492.2	3.8%	40,816.9	5.7%
2.1.	Local government units and their associations	24,966.7	4.2%	11,404.6	45.7%	36,371.3	5.4%	1,097.5	3.0%	37,468.8	5.2%
2.2.	Local earmarked funds with legal personality	14.5	0.0%	-14.5	-99.8%	0.0	0.0%	0.0	-100.0%	0.0	0.0%
2.3.	Independent public health care units	3,087.5	0.5%	-171.0	-5.5%	2,916.5	0.4%	362.4	12.4%	3 278.9	0.5%
2.4.	Local cultural units	24.5	0.0%	2.7	10.9%	27.1	0.0%	34.7	127.9%	61.8	0.0%
2.5.	Other local legal entities established under separate acts for public tasks execution with the exception of enterprises. banks and companies organized under commercial law	13.6	0.0%	-3.9	-28.7%	9.7	0.0%	-2.3	-24.1%	7.4	0.0%
3.	Debt of social security sub-sector	2,774.7	0.5%	4,185.1	150.8%	6,959.8	1.0%	-3,799.5	-54.6%	3,160.3	0.4%
3.1.	Social Insurance Institution (ZUS)	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
3.2.	Funds managed by Social Insurance Institution	2,774.7	0.5%	4,185.1	150.8%	6,959.8	1.0%	-3,799.5	-54.6%	3,160.3	0.4%
3.3.	Farmer's Social Insurance Institution (KRUS)	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
3.4.	National Heath Fund	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

**) preliminary data on September 10, 2010.*

State Treasury Debt according by the place of issue criterion, by instrument (m PLN, at nominal value, eop)

	Dec 2008	Dec 2009	Jun 2010	structure Jun 2010	change Dec 2009 - Dec 2008		change Jun 2010 - Dec 2009	
				%%	PLN mln	%%	PLN mln	%%
State Treasury debt [1]	569 945,9	631 506,5	688 203,4	100,0%	61 560,6	10,8%	56 696,9	9,0%
I. Domestic debt	420 202,1	462 733,6	494 301,3	71,8%	42 531,5	10,1%	31 567,7	6,8%
1. Treasury Securities	419 422,7	462 483,7	494 058,1	71,8%	43 061,0	10,3%	31 574,4	6,8%
1.1. Marketable Treasury Securities	411 218,7	452 956,2	484 771,1	70,4%	41 737,5	10,1%	31 814,8	7,0%
Treasury bills	50 403,4	47 544,6	39 729,5	5,8%	-2 858,8	-5,7%	-7 815,1	-16,4%
marketable bonds	360 815,2	405 411,6	445 041,6	64,7%	44 596,4	12,4%	39 630,0	9,8%
marketable fixed-income bonds	294 952,3	342 883,1	372 308,6	54,1%	47 930,8	16,3%	29 425,5	8,6%
2-year zerocoupon bonds	24 816,1	59 941,9	88 425,0	12,8%	35 125,8	141,5%	28 483,1	47,5%
5-year fixed-income bonds	105 910,4	128 841,2	122 747,7	17,8%	22 930,8	21,7%	-6 093,5	-4,7%
5-year fixed-income retail bonds	1 110,7	623,6	71,2	0,0%	-487,1	-43,9%	-552,4	-88,6%
10-year fixed-income bonds	135 880,8	123 065,9	129 642,6	18,8%	-12 814,9	-9,4%	6 576,7	5,3%
20-year fixed-income bonds	23 278,8	29 023,2	30 034,9	4,4%	5 744,4	24,7%	1 011,7	3,5%
30-year fixed-income bonds	1 387,2	1 387,2	1 387,2	0,2%	0,0	0,0%	0,0	0,0%
10-year fixed-income bonds - debt conversion [2]	2 568,3	0,0	0,0	0,0%	-2 568,3	-100,0%	0,0	-
marketable floating rate notes	55 073,0	51 595,3	61 613,7	9,0%	-3 477,7	-6,3%	10 018,4	19,4%
3-year retail FRN	1 307,1	1 235,0	1 188,2	0,2%	-72,1	-5,5%	-46,8	-3,8%
7-year FRN	19 670,4	19 670,4	19 670,4	2,9%	0,0	0,0%	0,0	0,0%
10-year FRN (WZ)	22 081,6	21 781,6	32 771,0	4,8%	-300,0	-1,4%	10 989,4	50,5%
10-year FRN (DZ)	11 264,0	8 158,3	7 234,2	1,1%	-3 105,6	-27,6%	-924,2	-11,3%
private placement FRN	750,0	750,0	750,0	0,1%	0,0	0,0%	0,0	0,0%
marketable index-linked bonds	10 789,9	10 933,2	11 119,3	1,6%	143,3	1,3%	186,0	1,7%
12-year index-linked	10 337,0	10 464,6	10 642,6	1,5%	127,6	1,2%	178,1	1,7%
15-year index-linked	453,0	468,6	476,6	0,1%	15,6	3,5%	8,0	1,7%
1. 2. Savings bonds	7 897,5	9 317,0	9 127,2	1,3%	1 419,5	18,0%	-189,8	-2,0%
2-year savings bonds	5 483,6	5 706,4	5 023,3	0,7%	222,8	4,1%	-683,1	-12,0%
4-year savings bonds	1 131,4	1 461,5	1 548,7	0,2%	330,1	29,2%	87,3	6,0%
10-year savings bonds	1 282,5	2 149,0	2 555,1	0,4%	866,6	67,6%	406,1	18,9%
1.3. Non-marketable T-Bonds	306,6	210,5	159,9	0,0%	-96,0	-31,3%	-50,6	-24,0%
Bonds issued for Bank BGŻ S.A.	306,6	210,5	159,9	0,0%	-96,0	-31,3%	-50,6	-24,0%
2. Other domestic ST debt [3]	779,4	249,9	243,1	0,0%	-529,5	-67,9%	-6,7	-2,7%
II. Foreign debt	149 743,8	168 772,9	193 902,1	28,2%	19 029,1	12,7%	25 129,2	14,9%
1. Treasury Securities (international mkts.)	121 156,2	134 064,7	159 206,0	23,1%	12 908,4	10,7%	25 141,4	18,8%
Brady Bonds	1 008,5	846,6	1 008,2	0,1%	-162,0	-16,1%	161,7	19,1%
international bonds	120 147,7	133 218,1	158 197,8	23,0%	13 070,4	10,9%	24 979,7	18,8%
2. Foreign Loans	28 587,6	34 708,2	34 696,1	5,0%	6 120,7	21,4%	-12,2	0,0%
Paris Club	3 172,6	326,2	364,4	0,1%	-2 846,4	-89,7%	38,2	11,7%
International Financial Institutions	24 996,8	34 185,6	34 110,2	5,0%	9 188,9	36,8%	-75,4	-0,2%
of which: European Investment Bank	19 265,5	20 846,0	20 759,9	3,0%	1 580,5	8,2%	-86,1	-0,4%
other creditors	418,2	196,4	221,4	0,0%	-221,8	-53,0%	25,0	12,7%

1) Treasury Securities by original maturity.

2) On September 30 and December 29, 1999, convertible bonds, USD bonds for buy-back of Brady bonds, long-term liabilities towards NBP and bonds issued to implement the agreement with the Paris Club were converted to marketable bonds having redemption dates of - April 29, 2002 (KO0402); December 22, 2002 (TK1202); April 22, 2003 (CK0403); July 22, 2004 (PK0704) and August 22, 2009 (DK0809).

3) Other domestic debt includes: liabilities of budgetary units, liabilities to the budgetary sphere for non-indexation of wages in the early 1990s and advances for cars.

DOMESTIC STATE TREASURY DEBT according to the place of issue criterion by holder (m PLN, at nominal value, eop)[1)]

	Dec 2008	Dec 2009	Jun 2010	structure Jun 2010 %%	change Dec 2009 - Dec 2008		change Jun 2010 - Dec 2009	
					PLN mln	%%	PLN mln	%%
Domestic State Treasury Debt	420 202,1	462 733,6	494 301,3	100,0%	42 531,5	10,1%	31 567,7	6,8%
Domestic banking sector	135 603,6	146 018,4	150 360,6	30,4%	10 414,8	7,7%	4 342,1	3,0%
Treasury securities	135 603,6	146 018,4	150 360,6	30,4%	10 414,8	7,7%	4 342,1	3,0%
- of which: TS on MF account *	0,0	988,0	3 998,9	0,8%	988,0	-	3 010,9	304,8%
Marketable instruments	135 297,0	145 807,9	150 200,7	30,4%	10 510,8	7,8%	4 392,8	3,0%
Treasury bills	38 098,3	32 742,4	26 531,1	5,4%	-5 355,9	-14,1%	-6 211,3	-19,0%
2-year zero-coupon bonds	7 474,7	24 174,1	34 385,7	7,0%	16 699,3	223,4%	10 211,6	42,2%
3-year floating rate bonds issued in retail network	5,4	5,4	6,6	0,0%	-0,1	-1,4%	1,2	22,4%
3-year floating rate bonds	0,0	0,0	0,0	0,0%	0,0	-	0,0	-
5-year fixed rate bonds and fungible bonds	31 024,0	36 804,0	31 219,0	6,3%	5 780,1	18,6%	-5 585,1	-15,2%
5-year fixed rate bonds issued in retail network	11,2	7,0	2,5	0,0%	-4,2	-37,2%	-4,6	-64,8%
7-year floating rate bonds	11 588,2	12 260,4	13 391,8	2,7%	672,2	5,8%	1 131,4	9,2%
10-year floating rate bonds (WZ)	10 733,7	10 587,7	16 915,5	3,4%	-146,0	-1,4%	6 327,8	59,8%
10-year floating rate bonds (DZ)	2 968,3	2 073,7	2 621,4	0,5%	-894,6	-30,1%	547,7	26,4%
10-year fixed rate bonds	31 554,4	24 544,2	23 024,9	4,7%	-7 010,2	-22,2%	-1 519,3	-6,2%
10-year fixed rate bonds (converted)	243,6	0,0	0,0	0,0%	-243,6	-100,0%	0,0	-
private placements	15,0	15,0	15,0	0,0%	0,0	0,0%	0,0	0,0%
12-year inflation linked	862,1	1 082,1	1 178,4	0,2%	220,0	25,5%	96,4	8,9%
15-year inflation linked	15,0	15,6	15,8	0,0%	0,5	3,5%	0,3	1,7%
20-year fixed rate bonds	617,5	1 221,3	775,5	0,2%	603,8	97,8%	-445,8	-36,5%
30-year fixed rate bonds	85,6	275,0	117,5	0,0%	189,5	221,4%	-157,5	-57,3%
Non - marketable instruments	306,6	210,5	159,9	0,0%	-96,0	-31,3%	-50,6	-24,0%
Bonds issued for Bank BGŻ S.A.	306,6	210,5	159,9	0,0%	-96,0	-31,3%	-50,6	-24,0%
Other domestic debt	0,0	0,0	0,0	0,0%	0,0	-100,0%	0,0	-
Domestic non-banking sector	228 723,3	234 901,9	238 376,0	48,2%	6 178,5	2,7%	3 474,1	1,5%
Treasury securities	227 944,0	234 652,0	238 132,8	48,2%	6 708,0	2,9%	3 480,8	1,5%
Marketable instruments	220 062,1	225 355,3	229 026,9	46,3%	5 293,3	2,4%	3 671,5	1,6%
Treasury bills	11 685,3	11 540,4	10 292,2	2,1%	-144,9	-1,2%	-1 248,2	-10,8%
2-year zero-coupon bonds	15 437,0	29 775,8	39 510,6	8,0%	14 338,7	92,9%	9 734,8	32,7%
3-year floating rate bonds issued in retail network	1 299,8	1 227,7	1 177,9	0,2%	-72,0	-5,5%	-49,9	-4,1%
3-year floating rate bonds	0,0	0,0	0,0	0,0	0,0	-	0,0	-
5-year fixed rate bonds and fungible bonds	59 483,3	59 930,0	56 352,8	11,4%	446,8	0,8%	-3 577,3	-6,0%
5-year fixed rate bonds issued in retail network	1 095,2	612,9	68,4	0,0%	-482,3	-44,0%	-544,5	-88,8%
7-year floating rate bonds	7 352,5	6 643,6	5 447,8	1,1%	-708,9	-9,6%	-1 195,8	-18,0%
10-year floating rate bonds (WZ)	11 303,3	11 174,1	15 766,2	3,2%	-129,3	-1,1%	4 592,1	41,1%
10-year floating rate bonds (DZ)	8 084,3	5 923,8	4 462,4	0,9%	-2 160,6	-26,7%	-1 461,4	-24,7%
10-year fixed rate bonds	77 980,4	69 655,5	66 500,5	13,5%	-8 324,9	-10,7%	-3 155,0	-4,5%
10-year fixed rate bonds (converted)	2 324,7	0,0	0,0	0,0%	-2 324,7	-100,0%	0,0	-
private placements	735,0	735,0	735,0	0,1%	0,0	0,0%	0,0	0,0%
12-year inflation linked	6 102,9	7 014,2	6 713,1	1,4%	911,3	14,9%	-301,1	-4,3%
15-year inflation linked	416,4	430,8	438,1	0,1%	14,4	3,5%	7,3	1,7%
20-year fixed rate bonds	15 653,8	19 695,4	20 409,6	4,1%	4 041,6	25,8%	714,3	3,6%
30-year fixed rate bonds	1 108,2	996,3	1 152,4	0,2%	-111,9	-10,1%	156,2	15,7%
Savings bonds	7 881,9	9 296,7	9 106,0	1,8%	1 414,8	17,9%	-190,7	-2,1%
2-year savings bonds	5 470,3	5 698,2	5 015,7	1,0%	227,8	4,2%	-682,5	-12,0%
4-year savings bonds	1 129,6	1 452,9	1 539,0	0,3%	323,3	28,6%	86,1	5,9%
10-year savings bonds	1 282,0	2 145,6	2 551,3	0,5%	863,7	67,4%	405,7	18,9%
Other domestic debt	779,4	249,9	243,1	0,0%	-529,5	-67,9%	-6,7	-2,7%
TSs held by foreign investors	55 875,1	81 813,3	105 564,7	21,4%	25 938,1	46,4%	23 751,5	29,0%
Treasury securities	55 875,1	81 813,3	105 564,7	21,4%	25 938,1	46,4%	23 751,5	29,0%
Marketable instruments	55 859,6	81 793,0	105 543,5	21,4%	25 933,4	46,4%	23 750,5	29,0%
Treasury bills	619,9	3 261,8	2 906,2	0,6%	2 641,9	426,2%	-355,6	-10,9%
2-year zero-coupon bonds	1 904,3	5 992,1	14 528,8	2,9%	4 087,8	214,7%	8 536,7	142,5%
3-year floating rate bonds issued in retail network	1,9	1,9	3,8	0,0%	0,0	2,1%	1,9	96,0%
3-year floating rate bonds	0,0	0,0	0,0	0,0	0,0	-	0,0	-
5-year fixed rate bonds and fungible bonds	15 403,2	32 107,1	35 176,0	7,1%	16 704,0	108,4%	3 068,8	9,6%
5-year fixed rate bonds issued in retail network	4,3	3,7	0,3	0,0%	-0,6	-13,4%	-3,4	-90,7%
7-year floating rate bonds	729,6	766,4	830,8	0,2%	36,7	5,0%	64,4	8,4%
10-year floating rate bonds (WZ)	44,6	19,8	89,3	0,0%	-24,7	-55,5%	69,4	349,8%
10-year floating rate bonds (DZ)	211,3	160,9	150,4	0,0%	-50,4	-23,9%	-10,5	-6,5%
10-year fixed rate bonds	26 346,0	28 866,3	40 117,2	8,1%	2 520,2	9,6%	11 251,0	39,0%
private placements	0,0	0,0	0,0	0,0%	0,0	-	0,0	-
12-year inflation linked	3 372,0	2 368,3	2 751,2	0,6%	-1 003,7	-29,8%	382,9	16,2%
15-year inflation linked	21,6	22,3	22,7	0,0%	0,7	3,5%	0,4	1,7%
20-year fixed rate bonds	7 007,5	8 106,5	8 849,7	1,8%	1 099,0	15,7%	743,2	9,2%
30-year fixed rate bonds	193,5	115,9	117,3	0,0%	-77,5	-40,1%	1,3	1,2%
Savings bonds	15,6	20,3	21,2	0,0%	4,7	30,3%	0,9	4,5%
2-year savings bonds	13,3	8,3	7,6	0,0%	-5,0	-37,9%	-0,6	-7,6%
4-year savings bonds	1,8	8,6	9,7	0,0%	6,8	385,5%	1,1	13,3%
10-year savings bonds	0,5	3,4	3,8	0,0%	2,9	579,3%	0,4	11,8%

* face value of TS on MF account in connection with collateral deposits in commercial banks

1) according to the place of issue criterion, data captures financial flows between sectors; Bonds according to primary term to maturity