The Public Finance Sector
DEBT MANAGEMENT STRATEGY
in the years 2009-2011

Ministry of Finance
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I. INTRODUCTION

According to article 70 of the Public Finance Act of June 30, 2005, the Minister of Finance is obliged each year to prepare a 3-year strategy of managing the State Treasury (ST) debt and of influencing the public debt as a whole. The Strategy is presented to the Council of Ministers for its approval and then submitted to the Sejm (lower house of the Parliament) together with the justification of the draft budget act.

Public debt management is conducted at two levels:

- in a broader sense, debt management is a part of fiscal policy and covers decisions on what portion of State expenditures are to be financed by debt and hence, what the level of public debt should be;
- 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.

The Public Finance Sector Debt Management Strategy in the years 2009-2011 contains forecasts of debt levels which are consistent with the fiscal policy assumptions of the draft Budget Act for 2009, 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

	2007 (Strategy 2008-10)	**2007** (actual)	**2008**	**2009**	**2010**	**2011**
1. Public debt						
a) PLN bn	543.6	527.4	565.9	604.4	637.0	670.0
b) relative to GDP	47.0%	45.2%	44.2%	43.7%	42.9%	41.9%
2. State Treasury debt servicing costs (cash basis)						
a) PLN bn	28.1	27.6	27.7	32.8	34.2	35.6
b) relative to GDP	2.4%	2.4%	2.2%	2.4%	2.3%	2.2%

Under the adopted assumptions the public debt to GDP ratio is expected to fall further to 41.9% in 2011. The ratio of ST debt servicing costs to GDP is expected to increase to 2.4% in 2009 and then return to the level of 2.2% in 2011.

This Strategy is to a large extent a continuation of the strategy adopted last year. The objective of the minimisation of the long term debt servicing costs subject to risk constraints remains unchanged. The implementation of the Strategy's objective will be compliant with three interconnected tasks: to increase the liquidity, efficiency and transparency of the Treasury securities (TS) market.

The following was assumed for the years 2009-2011:

- The flexible approach towards the market and currency structure of issuance will be maintained, to the extend that cost minimisation is achieved, subject to risk limitations and avoiding distortions of monetary policy.
- The domestic market will remain the main source of financing the State budget borrowing requirements. Because of the ongoing integration with the Economic and Monetary Union (EMU), the euro market will retain its strategic role in foreign issuance.
- Issuing large and liquid fixed rate benchmark bonds, both in the domestic and euro market, will be a priority of the issuance policy.
- The average term to maturity (ATM) of domestic debt is expected to increase, while its duration has already reached the acceptable level in terms of interest rate risk and will remain within the range of 2.5-4.0 years.
- In case of foreign debt the current levels of neither refinancing risk nor interest rate risk constrain the objective of minimising the debt servicing costs.
- The management of refinancing risk and interest rate risk of domestic debt can be separated.

The layout of the Strategy has not changed significantly. A new chapter was introduced on the expected impact of Poland's adoption of the euro on the ST debt management. A significant reduction in public sector deficit in 2007 and plans of further fiscal consolidation contributed to the decision taken by the ECOFIN Council in July 2008 to conclude an excessive deficit procedure concerning Poland. In September 2008 the government declared the intention to adopt the euro at the earliest possible date. The government and the Monetary Policy Council agreed that 2011 should be the year of meeting the criteria and of the European Commission approval for Poland joining the Eurozone. Thorough change in the macroeconomic and market environment of public debt management in Poland that comes with the euro adoption requires a sufficiently long time for preparations.

The module on the debt of public sector entities other than ST has been reorganised. The analysis of their existing debt is now included in Chapter II while Chapter VI (on the influence on the public finance sector debt) concentrates on the expected changes in the debt of public sector entities other than ST within the Strategy time horizon.

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

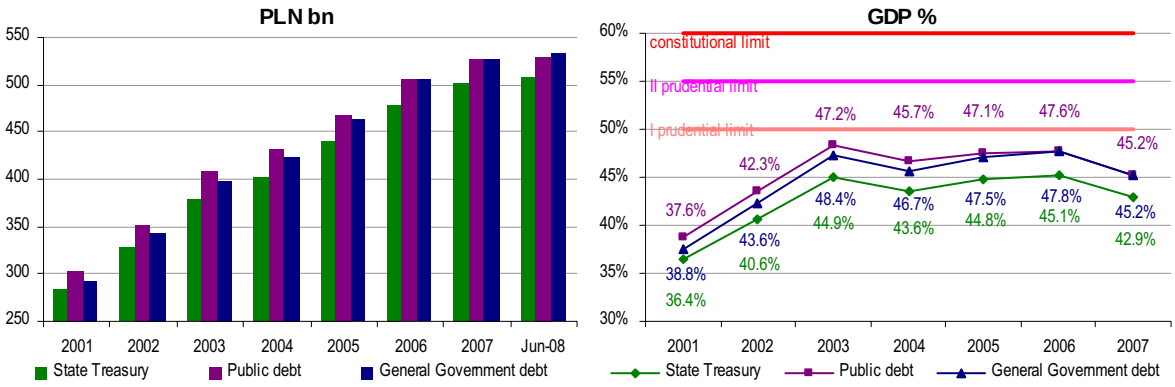
Financing the State budget borrowing requirements involves incurring public debt and bearing costs of its servicing. The essence of debt management is shaping the structure of debt to minimize servicing costs while at the same time keeping risk at an acceptable level.

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

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

Changes in volume of public debt in the years 2001-08 resulted mainly from changes in the ST debt. Until 2007 the growth of the nominal value of debt was the result of high level of State budget borrowing requirements and changes in exchange rate of the Polish zloty. At the same time since 2004 high rates of the GDP growth and improvement in the public finance contributed to a stabilization of the debt-to-GDP ratio at levels below 50%, which is the first threshold set in the Public Finance Act, and in 2007 enabled a decrease of the debt-to-GDP ratio to about 45%. In the first half of 2008 public debt rose by merely PLN 1.6 bn (of which ST debt by PLN 5.8 bn) as a result of strong appreciation of the zloty and relatively low State budget borrowing requirements.

Chart 1. Volume of public debt in the years 2001-2008[1]



In April 2007 the transition period during which Poland had the right to include Open Pension Funds (OFE) in the general government sector came to an end. Since then TS in possession of OFE do not lower the general government debt hence the volume of public debt measured in accordance with the Polish and EU methodologies is similar[2].

The debt-to-GDP ratio, at the end of 2007 at 45.2% (EU methodology) is lower than the ratio for the EU as a whole (58.7%) and for the Eurozone (66.3%)[3].

Changes of the debt-to-GDP ratio in the years 2001-2007 were depended mainly on budget deficits and other borrowing requirements, including those resulting from the pension reform, and on the nominal GDP growth. Borrowing requirements resulting from the pension reform costs grew every year and in 2007 they exceeded the budget deficit. The importance of proceeds from privatisation was diminishing. FX rates fluctuations influencing PLN value of foreign currency denominated debt were an important factor causing discrepancies between the amount of borrowing requirements and the growth of debt.

There was also a systematic decrease of other ST debt, not originating from financing the State budget borrowing requirements, primarily caused by the repayment of liabilities arising from not increasing wages in the budgetary sector and repayment of the Labour Fund debt. Other ST debt decreased from PLN 9.0 bn in 2001 to PLN 0.2 bn in mid 2007 and subsequently stabilized at that level.

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

[2] The main differences result from matured payables included in liabilities, which constitute public debt according to Polish methodology and State Road Fund (KFD) debt included in public debt only in the UE methodology. Differences between Polish and EU methodologies are presented in Annex 6.

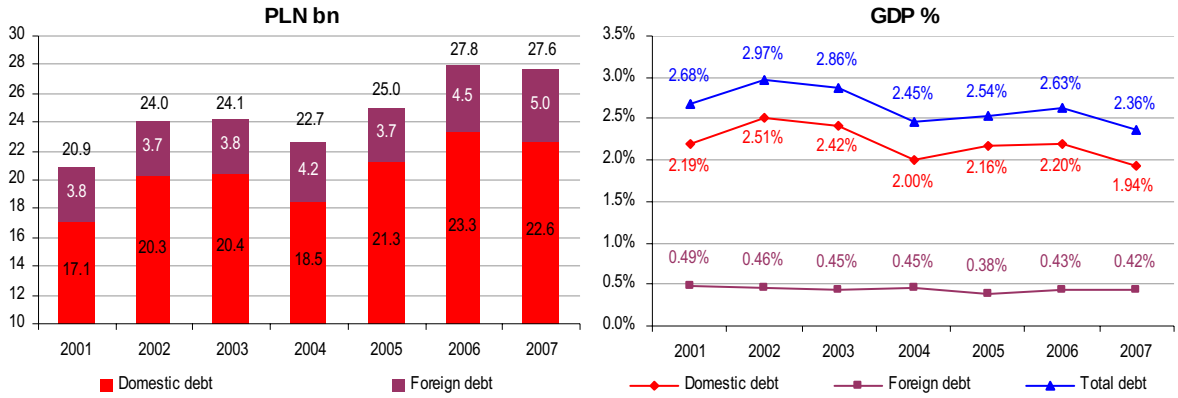
[3] See Annex 3.

Table 2. Factors influencing changes of the ST debt-to-GDP ratio in the years 2001-2007 (%)

Item	2001	2002	2003	2004	2005	2006	2007
Debt-to-GDP ratio	**36.4**	**40.6**	**44.9**	**43.6**	**44.8**	**45.1**	**42.9**
Change of the ST debt-to-GDP ratio	0.6	4.2	4.3	-1.3	1.2	0.3	-2.2
1. State budget borrowing requirements, including:	3.3	4.6	4.5	4.5	4.3	4.2	2.9
1.1. State budget primary balance	1.5	1.9	1.5	2.0	0.4	-0.3	-1.0
1.2. ST debt servicing costs	2.7	3.0	2.9	2.4	2.5	2.6	2.4
1.3. Pension reform costs*	0.0	0.0	0.0	1.1	1.3	1.4	1.4
1.4. Net proceeds from privatisation	-0.8	-0.2	-0.4	-0.8	-0.3	0.0	-0.1
1.5. Other borrowing requirements**	-0.1	-0.1	0.5	-0.2	0.4	0.5	0.3
2. Changes not resulting from State budget borrowing requirements	-0.6	1.1	1.7	-1.8	-0.4	-0.5	-0.8
FX rates movements	-1.0	0.8	1.4	-2.2	-0.3	-0.4	-0.9
other factors***	0.4	0.3	0.4	0.4	-0.1	-0.1	0.1
3. Changes in other ST debt	-0.5	-0.2	-0.2	0.0	-0.1	-0.2	-0.1
4. Nominal GDP growth	-1.6	-1.3	-1.7	-4.0	-2.6	-3.2	-4.2

**) Funds transferred to Social Security Fund (FUS) as compensation for contributions transferred to OFE.*
***) Mainly: changes of budget account balance, balance of granted loans, prefinancing.*
****) Changes of debt caused by TS discount, TS capitalisation and indexation, off-budget drawings, written off debt, conversion of FUS to OFE debt for securities.*

Chart 2. ST debt servicing costs in the years 2001-2007

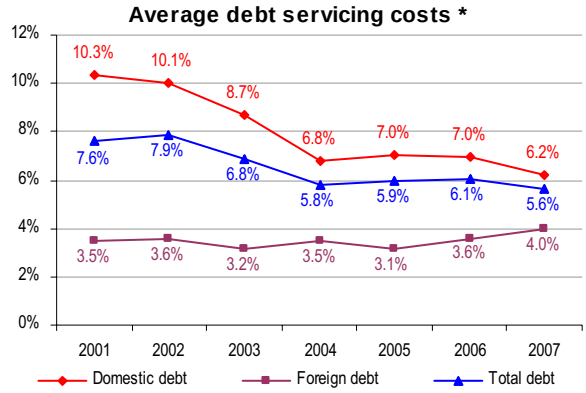


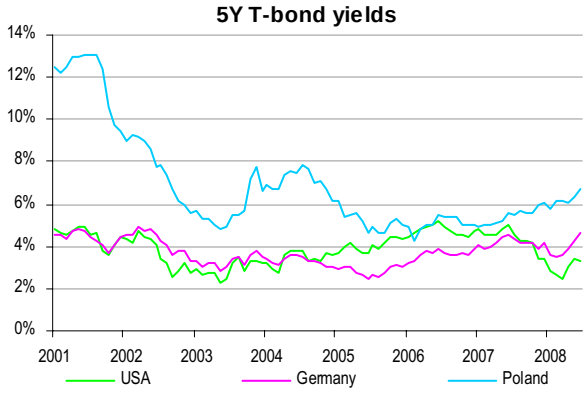
Changes in the debt servicing costs were the result of growth of the ST debt, changes in interest rates levels and exchange rate movements. After the stabilization period of interest rates from mid 2005 to mid 2007 the yields of TS grew as a result of a tightening cycle of the monetary policy by the Monetary Policy Council (RPP) and the crisis in the global financial market. Distribution of the debt servicing costs over time was influenced by the cash-based State budget accounting system, where discount constitutes cost at maturity. To eliminate the destabilizing 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 costs over time.

Foreign debt servicing costs were much lower than those of domestic debt. This was caused by positive yet diminishing spreads between interest rates on domestic and major foreign markets, and, more importantly, by the lowering share of foreign debt in total ST debt. Refinancing Paris Club debt, of which interest rates were significantly lower than market interest rates, on the financial market resulted in the growth of foreign debt servicing costs.

Chart 3. 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.*

The ST debt servicing costs-to-GDP ratio, after a significant fall in the years 2003-2004, grew slightly in 2005-2006 and in 2007 fell again, mainly as a result from a high GDP growth rate against the stabilization of nominal costs.

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 constraints. The issuance policy and other operations on debt significantly reduced the risk connected with the debt structure.

a) Refinancing risk

The domestic debt refinancing risk, relatively high in the years 2001-2003, was systematically reduced in the following years. The reduction of the refinancing risk was a result of:

- growing importance of medium and long-term bonds in financing the borrowing requirements; the share of bonds with maturity of 5 years or more in total sales of bonds on regular auctions amounted to 58.9% in 2001 and 70.9% in 2006 respectively[4], its share grew to 83,4% in 2007 and 85,3% in mid 2008 respectively, though the sale value of T-bonds diminished in favor of T-bills as a result of a weakening demand for long-term instruments connected with the subprime crisis, outflow of foreign investors and uncertainty about the direction of changes in the NBP policy rates;
- a drop in the outstanding amount of T-bills (from PLN 35 billion in 2001 to PLN 22.6 billion at the end of 2007, which constituted 20.0% and 5.9% of domestic TS respectively), in the first half of 2008 the debt in T-bills rose as a result of a temporary come back to T-bills as a source of financing the borrowing requirements, related with significantly lower demand for other debt instruments (in mid 2008 T-bills amounted to PLN 30.2 billion, which constituted 7.8% of the debt in domestic TS);
- growing significance of switching auctions. In 2002 bonds with short residual maturities in the face value of PLN 9.6 billion were bought back, for 2007 and first half of 2008 the numbers were PLN 27.6 billion and PLN 11.7 billion respectively.

[4] Including switching auctions.

Chart 4. Residual maturity of the ST debt in the years 2001-2008

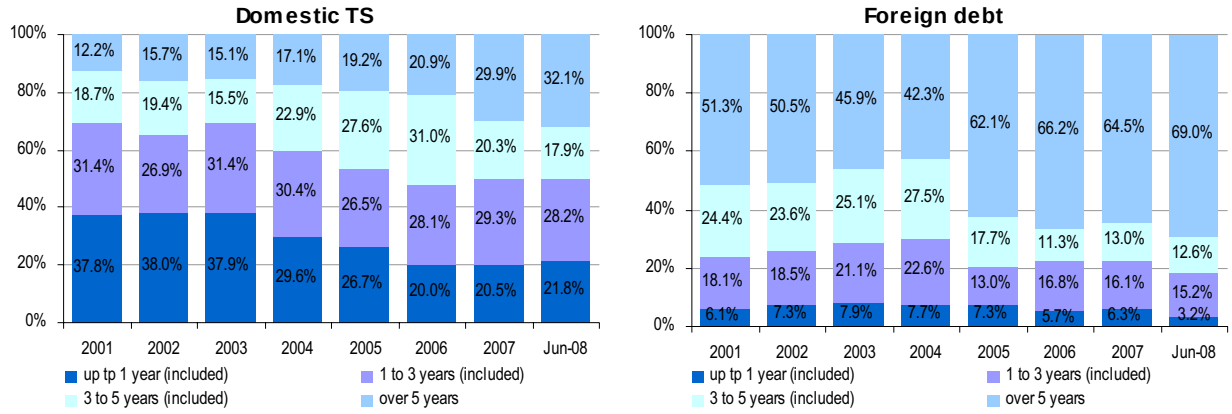
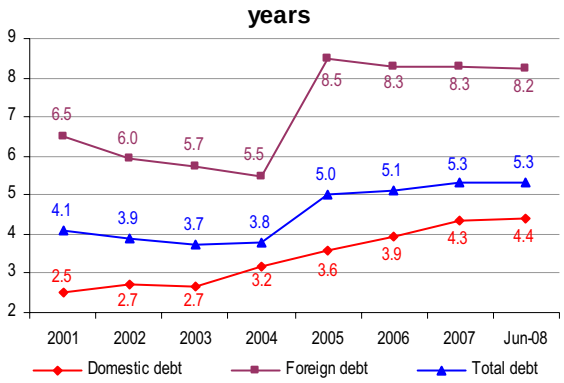


Chart 5. ATM of the ST debt in the years 2001-2008



In comparison with the domestic debt the refinancing risk of foreign debt was relatively low. It was reduced significantly in 2005 when the Paris Club debt was partly repaid before maturity and refinanced by long term bonds. In the subsequent years ATM of foreign debt slightly decreased, as a natural effect of aging of debt and limited value of new issuance.

A regular, since 2003, increase of ATM of the ST debt originated from the increase of ATM of domestic debt, which has a dominant share in total debt, and a significant increase in 2005, followed by stabilisation at a high level of ATM of foreign debt. In the first half of 2008 the pace of increase in ATM of domestic debt fell whereas ATM of foreign debt slightly fell, which resulted in a stabilization of ATM of the total ST debt.

b) Exchange rate risk

Share of the foreign currency debt in total ST debt, excluding slight increase in 2005, had regularly been decreasing and reached 23.5% in mid 2008. From the end of 2001 till the mid 2008 the nominal value of foreign debt increased merely by PLN 20.2 billion, as compared to PLN 203.2 billion for domestic debt. The share of currencies other than the euro was reduced. This tendency was the result of:

- the adoption (in basic scenario) of foreign financing in the amount close to the value of State budget borrowing requirements in foreign currencies, resulting from the servicing and repayment of foreign debt,
- strong appreciation (from the end of 2001 till mid 2008 the euro and dollar exchange rates decreased by 5% and 47% respectively),
- flexible approach to the implementation of the cost minimisation objective in the area of exchange rate risk constraint, allowing for temporary divergences from the basic scenario (in use since 2004),
- strategic importance of the euro as a prospective domestic currency (adopting the euro will result in immediate drop of the exchange rate risk).

Chart 6. Currency composition of the ST debt

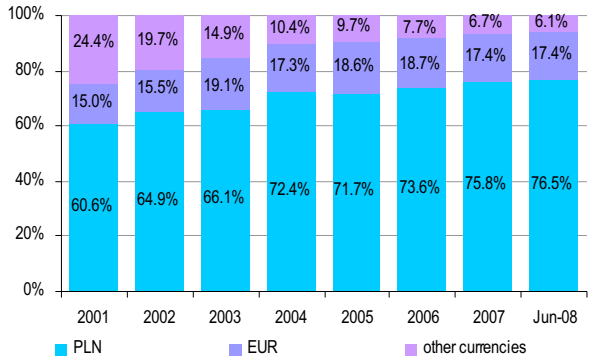
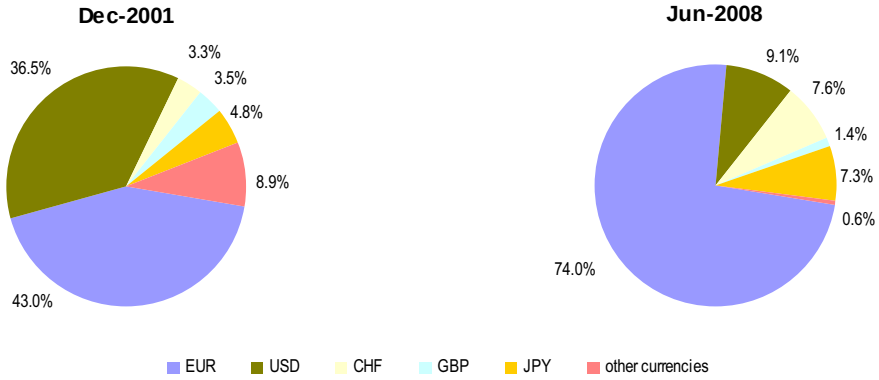


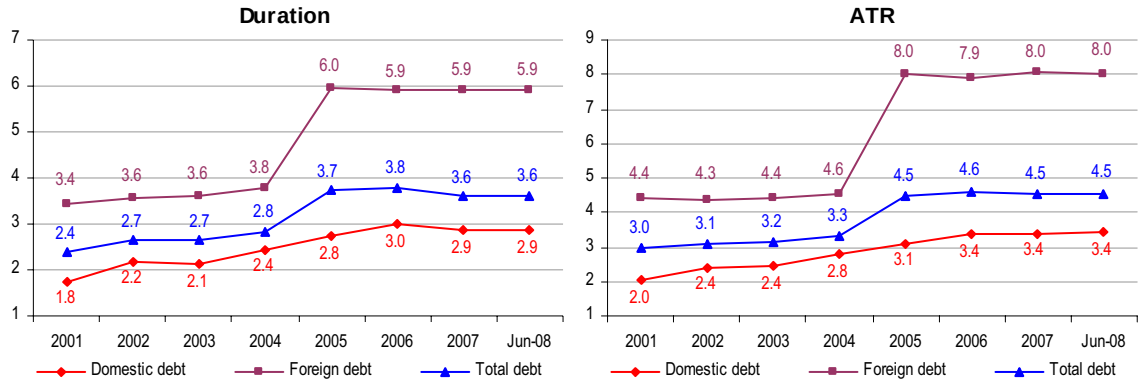
Chart 7. Currency composition of the ST foreign debt



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 in recent years similar to changes in the refinancing risk, thus as a consequence its main interest rate risk measures, i.e. duration and ATR, remained closely related to ATM. Additionally in the domestic market falling interest rates, especially in 2002 and 2005, contributed to higher duration. In 2007 the rise of ATM accompanied the fall of both duration and ATR due to a rise in sales of floating-rate instruments and higher interest rates. In the first half of 2008 the role of floating-rate instruments diminished, which caused the stabilization of both *duration* and ATR.

Chart 8. Duration and ATR of the ST debt in the years 2001-2008



Duration of the domestic debt exceeded the levels in the EU countries with the lowest values of this measure, while duration of the total debt is close to the EU average[5]. As in case of the refinancing risk, the interest rate risk of foreign debt remains at an acceptable level.

[5] At the end of 2007 duration in the EU countries (on average) amounted to 4.6 years in case of domestic debt (2.5 in Finland and 2.7 in Portugal) and 4.0 in case of total debt. See annex 5 for detailed data.

II.3. Volume and structure of debt of public finance sector units other than State Treasury

At the end of June 2008 the debt of other units than the ST constituted 6.3% of debt of the public finance sector before consolidation (5.0% after consolidation) as compared to 6.7% (5.4%) at the end of 2007. In recent years the local government sub-sector debt, in particular of local government units and independent public health units, had the highest and rising share in this part of the debt. The debt of other public finance sector units, in particular debt of the social security sector, decreased. Detailed data on the debt of public finance sector units in recent years, both before and after consolidation, are presented in Annex 7.

Chart 9. Debt of public finance sector units other than ST before and after consolidation by sectors (PLN bn)

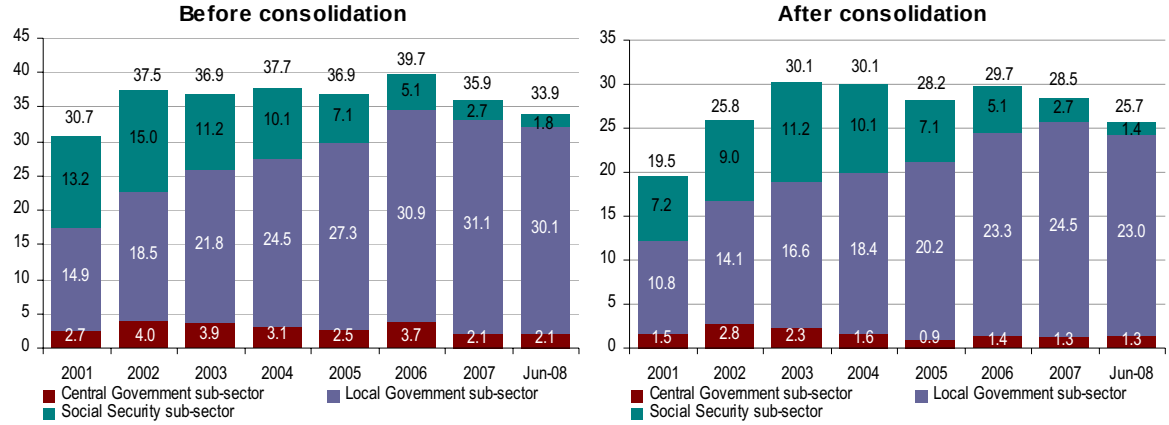


Chart 10. Share of debt of public finance sector units other than ST before and after consolidation in public finance sector debt and as a GDP ratio

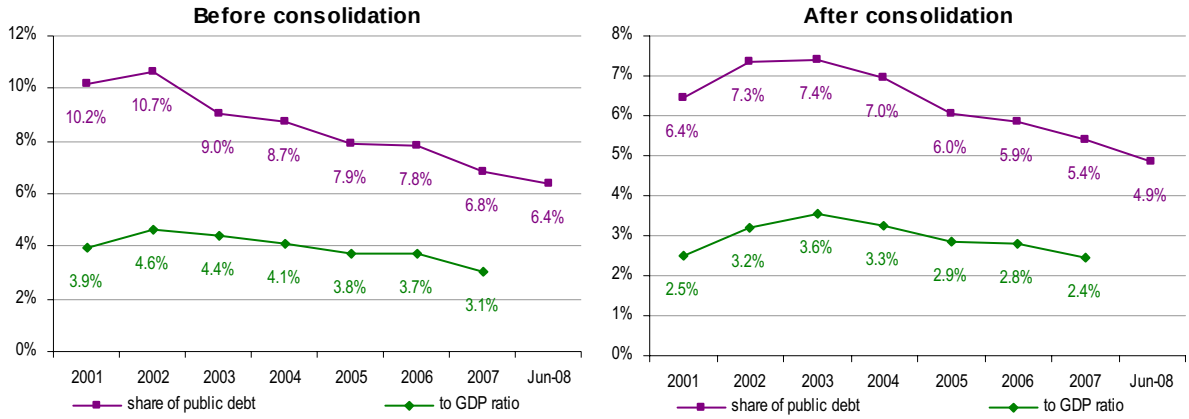
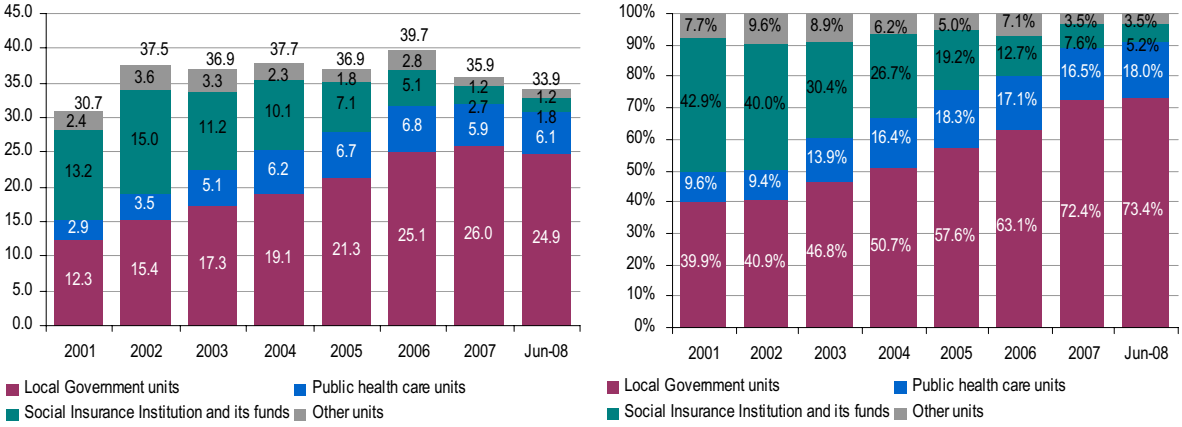


Chart 11. Debt of public finance sector units other than ST before consolidation (PLN bn)

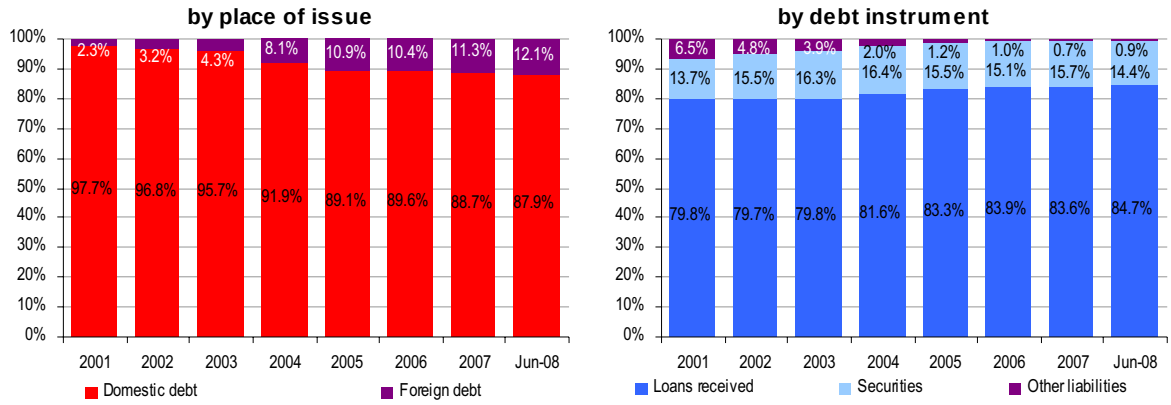


Further in this subchapter the debt before consolidation is analyzed.

1) Debt of local government units

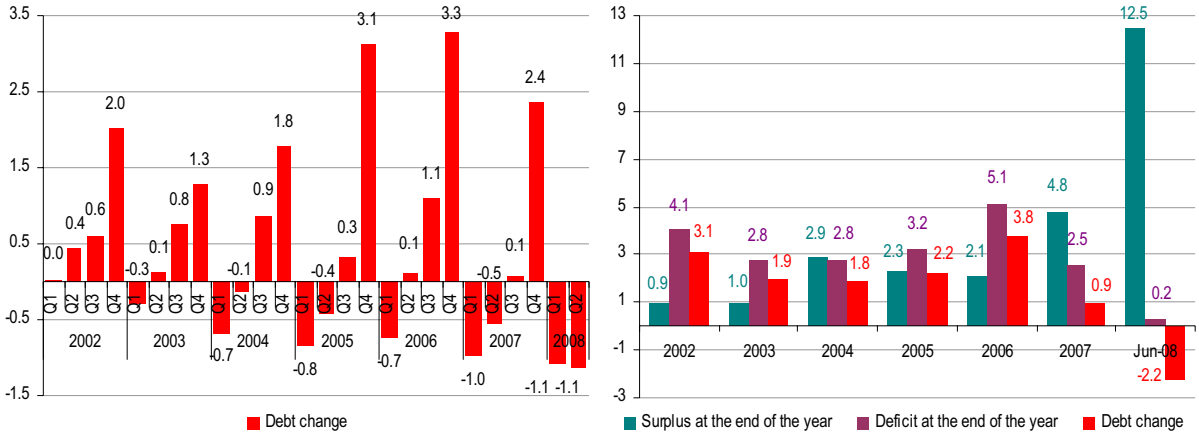
In recent years the debt of local government units and their associations was gradually increasing and at the end of 2007 stood at PLN 26 billion as compared to PLN 25.1 billion at the end of 2006. Domestic debt predominated though the share of foreign debt had constantly risen and at the end of 2007 stood above 10%. The structure of debt of local government units an their associations is dominated by loans. The share of liabilities other than loans and securities ,which consist of almost matured payables, decreased.

Chart 12. Structure of debt of local government units and their associations



In 2007 local government units and their associations achieved a budget surplus of PLN 2.1 bn as compared to budget deficit of PLN 3.0 bn in 2006. The balance of local government units consisted of deficits of individual units in the total of PLN 2.7 bn and surpluses in the total of PLN 2.7 bn. Their debt increased by PLN 0.9 bn (3.7%). Lack of clear connection between the balance of local government units and change of debt results from aggregating local governments with different budget situation. The tendency to incur liabilities especially in the last quarter of a year has been maintained, what is connected with seasonal patterns of local government budget balances.

Chart 13. Balance of local government units and their associations and changes in their debt (PLN bn)



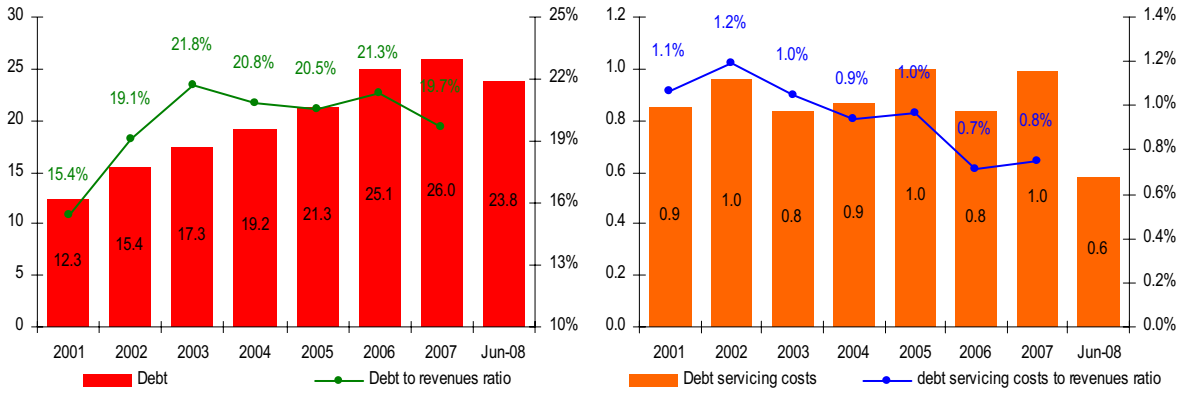
The ratio of total debt of local government units to their revenues (debt to revenues ratio) is significantly under the legal constraint of 60%. In 2007 it stood at 19.7% and as compared to 2006 was lower by about 1.6 pp. In 2007 the debt to proceeds ratio exceeded 60% in 5 local government units (as compared to 12 units in 2006). As in recent years, the main causes were:

- excessive, in relation to financial capacity, incurrence of loans for investment projects in previous years,
- lower than planned revenues.

In 2007 the highest debt to revenues ratio incurred in cities with the county status (28,7%), this ratio has increased yearly in provinces, achieving 17.8% in 2007. In 2007 debt servicing

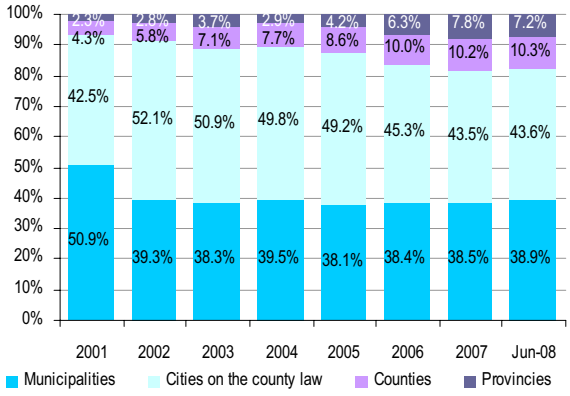
costs of local government units and their associations stood at PLN 1.0 bn, which constituted 0.8% of total expenditures and they were higher by 18.4% than in 2006.

Chart 14. 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 liabilities of cities with the county status (43.5% in 2007). The share of liabilities of municipalities remained on a stable level of about 38-39% and the share of provinces increased (from 6.3% to 7.8% in 2007, a nominal increase of 28.3%).

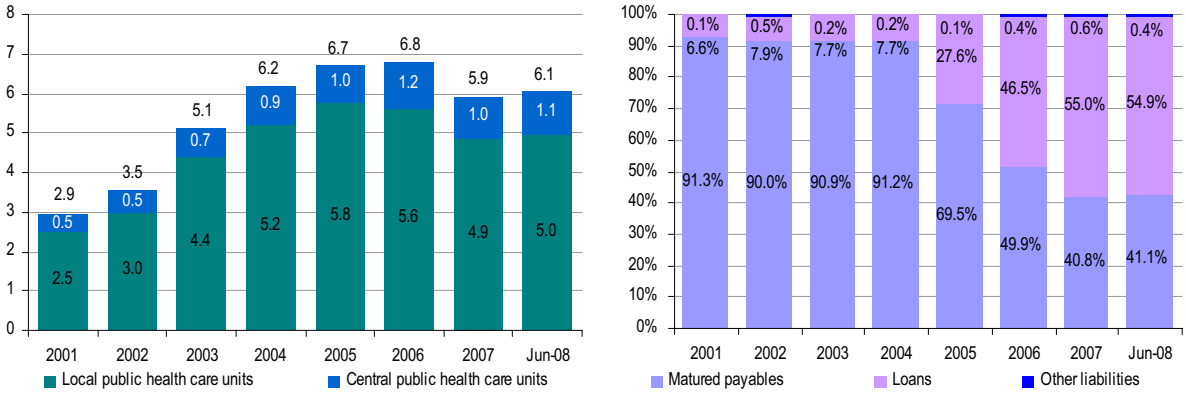
Chart 15. The structure of debt of local government units and their associations according to levels of local governments



2) Debt of independent public health care units

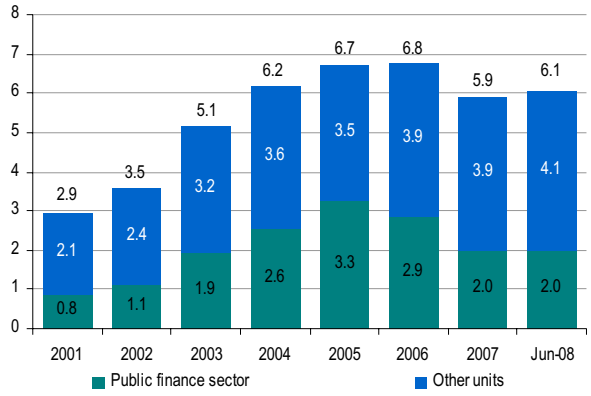
Debt of independent public health care units stood at PLN 5.9 billion as compared to PLN 6.8 bn in 2006. In 2007 for the first time loans were a predominant component of their debt (55% of total debt). Matured payables resulting from payment arrears had still a significant yet decreasing share in debt. The majority of the debt of independent public health care units is owed by local level units. The debt was owed almost exclusively (about 98.9%) to domestic creditors.

Chart 16. Debt volume and structure of independent public health care units



Since 2005 the debt of independent public health care units to public finance sector has been decreasing. This was the result of restructuring of independent public health care units, partly written off loans from the state budget granted under the act of 2004 and decreasing liabilities to Social Insurance Institution.

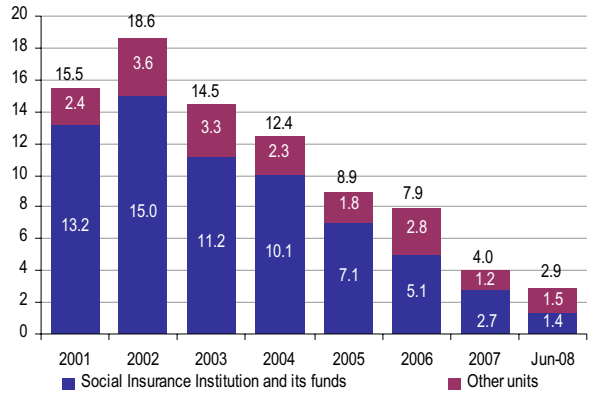
Chart 17. Debt of independent public health care units to public finance sector and other units (PLN bn)



3) Debt of other units

The highest indebted units were the Social Insurance Institution and funds managed by it, which was exclusively the result of liabilities incurred by the Social Insurance Fund. Since 2003 debt of the Social Insurance Fund had been decreasing systematically, as a result of repayment of bank loans. At the end of 2007 the debt of the Social Insurance Fund stood at PLN 2.7 bn and consisted exclusively of matured payables.

Chart 18. Debt of public sector units other than State Treasury, local government units and independent public health care units (PLN bn)



The matured payables of the Social Security Fund were resulting from arrears in transfers of retirement contributions to the open pension funds in the years 1999-2002. Since November 2003, these liabilities with accrued interest were taken over by the ST and converted to Treasury bonds. The remaining part of the matured payables is the result of unduly collected retirement contributions and current contributions not yet settled or untimely transfered to the open pension funds.

Table 3. Conversion of debt of the Social Insurance Fund (FUS) towards open pension funds into TS (PLN bn)

Item	Dec 2003	Dec 2004	Dec 2005	Dec 2006	Dec 2007	Jun 2008
Face value of issued T-bonds (outstanding at the end of period)	0.4	1.2	2.5	3.7	5.1	5.6

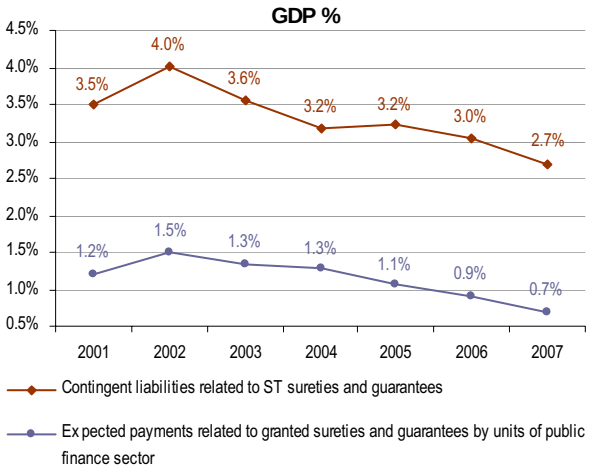
The debt of other units was recently decreasing and constituted an insignificant share of public debt (PLN 2.9 bn, i.e. 0.5% of debt of public finance sector before consolidation as of June 2008).

II.4. Guarantees and sureties granted by public finance sector entities

Activity of the ST in granting guarantees and sureties has not created any serious threats to the public finance so far. Limitations on guaranties and sureties granted by the ST were set in the budget act for 2007 at the value of PLN 17 billion, of which PLN 3.1 billion was used.

At the end of 2007 over 70% of contingent liabilities under guarantees and sureties granted by the ST belonged to the low-risk group. Amounts of contingent liabilities and the coefficient of long term risk for whole portfolio decreased. The ratio of expected payments under guarantees and sureties granted by the ST to GDP decreased from 0.9% in 2006 to 0.69% in 2007. As in previous years domestic guarantees and sureties were relatively more risky.

Chart 19. Contingent liabilities and expected payments under guarantees and sureties granted by the ST



At the end of 2007 the value of contingent liabilities of local government units under guarantees and sureties increased to PLN 3.5 bn (as compared to PLN 2.9 bn at the end of 2006). At the end of the first half of 2008 these liabilities amounted to PLN 4.3 bn.

II.5. Evaluation of implementing the Strategy's objective in 2007 and first half of 2008

In 2007 and in the first three quarters of 2008 debt management was conducted in accordance with *The public finance sector debt management strategy in the years 2007-09*, approved by the Council of Ministers in September 2006 and with *The public finance sector debt management strategy in the years 2008-10,* approved in September 2007.

Table 4 presents the evaluation of implementing the Strategy's objective along with risk constraints in 2007 and the first half of 2008.

Table 4. Evaluation of implementing the Strategy's objective in 2007 and first half of 2008

<table>
<tr><th colspan="3">I. Strategy's objective</th></tr>
<tr><td></td><td>Evaluation</td><td>Implementation</td></tr>
<tr><td rowspan="2">Debt servicing costs minimisation</td><td rowspan="2">High</td><td>1. Selection of instruments
The domestic market was core to financing the borrowing requirements (in 2007 the face value of TS issuance amounted to PLN 105.9 bn in the domestic market and PLN 10.4 bn in foreign markets, additionally PLN 2.8 bn were drawn from international financial institutions, in the first half of 2008 - PLN 60.4 bn, PLN 8.3 bn and PLN 2.0 bn respectively). Main factors taken into account when deciding about the financing structure were:
• significantly lower than planned State budget borrowing requirements in 2007, resulting in lower TS sales both on domestic and foreign market,
• limited State budget borrowing requirements in foreign currencies,
• situation in financial markets. Rising inflation and uncertainty about the scale of tightening the monetary policy in the domestic market influenced the increase in demand for short term instruments, floating rate and inflation-linked bonds at the expense of demand for fixed rate bonds. Since mid 2007 the subprime crisis in foreign markets caused the increase in the risk aversion and a turn to the most liquid and credible instruments, resulting in increased spreads of other issuers' instruments to high levels in comparison to credit risk.
The most important activities connected with foreign debt included:
• benchmark issues on the euro market (15-year bonds with face value of EUR 1.5 bn in January 2007 and 10-year bond with face value of EUR 2.0 bn in June 2008),
• maintaining Poland's presence on other foreign markets, especially those with low interest rates like the Japanese yen (in November 2007 and in June 2008 30-year bonds with face value of JPY 50 bn and 25 bn respectively were issued), and the Swiss franc (in May 2007 5-year bonds with face value of CHF 500 million and 12-year bonds with face value of CHF 1 bn and in April 2008 9-year bonds with face value of CHF 250 million and 4-year bonds with face value of CHF 225 million were issued).
2. Efficiency of the TS market
Main activities aimed at cost minimisation included:
• Issuance policy aimed at creation of large and liquid benchmark issues in the domestic market was continued. EUR 5 bn threshold was crossed by 11 domestic issues (including 9 fixed-rate bonds). Concentration of issuance constituted an important factor facilitating the rise of liquidity in the secondary market. Liquidity ratio of the bond market rose from 176.2% in 2006 to 185.4% in 2007 and decreased to 150.5% in the first half of 2008 as a result of increased uncertainty in financial markets.
• Policy of issuing liquid benchmarks in the euro market. Face value and liquidity of Polish bonds is the largest among bonds listed on the NewEuroMTS electronic platform.</td></tr>
</table>

II. Constraints – quantitative						
Constraint	Evaluation	Implementation	Measure	Value		
				2006	2007	Jun 2008
Refinancing risk	Satisfactory	• Dominant position of mid- and long- term bonds in total sales. • Temporary return to financing borrowing requirements by T-bills in the first half of 2008. • High importance of switching auctions. • ATM of domestic debt exceeded the level of 4 years assumed to be reached by 2009. • ATM of foreign debt remained at a safe level.	ATM: - domestic debt - foreign debt - total debt	 3.94 8.28 5.11	 4.33 8.28 5.30	 4.40 8.21 5.31
			Share in domestic TS of: - securities maturing within 1 year - Treasury bills	 20.0% 7.4%	 20.5% 5.9%	 21.8% 7.8%
FX risk	High	• Limited significance of foreign financing. • High influence of appreciation of the zloty on the share of foreign debt in total debt. • Share of foreign debt in total debt maintained in the range set in the Strategy (20-25%). • Share of EUR debt in foreign debt maintained above the 70% target set in the Strategy.	Share of foreign debt in total ST	26.4%	24.2%	23.5%
			Share of EUR-denominated debt in foreign debt	70.9%	72.1%	74.0%
Interest rate risk	High	• Duration of domestic debt decreased yet remained in the 2.5-4.0 range set in the Strategy. • Flexible TS supply in reply to changes in financial markets. • Risk connected with foreign debt remained at a safe level.	Duration: - domestic debt - foreign debt - total debt	 2.99 5.90 3.78	 2.85 5.92 3.63	 2.87 5.89 3.60
			ATR - domestic debt - foreign debt - total debt	 3.40 7.91 4.61	 3.39 8.05 4.53	 3.44 8.03 4.53

III. Constraints – non-quantitative		
Constraint	Evaluation	Implementation
Liquidity risk	Satisfactory	Main instruments used in liquidity management included: • switching auctions (their main purpose was to reduce refinancing risk connected with redemptions of large issues), • interest-bearing zloty deposits in the National Bank of Poland (NBP), • zloty deposits, where Bank Gospodarstwa Krajowego (BGK) acts as an intermediary. These were buy-sell-back transactions and interbank deposits. In 2007 transactions with face value of PLN 539 bn were concluded, in the first half of 2008 transactions with face value of PLN 168 bn respectively, • interest-bearing foreign currency deposits with the NBP. In 2007 deposits with face value of EUR 2 bn and USD 5 bn were conducted, in the first half of 2008 deposits with face value of EUR 2 bn and USD 1 bn respectively. • in the first half of 2008 T-bills were used as well. Liquid assets of the State budget (on average: PLN 9.0 bn in 2007 and PLN 6.6 bn in the first half of 2008 of zloty deposits as well as PLN 2.7 bn in 2007 and EUR 0.9 bn in the first half of 2008 of foreign currency deposits) contributed to increased safety in execution of budgetary flows and smooth distribution of TS supply. In June 2008 redemption of the first PS0608 benchmark series with initial face value of PLN 19.4 bn took place, of which after switching auctions PLN 12.3 bn, i.e. 64% of issue remained to be redeemed at maturity.
Credit risk	Satisfactory	• Buy-sell-back transactions did not generate credit risk. • For interbank deposits the system of credit limits was in place. • In 2007 a significant increase in the value of derivatives transactions took place, which resulted from its use to achieve desirable distribution of debt servicing costs over time. Credit risk connected with derivatives is limited by selection of counterparties with high credit rating (it is necessary to have ISDA Master Agreement or an equivalent Polish law agreement signed with MF to make deals) and limitation imposed on total value of transactions involved with every counterparties aiming to diversify the credit risk. Financial standing of potential transaction partners is monitored daily, in case of significant increase in credit risk further transactions are suspended.
Operational risk	Satisfactory	• Management of debt conducted in one department in the Ministry of Finance. • Integrated database of the ST debt. • Work on development of a comprehensive risk management system is carried out. • Additional measures improving safety of debt management data were introduced. Infrastructure enabling market activity was created. • Ongoing problems with retaining valuable staff and difficulty in attracting new employees generates significant risk.
Distribution of debt servicing cost over time	Satisfactory	• Smooth distribution of servicing costs was taken into account when deciding about new issues of TS. Coupons of new bonds were set close to their yields. • Even distribution of debt servicing costs was enhanced by switching auctions for bonds maturing in a following year. • In order to limit increasing debt servicing costs in 2008 derivatives transactions distributing the costs from coming year to current year were conducted. From September 2007 till January 2008 transactions with total face value of PLN 44 bn were conducted resulting in decrease in costs by PLN 3.1 bn in 2008 and increase in costs by PLN 3.0 bn in 2007.

III. ASSUMPTIONS OF THE STRATEGY

III.1. Macroeconomic situation in Poland

Major economic factors influencing changes of the nominal value of public debt include: the borrowing requirements (including the deficit of the public finance sector) and 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 which have a direct impact on debt servicing costs include interest rates, exchange rate and, to a lesser extent, inflation. Increase of the credit rating of Poland to A- in all three main rating agencies in 2007 also influenced costs of the financing borrowing requirements[6].

1. GDP growth

Real GDP growth in 2007 amounted to 6.6% (as compared to 6.2% in 2006), the highest since 1997. Data for 2008 (real GDP growth of 5.9% in the first half of 2008) show that the GDP growth rate in 2008 will remain at high level, lower than in 2007 though. It is expected that real GDP growth in 2008 will amount to 5.5%. In the following years 2009-11 GDP growth will continue to slow down. Slowdown in GDP growth will result from worsening global economic conditions and supply-side constraints. Main factors contributing to growth, in the forecast's horizon, will include, as in previous year, domestic consumption supplied by favourable labour market conditions, transfers for households (transfers of European Union funds as well as transfers of income from Poles working abroad) and further reductions of the fiscal wedge.

2. Fiscal deficit

Favourable economic conditions are a factor that has positive influence on the fiscal situation. In 2007 general government deficit to GDP ratio significantly decreased (to 2.0%). Significant scale of deficit reduction in 2007 and plans of further consolidation of the public finance sector, presented inter alia in the Convergence Program submitted to European Commission in March 2008, resulted in a decision of the ECOFIN Council in July 2008 to lift the excessive deficit procedure, to which Poland was subject since 2004. Once the excessive debt procedure is lifted, UE Member States are obliged to reach the medium term budgetary objective measured by their structural balance.

In subsequent years reduction of fiscal imbalances is planned. In 2011 the structural deficit (i.e. after excluding cyclical fluctuations and one-off effects) will reach the medium term budgetary objective of 1% of GDP. It is expected that high costs of a tax wedge reduction will result in a temporary increase in the deficit to GDP ratio in 2008.

3. Inflation

For the most of 2007 high GDP growth was accompanied by a moderate increase in inflation and the average CPI amounted to 2.5%. In the last quarter of 2007 inflation accelerated and continued to grow in 2008. It is expected that inflation reached the peak (4,8%) in August 2008 and subsequently will decrease to return in the years of 2009-11 to the 2.5% target of National Bank of Poland.

4. Exchange rate of the zloty

In 2007 the zloty appreciated by 6.5% against the euro and 16.3% against the US dollar, in the first half of 2008 respectively 6.4% against the euro and 13.0% against the US dollar. The main factors influencing the exchange rate include:

- process of Poland's accession into euro zone,
- price convergence in the EU member states (which means appreciation of the zloty as a currency of a country with relatively low price level),
- solid macroeconomic foundations of Polish economy,
- inflow of capital, including foreign direct investments and EU funds,
- expected end of the tightening cycle of monetary policy by the Monetary Policy Council (RPP).

[6] In the case of Moody's agency A2 rating approximatelly corresponds with A- for Standard&Poor's and Fitch agencies. For government debt rating of the EU Member States see Annex 4.

5. Interest rates

Taking into account the strong expectations that NBP reference rate would be increased since mid 2007 TS yields were rising and in the third quarter of 2007 this tendency was additionally deepened by uncertainty in international financial markets resulting from the subprime crisis. TS yields decreased significantly in September 2008 in connection with the government announcement of an intention to join the Eurozone in 2011. In mid-September 2008 2-year bond yield reached the level of 6.3% and 10-year bond yield the level of 5.9% respectively.

High GDP growth accompanied by the risk of rising inflationary pressure persuaded RPP to continue the increases of the NBP reference rate, which began in Match 2007. In 2008 three increases of the NBP reference rate took place, since June 2008 the reference rate was maintained at level of 6.0%. Taking into account expected gradual slowdown of GDP growth rate and weakening pressure in the labour market it is expected that from second half of 2009 the NBP reference rate will decline.

Bond markets in Poland will remain highly correlated with the Eurozone bond market, while spreads in yields of Polish bonds to their euro denominated equivalents for Eurozone issuers will decline after the precedent increase caused by global factors (i.e. increase in risk aversion, declining interest in the offer of smaller issuers). Bond markets will be influenced by adoption and implementation of a scheduled plan of preparation to introduce the euro in Poland and its implementation.

Table 5. Macroeconomic assumptions of the Strategy

Item	2007	2008	2009	2010	2011
Real GDP growth (%)	6.6	5.5	4.8	4.9	5.0
GDP in current prices (PLN bn)	1 167.8	1 280.4	1 381.4	1 486.0	1 599.6
State borrowing requirements (PLN bn), including:	34.0	42.7	39.1	32.6	32.0
Budget deficit	16.0	22.9	18.2	11.0	5.0
Pension reform costs	16.2	19.6	22.3	23.8	26.2
Average CPI (%)	2.5	4.4	2.9	2.5	2.5
Reference interest rate (%) – yearly average	4.4	5.8	6.2	5.6	5.3

6. Investor base development

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

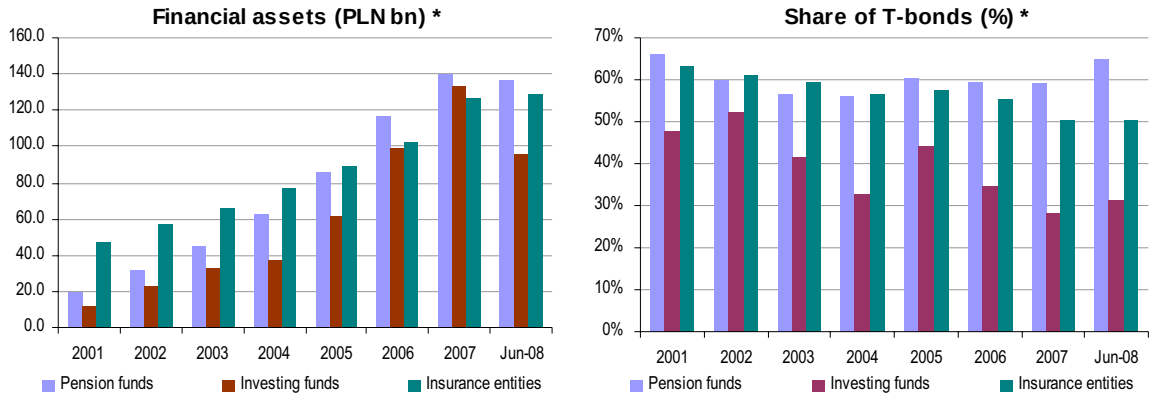
A few recent years brought dynamic growth in assets of domestic institutional investors. This tendency slowed down in 2008 in connection with deteriorating conditions on the Warsaw Stock Exchange (GPW).

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

- the pension reform introduced in 1999, accompanied by a creation of Open Pension Funds (OFE). Assets of these funds are growing quickly due to inflow of prospective pensioners' contributions and lack of outflows (first outflows will occur in 2009);
- dynamic insurance market development;
- conditions in the Polish stock market, which is one of the factors determining the investment preferences of household. During the boom in the stock market, due to low interest on bank deposits, savings were redirected from bank deposits to investment funds, offering potentially higher returns. Recently this tendency has been reversed, also due to rising interest on bank deposits.

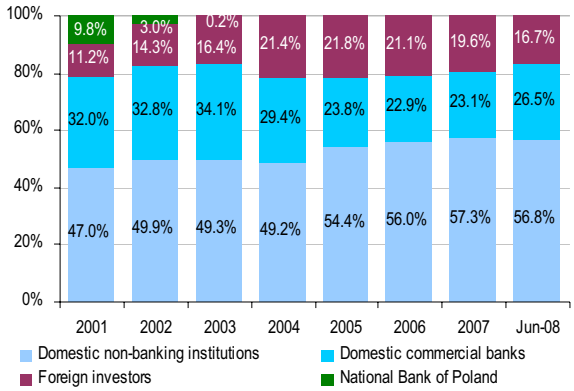
Since 2005 non-banking financial institutions, perceived as the most stable investor segment, have owned over half of TS issued on the domestic market.

Chart 20. Non-banking financial institutions assets and share of TS



in case of insurance companies data as of the end of March 2008.

Chart 21. Domestic ST debt by holder



7. *Impact of the subprime crisis on public debt management*

Direct consequences of the subprime crisis for the real sector of Polish economy seem to be weak so far. Crisis significantly influenced the global financial market and consequently the domestic financial sector, especially the banking sector, where:

- financial institutions are much more risk averse with transactions that invlolve credit risk than before the crisis;
- banks less willingly borrow to each other, which leads to a decrease in money market liquidity;
- the importance of liquidity and hence risk of illiquidity attributed by investors increased significantly.

Situation in global financial markets was the catalyst in the slump on the Warsaw Stock Exchange, which took place after a lasting boom begun in 2003.

Poland as the TS issuer was influenced by the consequences of the crisis through:

- a decrease in foreign investors interest in emerging markets, resulting in a decrease in demand on bonds issued by Poland offered both on domestic as well as foreign markets;
- decrease in domestic demand on the TS, as a result of global deterioration of liquidity in banks and partially of outflow of capital from investing funds. In particularly, willingness to buy long term instruments significantly fell, which decreases the possible scope for debt management to shape the financing structure in a desirable way from the risk management point of view.

As a results, in the first half of 2008 the change in domestic debt structure by holder took place, foreign inestors outflow (PLN 9.8 billion from TS market) and demand constraints from the domestic non-banking sector resulted in an increase in the role of banking sector, which is interested mostly in short maturities and floating rate instruments.

III.2. International situation

Since mid 2007 the situation in the external environment of Polish economy has clearly deteriorated. The main reasons were:

- tightening financial conditions as a result of turmoil in international financial markets,
- deepening of the crisis on real estate markets and
- significant rise in prices of natural resources and food.

As a consequence at the end of 2007 the GDP growth rate in the world economy slowed down and mainly as a result of slowing economies of the developed countries. However in the whole year of 2007 global growth remained at a high level, although lower than in previous year, inter alia as a result of still good economic conditions in emerging economies. In the years 2008-2009 the average global GDP growth is estimated to be slower than its long term average, the Eurozone's GDP growth is expected to slow down as well. In 2010 negative shocks should subside and the world economy is expected to return to a higher growth path.

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

- situation in the interest rate markets for currencies in which liabilities will be contracted. As a result of the adopted issuance policy, the development of the situation in the euro, yen and US dollar markets are the most important for Poland (the Swiss franc market is highly correlated with the euro market);
- risk perception and liquidity preference of investors acting in the global market, influencing the level of the risk premium expected by the purchasers of Polish bonds and hence yield spread between Polish and base instruments.

1. Euro market (EUR)

After over a year of maintaining the basic interest rate at level of 4.0% the European Central Bank decided in July 2008 to increase it by 25 bps. The decision about the increase of the interest rate was taken in response to rising inflation pressure, despite threats of negative subprime crisis influence on the growth in the Eurozone. The European Central Bank is perceived as far more determined not to allow further increase in inflation than the Federal Reserve System (FED) in the USA. Therefore ECB is not expected to decrease its interest rate as long as inflation pressure persists, instead further increases cannot be ruled out in case of rising inflation in the Eurozone.

2. American market (USD)

After the period of sharp cuts of interest rates, aimed at curbing the crisis in the sub-prime mortgages sector, the key interest rate reached a very low level of 2% (after cutting from the level of 5.25% in September 2007). Despite high inflation the threats of possible further weakening of the economy incline the FED to maintain interest rates at a very low level. The market is expecting the increase in interest rates at the beginning of 2009. In the case of weak condition of the American economy interest rates may remain longer at current levels. One of the key factors is the influence of the condition of financial institutions, burdened with the consequences of the subprime crisis, on the economy as a whole.

3. Japanese market (JPY)

As a result of an improving situation in the Japanese economy, in mid 2006 the Japanese central bank abandoned the "zero interest rate" policy, nonetheless currently the base interest rate amounts to 0.5%. As expectated, concerns about influence of American economy's slowdown and the level of Japanese consumers' optimism induced the Japanese Central Bank to maintain interest rates at an unchanged level. Recent developments in the Japanese economy, especially lower GDP growth forecasts will result in unchanged interest rates in the near future as the most probable scenario.

4. Credit spreads

Significant changes in investors behaviour in debt markets are one of the consequences of the global financial cisis that started in the American sub-prime mortgages market. Uncertainty arising from an unknown scale of losses and its impact on financial standing of potential counterparts results in a significant decrease of liquidity and rising risk aversion among

investors. There is clearly capital outflows from smaller markets, which cannot manage to assure suitable liquidity, to markets of bigger issuers (Germany, France but also Italy in the Eurozone) and investor aversion towards countries with an emerging markets status or those that only recently left this group, among them Poland.

It caused a significant rise of credit spreads between yields of bigger issuers with high creditworthiness and of smaller issuers. This environment is expected to continue at least till the scale of losses resulted from the subprime crisis is fully revealed.

IV. DEBT MANAGEMENT STRATEGY OBJECTIVE IN THE YEARS 2009-2011

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**, i.e. cost minimisation within the timeframe of longest maturities of debt instruments with significant share in debt volume, through the optimal choice of markets, debt management instruments, structure of financing the borrowing requirements and issuance dates;
- **increasing efficiency of the TS market**, contributing to lowering of TS yields. It means aiming at spreads between TS issued by Poland and EU countries with 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 a possible flexibility in choosing the market, currency and instrument type in financing the borrowing requirements. The choice of the financing structure should take into account the assessment of the market situation (levels 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 risk constraints.

The domestic market will remain the main source of financing the State budget borrowing requirements. The supply of domestic TS will be designed in a way that excessive increase in yields in respective segments of the yield curve does not occur.

Taking the aforementioned policy rules into account, foreign markets issuance should:

- take foreign currency borrowing requirements of the State budget into account, including principal and interest payments, both scheduled and resulting from early repayments,
- strengthen Poland's position in the euro market, which is of strategic importance due to the perspective of full integration under the EMU,
- ensure that Poland has access to the investor base in other major financial markets,
- stabilise the domestic market in the sense that security of financing the State budget borrowing requirements is ensured, should temporary disturbances in the domestic market occur,
- affect the domestic financial market, especially the exchange rates, as little as possible,
- allow buying or selling foreign currencies in the NBP, as an available instrument of managing the foreign currency borrowing requirements of the budget, while taking into account its economic rationale and the monetary policy considerations.

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
   - further increase in the role of medium and long term instruments in financing the State budget borrowing requirements in the domestic market at the pace dependent on the investors' demand,
   - aiming at even distribution of redemptions and interest payments of domestic and foreign debt in subsequent years,
   - ATM of domestic debt reaching at least 5 years in the Strategy horizon,

- the current level of foreign debt refinancing risk does not restrain cost minimisation;

b) exchange rate risk
- maintaining the exchange rate risk measured by the share of foreign currency debt in the ST debt in the period preceding the entry to the euro zone to 20-25%,
- possibility of using derivatives in managing the exchange rate risk in order to target the currency structure of debt,
- maintaining within the Strategy's timeframe an effective (after swaps) share of the euro, as a future domestic currency, of at least 70%;

c) interest rate risk
- keeping duration of the domestic debt in the range of 2.5-4.0 years,
- separating the management of the interest rate and refinancing risks 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 funds while managing them efficiently,
- the level of liquid funds will be the product of the State budget's demand for liquidity and of smoothening of TS supply within a year, taking into account seasonal considerations as well as current and expected market situation;

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

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 the bond coupons at levels close to their yields over the sales period.

V. STRATEGY TASKS IN A THREE-YEAR HORIZON

The major tasks for implementing the Strategy's objective 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 continuous in nature. The tasks of the Strategy have been reformulated this year in order to subordinate the actions and instruments used in implementing the objective of debt servicing cost minimisation to three continuous, mostly interrelated tasks of increasing the liquidity, efficiency and transparency of the TS market. The tasks of the Strategy correspond to the first three tasks of the previous year's Strategy, which were:

1. Increasing liquidity and efficiency of the TS market,
2. Development of the Primary Dealers (PD) System and of the electronic market for TS,
3. Broadening the investor base and efficient communication with participants of financial markets.

In previous Strategies the task of developing the system for managing State budget liquidity was presented. As current changes in liquidity management are related to the functioning of the state budget and not to the development of financial market instruments, this task has not been included in this year's Strategy.

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, which generate high cost of selling, and to increasing the demand from investors interested in liquid investments only. Both factors contribute to decreasing yields of TS and hence to the minimisation of ST debt servicing costs. Market liquidity is of key importance in the context of Poland's planned entry to the Eurozone (see Chapter VIII), which requires consistent implementation of adjusting measures in the period preceding adoption of the euro. In the period covered by the Strategy the following measures are planned:

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

  EUR 5 bn was chose a reference value at the current stage of development of the domestic TS market, considered sufficient to provide sufficient liquidity for large institutional investors and yet not generating excessive refinancing risk at maturity. In the future an increase of the reference value is possible, so as to liquidity of TS in the domestic market was comparable with liquidity provided by significant issuers in the Eurozone. In mid 2008 there were 11 bond series exceeding the EUR 5 bn equivalent, of which 4 exceeded the EUR 8 bn equivalent.
- Large liquid issues in the euro market, contributing to the development of the Polish yield curve in the euro. In mid 2008 there were 3 bond series of EUR 3 bn or more, of which one exceeded EUR 5 bn.
- Adapting the issuance policy to market circumstances, including 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 the debt servicing costs at the second of two levels stated in Chapter IV. It includes both primary and secondary market. The following actions are planned:

- Adjusting the timing of issuance in the domestic and foreign market to market and budgetary conditions, taking into account actions aiming at increasing transparency of the TS market;

- Increasing the role of the participants of the PD system in the development of the TS market and in debt management operations – in the areas where primary dealers are at least as competitive as other market participants, the choice of partner should be made with the preference for primary dealers over other market participants;
- Removing technical and legal obstacles on the domestic and foreign TS markets, in particular:
  - actions aiming at enabling the settlement of transactions on TS issued on the domestic market by internationally recognized clearing houses (in particular Clearstream and Euroclear),
  - comprehensive regulation of tax exemptions of non-residents from the income tax on interest of bonds offered in the foreign markets,
  - actions aiming at harmonizing a tax rate for non-residents on interest of bonds issued on the domestic market (withholding tax) so that the country of origin is neutral to the profitability of investment;
- Direct meetings with investors in the domestic and foreign markets and consultations with the participants of the TS market, in order to exchange information efficiently and take the investors' needs into account in the process of implementing the Strategy, including:
  - regular meetings with primary dealers,
  - regular meetings with non-banking sector investors,
  - meetings with foreign banks and other foreign investors,
  - ad hoc meetings and phone consultations with investors;
- Broadening the investor base, in particular by regular meetings with foreign investors in the form of non-deal roadshows in the key foreign markets, aiming at:
  - building and maintaining relations with key foreign investors,
  - separating issuance of foreign bonds from promotional activities (roadshows), enabling issuance at best possible timing, regardless of the marketing readiness,
  - promotion of Polish TS issued both in 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 transparency of the TS market allow to limit uncertainty connected with its functioning and acquire reliable information on current market prices, as well as helps to formulate educated expectations of future price levels. 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 horizon:

- Transparent issuance policy, including announcing TS issuance calendars, yearly, quarterly and monthly supply plans of TS in the domestic and foreign markets and supply offers for individual auctions;
- Promoting the electronic market in the PD system regulations, mainly the obligations imposed on dealers and candidates concerning quoting benchmark bonds, the bid and offer spreads and participation in the fixings of TS.

VI. INFLUENCING THE PUBLIC FINANCE SECTOR DEBT

According to Article 69 of the Public Finance Act, 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 the 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 stem from regulations in the Public Finance Act. First and foremost they include constraints imposed on the manner of incurring obligations 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 thresholds of 50%, 55% and 60%.

VI.1. Changes in legal regulations

The most important legislative change that influences incurring liabilities by public finance sector units and their level of borrowing requirements is a draft of a new public finance act. In the line of the public debt the project, as compared to the currently ruling act, introduces the following changes:

- Change in scope and organization of the public finance sector:
  - closing state budgetary enities and state auxiliary entities, local budgetary entities and municipal, county and provincial earmarked funds with legal personality;
  - as part of adjusting the scope of the public finance sector to the UE methodology, excluding the research and development units as well as science institutes – it particularly means that, like in the UE methodology, research and developments units debt will not constitute public debt in the polish methodology;
  - transforming the state agencies into new legal and organizational form for performing key tasks for the State, i.e. executive agencies.
- New threshold of the public debt to GDP ratio introduction and strenthening prudential and remedial procedures, the most important changes include:
  - replacement of three current thresholds of 50%, 55% and 60% by four new thresholds of 47%, 52%, 55% and 60%,
  - possibility of earlier adjustment of fiscal policy in case of excessive increase of public debt volume, the prudential and remedial procedures are applied when the debt to GDP ratio excceds 47% (previously 50%), the most severe sanctions, i.e. necessity to decrease the debt to GDP ratio are applied after it exceeds 52% (previously 55%),
  - imposing additional limits on growth of expenditures (including: new investments and salary raise in the budgetary sector) in case the debt to GDP ratio exceeds 52% and 55%,
  - excluding local units from limitation (except for 55% and 60%) in the prudential and remedial procedures;
- Introduction of a balanced budget principle of local government units and a system of individual limits on incurring debt, depandent on ability to service its repayment.
- Separating the EU funds budget within State budget since 2010. The balance of UE funds budget will not be included in the balance of the State budget, however the deficit of UE funds budget will be included in the State budget borrowing requirements and the surplus will be used in State budget debt management.

Furthemore, in the Strategy horizon a package of acts reforming the health care system is planned to be passed by the Parliament. Government draft assumes that health care units will be transformed into the legal form of companies.

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

Granting sureties and guarantees by the public finance sector units, especially by the ST, 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 2008 a slight increase in the ratio of expected payments under sureties and guarantees granted by the ST to GDP is expected.

In order to reduce the risk stemming from granting sureties and guarantees 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 environment, creating new jobs, regional development, residential building, railway, especially those co-financed with the EU structural funds (loans and bonds secured or guaranteed by the ST should help to utilize the EU structural funds), but also to support other investment that may arise from possible new support programs using sureties and guarantees in compliance with the EU rules, e.g. in the shipyard, defense and air sectors.
- The ratio of expected sureties and guarantees granted by the ST to GDP should not exceed 1.4%, the ratio of the ST contingent liabilities resulting from granted sureties and guarantees to GDP should not exceed 4.5%.
- 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 by some other legal persons, the budgetary act determines each year the total amount to which sureties and guarantees can be granted by the ST.

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

Under the adopted assumptions the debt of the public finance sector units other than ST in the years 2009-11 will increase from PLN 37.1 bn to PLN 44.0 bn before consolidation and from PLN 28.1 bn to PLN 33.8 bn after consolidation. This increase will be the result of:

- systematic increase of debt of local government units and their associations,
- slight decrease of local independent public health care units,
- stabilization of debt of central independent public health care units,
- stabilization of matured payables of the Social Insurance Fund,
- stabilization of debt of other units in central and local sector.

The debt of other sector before consolidation-to-GDP ratio will decrease from 2.9% in 2008 to 2.7% in 2011, the ratio for debt after consolidation will stabilize at about 2.1%. The share of this group of units in total debt of the public finance sector before consolidation will in 2011 stay at about 6.4% before consolidation and at about 5.0% after consolidation.

Chart 22. Debt of public finance sector units other than ST before and after consolidation by sectors (PLN bn)

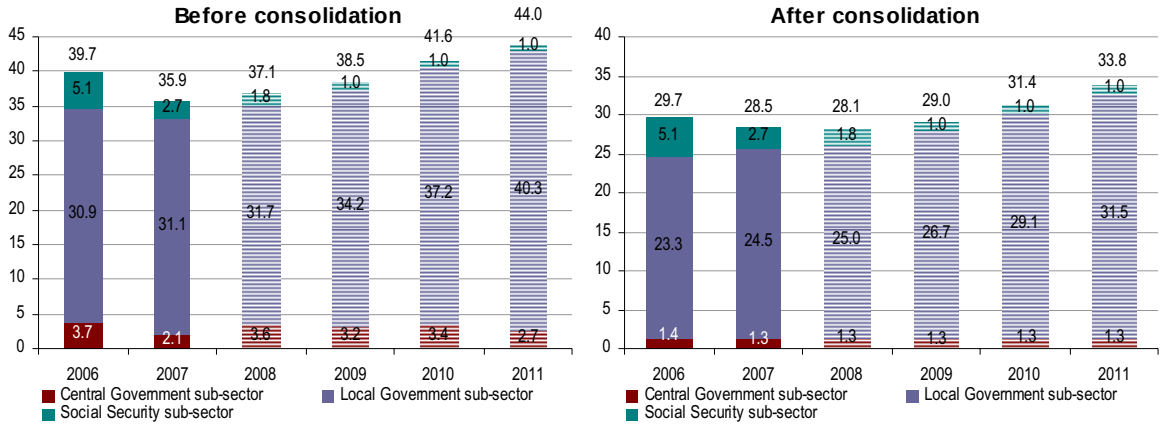
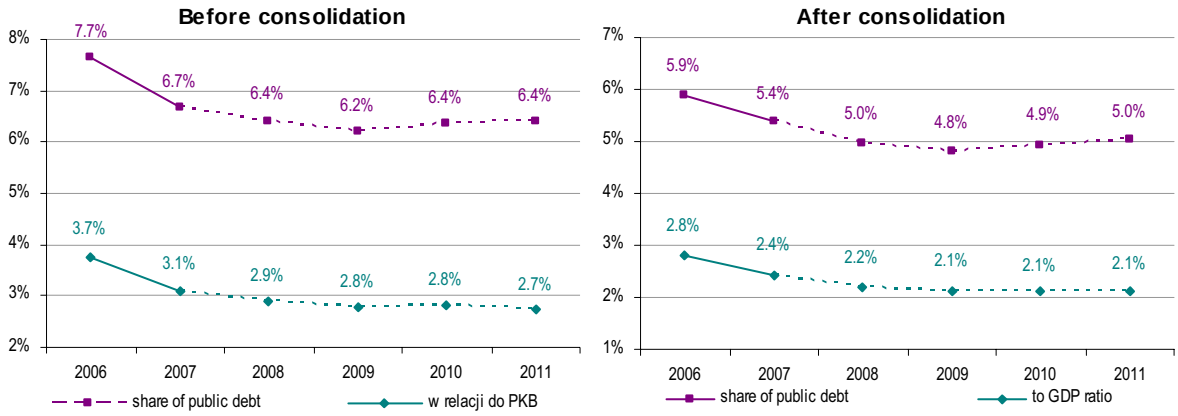


Chart 23. Debt of the public finance sector units other than ST before and after consolidation – ratio to GDP and share in total debt of public finance sector



1) Debt of local government units

The debt of local governments units and their associations is expected to systematically increase in the years 2008-11 and will be a result of budget deficits and surpluses of particular units. High borrowing requirements of local government units will be first of all the effect of executing infrastructural projects, co-financed from the EU funds from the Financial Perspective 2007-13. The majority of investments will be the effect of preparation to the European Football Championships EURO 2012.

The new rules of liabilities incurring by the local government units, described in the chapter VI.1, making incurring liabilities contingent upon the unit potential to repayment of liabilities, will counteract excessive indebtness of local government.

The dominant instrument of financing the borrowing requirements of local government units will still be loans in commercial banks, yet the debt resulting from issued securities, especially by large units will increase. As in recent years, cities with the county status and municipalities will generate most of debt.

2) Debt of independent public health care units

Debt of independent public health care units before consolidation is expected not to increase. Debt of the local units is expected to decrease, yet their debt will continue to dominate in the structure of liabilities of independent public health care units.

Changes in the debt will be the result of:

- commercialization of local independent public health care units under the reform of the national health service – their transformation in companies organized under commercial law will have influence on exclusion of local independent public health care units from the public finance sector,
- restructuring of existing debt of transformed local independent public health care units – on principles supporting healing the finances of individual units, taking into account the interest of creditors, founding bodies of local independent public health care units and ST,
- current financial results of individual units.

Within the restructuring of the debt of local independent public health care units under the Public Assistance and Restructuring of Local Independent Public Health Care Units Act, written off matured payables of some units and further conversion of matured payables into loans will occur.

3) Debt of other units

The debt before consolidation of other units of the public finance sector will decrease significantly in the Strategy horizon, its volume will be the result of:

- temporary increase of debt of state legal persons, i.e. mainly the Agricultural Market Agency from loans granted by ST for prefinancing of tasks co-financed with the EU funds,
- repayment of matured payables of the Social Insurance Fund resulting from arrears in transfers of retirement contributions to open pension funds,

- stable other matured payables of the Social Insurance Fund, mainly resulting from unduly collected retirement contributions and current retirement contributions which are unsettled and untimely transferring to the pension funds,
- decrease of debt of state higher schools, local government earmarked funds, Polish Academy of Science and units established by it,
- increase of debt of the state and local cultural units, research and development units research and development units (according to the draft of the new of Public finance act these units are excluded from the public finance sector).

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 objective 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 will continue to decrease to 41.9% in the year 2011. The public debt-to-GDP ratio will not exceed the first safety threshold within the Strategy time horizon, i.e. 50%, as well as the first threshold from the new public finance act, i.e. 47%. Growth of the ST debt servicing costs will be mainly the result of the growth of debt volume and of cash-based budget accounting. Debt servicing costs-to-GDP ratio will stabilize at a level of 2.2%-2.4%.

Table 6. Forecasts of the public debt volume and the ST debt servicing costs in the years 2008-2011

	2007	2008	2009	2010	2011
1. State Treasury debt					
a) PLN bn	501.5	541.4	579.6	610.4	641.3
domestic	380.4	417.1	449.4	477.2	505.6
foreign	121.1	124.3	130.1	133.2	135.8
b) relative to GDP	42.9%	42.3%	42.0%	41.1%	40.1%
2. Public debt					
a) PLN bn	527.4	565.9	604.4	637.0	670.0
b) relative to GDP	45.2%	44.2%	43.7%	42.9%	41.9%
3. General government debt (EU methodology)					
a) PLN bn	527.6	567.8	606.9	639.7	673.1
b) relative to GDP	45.2%	44.3%	43.9%	43.1%	42.1%
4. State Treasury debt servicing costs (cash basis)					
a) PLN bn	27.6	27.7	32.8	34.2	35.6
b) relative to GDP, including:	2.4%	2.2%	2.4%	2.3%	2.2%
- domestic debt	1.9%	1.8%	1.9%	1.9%	1.8%
- foreign debt	0.4%	0.4%	0.4%	0.4%	0.4%

Chart 24. Public debt-to-GDP ratio

Chart 25. ST debt servicing costs-to-GDP ratio

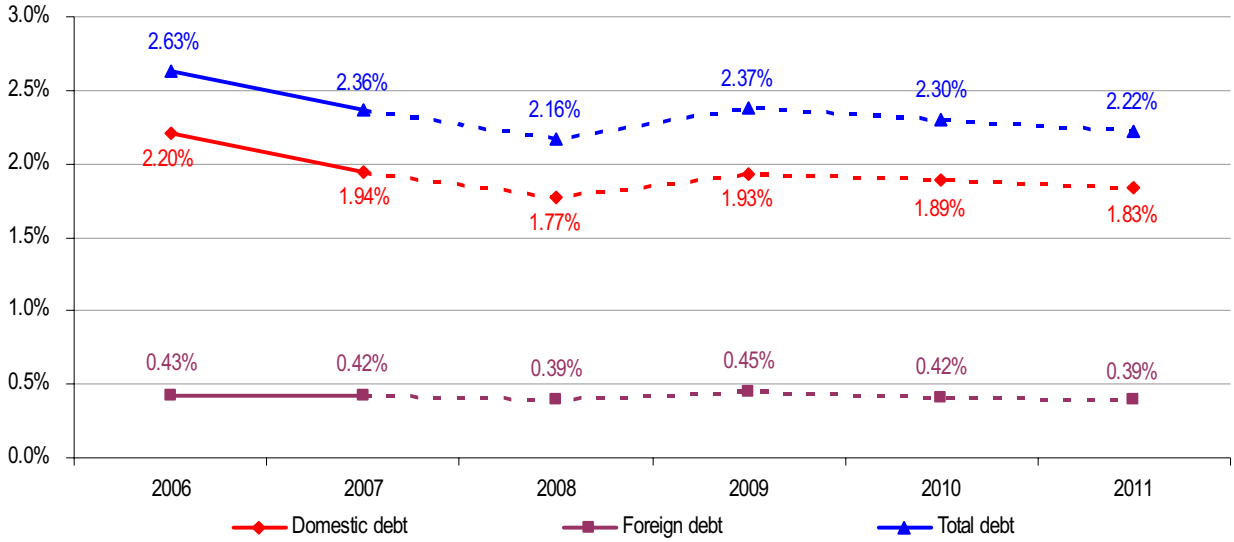


Chart 26. Sensitivity of public debt-to-GDP ratio to changes in assumptions

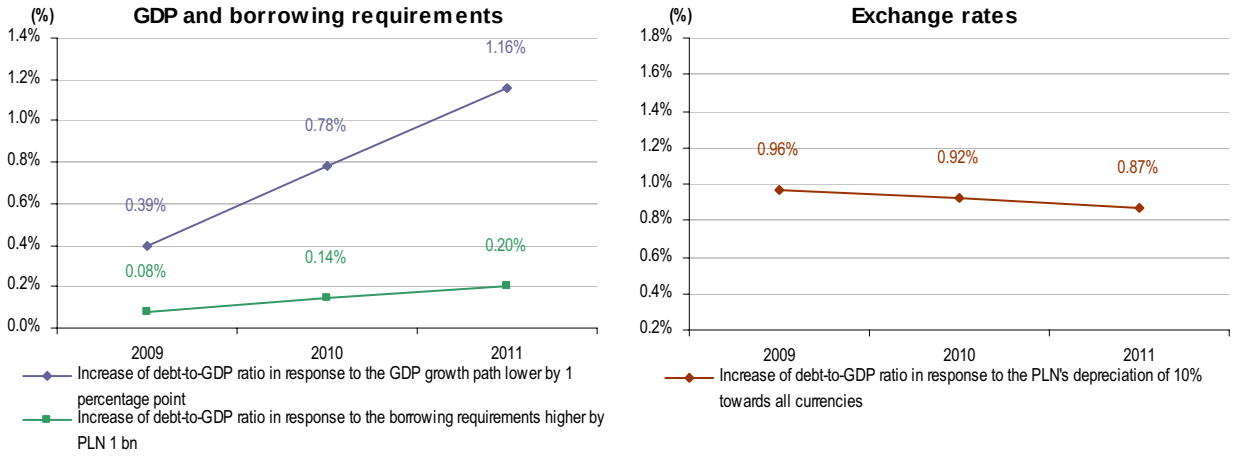
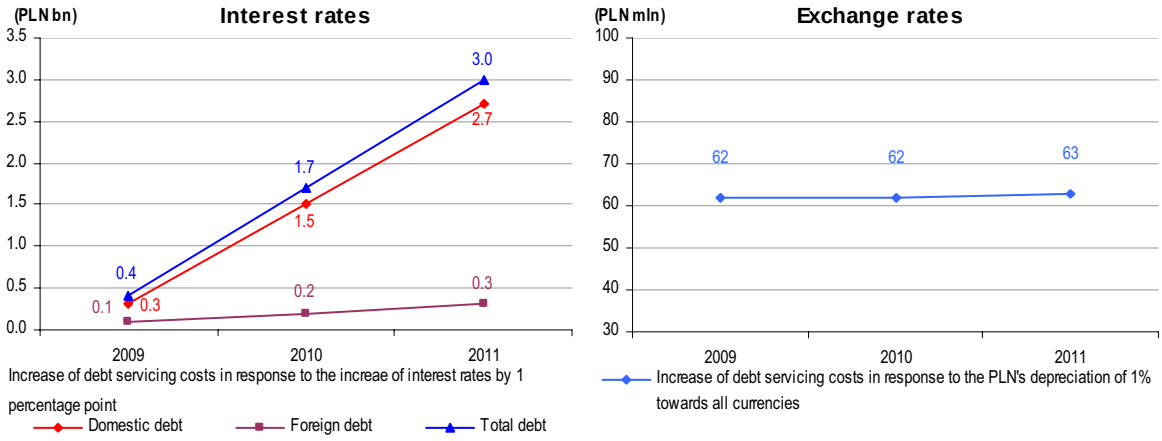


Chart 27. Sensitivity of the ST debt servicing costs to changes in assumptions



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

According to the adopted Strategy of granting guarantees and sureties it is expected that the ratio of the ST contingent liabilities resulting form granted guarantees and sureties to GDP will not exceed 4.5%, while the ratio of risk-weighted payments resulting from granted guarantees and sureties to GDP will not exceed 1.4%.

Table 7. Forecasts of contingent liabilities and risk-weighted payments resulting from guarantees and sureties granted by the ST in the years 2008-2011

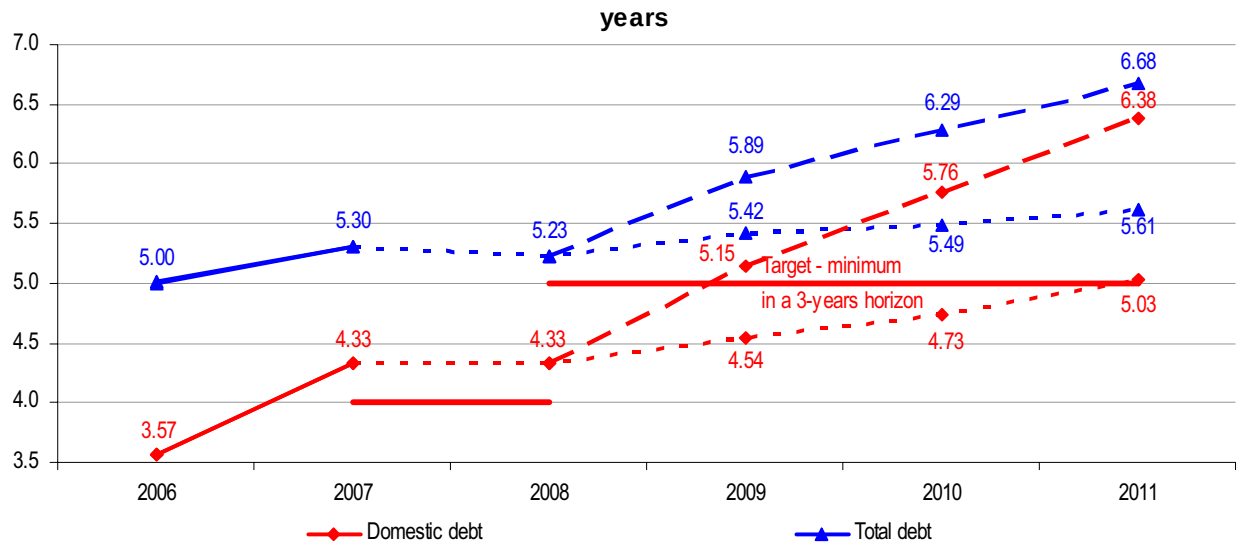
		2008	2009	2010	2011
Contingent liabilities	PLB bn	31.6	42.6	47.0	49.5
	Relative to GDP	2.5	3.1	3.2	3.1
Risk-weighted payments	PLN bn	7.7	9.7	10.5	10.7
	Relative to GDP	0.6	0.7	0.7	0.7

VII.2. State Treasury debt structure

It is forecasted that in the horizon of the Strategy:

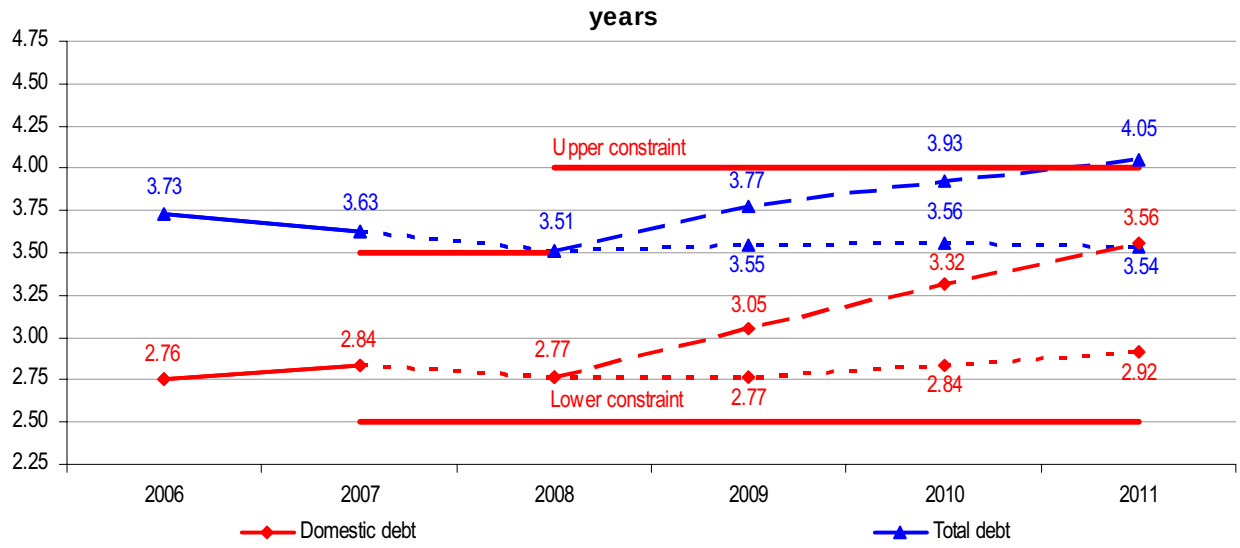
- the refinancing risk will be further reduced – ATM of the domestic marketable debt will increase, depending on adopted financing strategy, to 5.0-6.4 years, while ATM of the total ST debt will be in the range of 5.6-6.7 years,

Chart 28. ATM of the ST debt



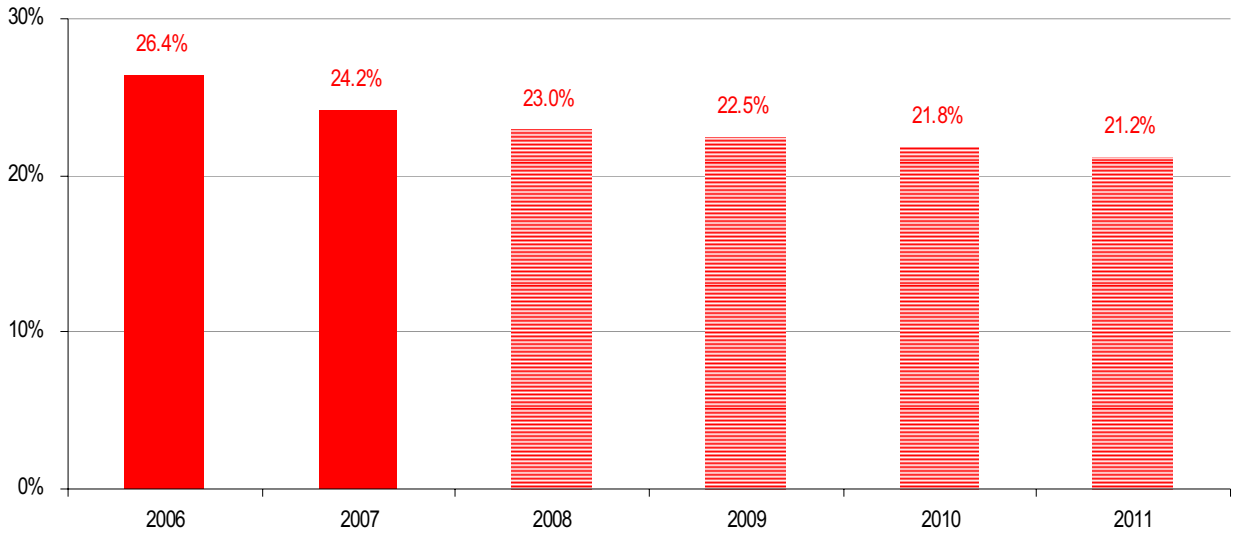
- the interest rate risk will be also reduced – duration of the domestic marketable debt will be in the range of 2.7-3.6 years, duration of the total debt in the range of 3.5-4.1 years,

Chart 29. Duration of the ST debt



- the exchange rate risk will be further reduced – share of the foreign debt in total debt will decrease from 23.5% in mid 2008 and will be in the range of 20%-25%,

Chart 30. Share of foreign debt in the ST debt



VII.3. Threats to the implementation of the Strategy

The main possible threats to the implementation of the Strategy are:

1) alternative to the assumed development of macroeconomic situation in Poland, in particularly the decrease in the GDP growth rate, larger than forecasted growth of prices and increase in interest rates, as well as volatility of the exchange rate;
2) development of situation in the world's economy, including:
   - possible slowdown of the GDP growth,
   - outflow of funds from emerging markets caused by changes in risk aversion in the global investors community,
   - prevailing harmful consequences of the sub-prime mortgages crisis in the USA for other segments of the financial market;
3) Risk that condition of public finances will deteriorate, this condition is influenced by:
   - the level of State budget borrowing requirements (main component of an increase in public debt), dependant on economic prosperity,
   - growth rate of debt of public finance sector entities other than the ST,
   - guarantees and sureties granted by public finance sector entities.

   Financing the infrastructure investments, co-financed from the EU funds, connected with preparations to the EURO2012 event will be particularly challenging for all three above mentioned areas.
4) Disturbance of the Poland's entry to the Eurozone and its impact on the exchange rate and interest rates.

VIII. IMPACT OF THE EURO ADOPTION ON STATE TREASURY DEBT MANAGEMENT

In this chapter[7] main factors of the impact of Poland's euro adoption on the ST debt management strategy are discussed. Four interrelated aspects of entering the Eurozone on public debt management were distinguished:

- changes in the macroeconomic environment,
- changes in the market environment,
- changes in debt management process, including those resulting from the changes in the macroeconomic and market environment, and
- legal and technical aspects of adopting the euro.

VIII.1. Changes in the macroeconomic environment

The main change will be the replacement of the domestic yield curve in Polish zloty by the euru yield curve. The yield curve of Polish TS depends primarily on:

- current and expected futire levels of market interest rates,
- Poland's creditworthiness,
- Liquidity of the TS market.

Joining the Eurozone will affect, to a various extent, all three aspects and the joint effect of the euro adoption will be a significant decrease in public debt servicing costs. In a hypothetical situation if Poland had already been a Eurozone member in mid 2008, the ST debt servicing costs would be lower by PLN 6.1 bn yearly, of which about PLN 1.0 bn would be the result of increased creditworthinessj[8].

1) Market interest rates

Market interest rates will depend on the policy of the European Central bank and on market expectations regarding future interest rates in the Eurozone, and not on current and expected future policy of the NBP, like they used to do. The direct effect will be the decrease of interest rates in Poland, resulting from their current disparity. Some of the convergence will take place before the euro adoption, as financial markets will already discount it, especially when the date is known. The government's declaration of Septmenber 2008 of the intention to adopt the euro resulted in the decrease of long-term interest rates by about 15-25 bp.

The scale of potential savings in debt servicing costs for a country joining the Eurozone depends to a large extend on market situation in the medium term. The market situation was more favourable for countries with lower creditworthiness in the early years of the Eurozone than in 2008.

2) Creditworthiness

Adopting the euro can also have benefitial effects on Poland's creditworthiness as an issuer, as it requires meeting criteria that prove economic stability of the economy, additionally the euro adoption itself can be perceived by some investors as increasing stability of the economy.

As a result of adopting the euro the conditions of debt issuance in foreign currencies would change. Currently decisions on the currency of financing the borrowing requirements take into account their impact on monetary policy and the zloty exchange rate. As by replacing the zloty by the euro Poland will become a part of a much larger currency zone, the impact of currency operations conducted as part of debt management on money supply will be insignificant. Adopting the euro, which constitutes over 70% of the foreign currency debt, will also

[7] In Charter VIII the results of a paper written by M. Szczerbak, J. Misiórski and G. Pochopień of the Ministry of Finance, titled "Impact of Poland's Adoption of the Euro on the State Treasury Debt Management Strategy" (Warsaw, 2008) were used, which is a part of the "Report on the Republic of Poland's full participation in the third stage of the Economic and Monetary Union" prepared by the National Bank of Poland.

[8] The above estimate stems from the assumption that with the mid 2008 debt level, yields of Polish TS in the domestic currency would be close to the yields of a Eurozone member with similar creditworthiness, i.e. Greece, while the financing cost in foreign currencies would fall approximately by 20 bp.

significantly reduce the stock of foreign currency debt and potential scale of issuance in foreign currencies.

VIII.2. Changes in the market environment

Adopting the euro will mean that the domestic financial market will become a segment of a much larger and more liquid euro market and the market for Polish TS will become a part of euro-denominated TS and broader, of euro-denominated debt instruments. An access to a developed and diversified derivatives market and currency market will enable much more flexibility in shaping the risk profile. At the end of 2007 the outstanding value of debt instruments in Poland was merely a 1.2% of equivalent Eurozone value, worth over EUR 12 tr, in case of central government debt the ratio stood at 2.9%.

1) Demand factors

The main demand factor will be a significant limitation of the demand barrier for the issuer of the ST debt, as the supply of TS, even with high borrowing requirements, will constitute a small portion of a potential demand. Probability of insufficient demand to given supply will be reduced and in crisis events the necessity to accept higher yields of TS will be the main negative consequence. Elimination of the exchange rate risk connected with adopting the common currency will enable instruments offered by the ST to be considered in portfolios of a broad group of new investors.

On the other hand the disappearance of the exchange rate risk resulting from adopting the euro will influence the situation and behaviour of domestic investors. The will gain access to a much broader than before pool of instruments they can invest in free of exchange rate risk, which will result in shifting of some of their demand for TS to instruments offered by other Eurozone countries.

The combined effect of both factors, i.e. broadening the investor base, and hence increase in potential demand, and loss of some of demand from local investors, for the demand for TS is ambiguous. The experiences of countires that entered the Eurozone indicate a gradual rise in the share of non-residents in debt, the bigger the smaller the issuer was, as well as a slight decrease of average demand on the primary market and at the same time a reduced risk defined as volatility of demand for TS.

2) Primary market

Competition of other Eurozone issuers can trigger changes in the organisation of the primary market. Experiences of other countries indicate that the way a primary market is organised depends heavily on the size of an issuer and hence on liquidity of TS issuance. The largest European issuers, that is Germany, Italy and France, use primarily auctions to issue their TS. Their actions are treated as benchmark for smaller issuers, who adjust their issuance to the biggest players by reducing the number of auctions and at the same time significantly increasing the supply at each auction and adjusting the issuance calendar. The element of key importance in the issuance policy in the euro market is achieving sufficient liquidity for TS issues since the very beginning of offering each series, hence the form of sindicated issue is common, especially as an alternative for a first auction of a new bond series.

Change of the market environment related to Poland's adoption of the euro will mean a mofidication of the role of PD. In the face of an expected increase of mobility of domestic investors, the importance of an access of PD to a broad investor base interested in Polisg TS will significantly increase. After the Eurozone was created the share of non-residents in domestic PD systems increased, including global financial institutions with PD status in several countires.

VIII.3. Changes in debt management process

The objective of the debt management strategy, which is minimisation of long term debt servicing costs subjest to risk constraints, is universal and will not change after joining the Eurozone. Changes in the environment will require adjusting the ways of implementing this objective.

1) Exchange rate risk management

As a result of adopting the euro the exchange rate risk will instantly fall. If the currency structure of the ST debt on entry to the Eurozone was the same as in mid 2008, the share of foreign currency debt would decrease from 23.5% to 6.1%. In the debt management strategy after joining the Eurozone the role of foreign currency issuance will need to be redefined. In particular the rationale for such issuance will need to be determined. The factors that need to be taken into account will be on one hand potentially lower costs of servicing debt denominated in currencies with low interest rates and an access to broader investor base, on the other hand exchange rate risk and comparative cost advantage in the domestic market. Almost all Eurozone countries reduced or wholly eliminated the exchange rate risk after adopting the common currency, some of them by swapping payments in foreign currencies into payments in the euro.

2) Debt management instruments

A change in market environment related to Poland's euro adoption, mainly gaining an access to a liquid euro market and significant limitation of the demand barrier for TS will mean greater flexibility in managing the debt structure by the use of instruments. In case of many Eurozone issuers the role of long term bonds and inflation-indexed bonds increased, and derivatives became a common tool of managing the risk profile. The experience of Eurozone countries indicate buy-backs of TS as a useful instrument of managing the refinancing risk, while bond switching are mainly used to replace less liquid instruments by liquid issues.

3) Institutional aspects

Many countries used preparations for ther euro adoption as an opportunity to change institutional arrangements of debt management and form a separate agency of debt management[9]. These changes aimed at adjusting the organization and competences of the insitututions to a specific role of debt amangement, that combines public finance and financial markets, at times of increasing globalization of financial markets and rising role of risk management. Debt management agencies were founded also in the EU countries not belonging to the Eurozone.

VIII.4. Legal and technical aspects

Adopting the common currency is expected to speed up the process of standardisation of market conventions and instruments, just as it was in countries that already entered the Eurozone. The main goal of standardisation is smoothing the functioning of the debt market and not burdening investors with the knowledge of sometimes very peculiar conventions functioning in individual markets.

One of the key challenges for Polish financial market, that goes beyond the TS market, related to Poland's entry into the Eurozone will be adjustment of the settlement and depository infrastructure of the domestic capital market.

Adopting the euro will involve converting debt and all related liabilities from the zloty into the euro.

A direct competition from other Eurozone issuers means that from the perspective of an expected rate of return of an investor the importance of rules and rates of taxation on income from TS grows. For the rate of return obtained by non-residents investing in the Polish market the important element is the content of billateral agreements on avoiding double taxation concluded by Poland.

Table 8 sums up the most important opportunities and threats for the ST debt management resulting from Poland's euro adoption. The conclusion can be drawn that the balance of pros and cons from public debt management perspective is decisively positive.

[9] Institutional model sof public debt management in the EU countries are described in Annex 2.

Table 8. Opportunities and thrests for ST debt management of adopting the euro

Opportunities	Threats
• Lower ST debt servicing costs o Market interest rates o Creditworthiness	
• Neutrality of foreign issuance for monetary policy	
• Radical limitation of the demand barrier o Security of the financing o Desired market risk profile	
• Diversification of demend for TS – increased demand of investors from other Eurozone countries	• Diversifiacation of supply of TS – decrease in demand of domestic investors • A need to adjust the issuance policy and selling techniques to large issuers
• Radical limitation of the exchange rate risk	
• Higher liquidity of TS • Easier refinancing of large issues	• Higher importance of a necessity to provide suffcient liquitidy of TS • Providing liquid issues can result in increased refinancing risk
• Increase of the inwestor base resulting from internationalisation of the PD system	• Decreased interest of global PDs in promoting the local market

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 prevoius Strategy the notation manner of duration formula has changed, which now precisely descibes 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 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.

Reference portfolio – see *benchmark (portfolio).*

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. 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 n 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 9 out of 15 Member States EURO zone).

Table 1. Institutions responsible for debt management the EU Member States

	Country	Model	Institution name
Euro zone	Austria	**agency**	Österreichische Bundesfinanzierungsagentur
	Belgium		Agence de la Dette (Agentschap van de Schuld)
	Finland		Valtiokonttori
	France		Agence France Trésor
	Germany		Finanzagentur GmbH
	Ireland		National Treasury Management Agency
	Malta		Debt Management Office
	Netherlands		Agentschap van het ministerie van Financiën
	Portugal		Instituto de Gestão do Crédito Público
	Cyprus	**bank**	Κεντρικη Τραπεζα Τησ Κυπρου
	Greece	**government**	Γενικο Λογιστηριο Τοψ Κρατοψσ
	Italy		Ministero dell'Ecomomia e delle Finanze
	Luxemburg		Ministère des Finances
	Slovenia		Ministrstvo za finance
	Spain		Ministerio de Ekonomia
Other EU countries	Hungary	**agency**	Magyar Állampapír
	Slovakia		Štátna pokladnica
	Sweden		Riksgäldskontoret
	Latvia		Valsts Kase
	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 3. General government deficit and debt and yields on 10-year bonds in the EU Member States

	2006			2007		
	General government balance %GDP	General government debt %GDP	10-year rate[1)]	General government balance %GDP	General government debt %GDP	10-year rate[1)]
Italy	-3.4	106.5	4.04	-1.9	104.0	4.54
Greece	-2.6	95.3	4.04	-2.8	94.5	4.53
Belgium	0.3	88.2	3.82	-0.2	84.9	4.41
Malta	-1.6	67.6	3.77	0.0	65.0	4.21
Hungary	-9.2	65.6	6.81	-5.5	66.0	6.93
Cyprus	-1.2	64.8	4.26	3.3	59.8	4.60
Portugal	-3.9	64.7	3.96	-2.6	63.6	4.47
Malta	-2.6	64.2	4.33	-1.8	62.6	4.81
France	-2.4	63.6	3.81	-2.7	64.2	4.35
Austria	-1.5	61.8	3.80	-0.5	59.1	4.34
Netherlands	0.5	47.9	3.81	0.4	45.4	4.34
Poland	**-3.7**	**47.7**	**5.14**	**-2.0**	**45.2**	**5.86**
Sweden	2.3	45.9	3.65	3.5	40.6	4.31
United Kingdom	-2.6	43.1	4.54	-2.9	43.8	4.70
Spain	1.8	39.7	3.82	2.2	36.2	4.35
Finland	4.1	39.2	3.82	5.3	35.4	4.34
Slovakia	-3.6	30.4	4.15	-2.2	29.4	4.61
Denmark	4.8	30.4	3.78	4.4	26.0	4.33
Czech Republic	-2.7	29.4	3.68	-1.6	28.7	4.67
Slovenia	-1.2	27.2	3.90	-0.1	24.1	4.55
Ireland	3.0	25.1	3.76	0.3	25.4	4.45
Bulgaria	3.0	22.7	4.18	3.4	18.2	5.08
Lithuania	-0.5	18.2	4.28	-1.2	17.3	4.94
Romania	-2.2	12.4	7.42	-2.5	13.0	6.93
Latvia	-0.2	10.7	4.90	0.0	9.7	5.10
Luxembourg	1.3	6.6	3.95	2.9	6.8	4.68
Estonia	3.4	4.2	4.70	2.8	3.4	6.81
UE 27	**-1.4**	**61.2**	**-**	**-0.9**	**58.7**	**-**
Euro zone	**-1.3**	**68.4**	**-**	**-0.6**	**66.3**	**-**

[1)] Harmonized long-term interest rates for convergence purposes, i.e. rates on the secondary market (with the exception of Cyprus in the years 2006-07 and Latvia in 2006 – primary market); for Luxembourg – index based on basket of long-term bonds issued by private credit institutions with an average actual maturity close to 10 years; for Estonia: an interest rate on loans for non-financial companies and households with maturity close to 10 years; Statistics Pocket Book, ECB.

[2)] Data for Poland – Ministry of Finance; other data – Eurostat Euro-indicators, News Release 54/2008 of April 18 2008.

Annex 4. Government debt rating of EU Member States

Table 2. Long-term government debt rating in foreign currency of EU Member States

as of August 15, 2008

	Moody's	Standard&Poor's	Fitch
Austria	Aaa	AAA	AAA
Belgium	Aa1	AA+	AA+
Bulgaria	Baa3	BBB+	BBB
Cyprus	Aa3	A+	AA-
Denmark	Aaa	AAA	AAA
Estonia	A1	A	A
Finland	Aaa	AAA	AAA
France	Aaa	AAA	AAA
Germany	Aaa	AAA	AAA
Greece	A1	A	A
Hungary	A2	BBB+	BBB+
Irland	Aaa	AAA	AAA
Italy	Aa2	A+	AA-
Latvia	A2	BBB+	BBB+
Lithuania	A2	A-	A
Luxembourg	Aaa	AAA	AAA
Malta	A1	A	A+
Poland	**A2**	**A-**	**A-**
Portugal	Aa2	AA-	AA
Romania	Baa3	BBB-	BBB
Slovakia	A1	A	A+
Slovenia	Aa2	AA	AA
Spain	Aaa	AAA	AAA
Sweden	Aaa	AAA	AAA
The Czech Republic	A1	A	A+
The Netherlands	Aaa	AAA	AAA
The United Kingdom	Aaa	AAA	AAA

Source: International Financing Review, September 1, 2008.

Annex 5. ATM and duration of public debt of EU Member States in 2007

	ATM			Duration		
	Total	Domestic	Foreign	Total	Domestic	Foreign
Austria	9.10	9.40	2.90	6.05	6.50	2.80
Belgium	6.61	6.63	0.98	4.66	*	0.13
Bulgaria**	*	7.35	*	*	*	*
Cyprus	*	*	*	*	*	*
Denmark	5.78	5.35	2.98	3.15	4.03	-2.08
Estonia	*	*	*	*	*	*
Finland	3.80	3.80	0.00	2.50	2.60	0.00
France	7.10	7.10	*	*	*	*
Germany	6.50	6.60	2.40	4.40	*	2.20
Greece	8.10	*	*	*	5.30	*
Hungary	4.60	4.01	6.07	*	2.82	*
Irland	6.67	*	*	5.56	*	*
Italy	6.85	6.63	10.18	*	4.45	*
Latvia***	*	*	*	3.38	*	*
Lithuania	*	*	*	*	*	*
Luxembourg	8.60	*	*	*	*	*
Malta	*	*	*	*	*	*
Poland**	**5.30**	**4.33**	**8.28**	**3.63**	**2.85**	**5.92**
Portugal	6.03	*	*	2.71	*	*
Romania	*	*	*	*	*	*
Slovakia	5.10	3.90	8.60	4.05	3.33	6.71
Slovenia	*	*	*	*	*	*
Spain	6.80	6.80	*	*	4.90	*
Sweden	4.70	5.50	0.13	*	*	*
The Chech Republic	6.40	*	*	3.80	*	*
The Netherlands	7.00	7.00	*	*	*	*
The United Kingdoom	*	14.52	0.50	*	9.00	0.50

*) Not available.

Source: OECD, www.oecd.int.

**) Ministry of Finance of The Republic of Bulgaria, www.minfin.government.bg.

***) The Treasury Republic of Latvia, www.kase.gov.lv.

****) Ministry of Finance, www.mf.gov.pl.

Annex 6. Legal regulations applied to public debt in Poland and the EU

Table 3. Public debt – basic legal regulations

Polish regulations	EU regulations
1. Constitution of the Republic of Poland ➢ ban on contracting loans and granting guarantees and sureties resulting in the public debt exceeding 3/5 of GDP (Article 216(5));	1. Treaty establishing European Community ➢ 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 104) – 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 ➢ 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 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 4. Limits on the public debt to GDP ratio in the current and a draft of a new Public Finance Act

Current Public Finance Act	Draft of a new Public Finance Act
I. Legal procedures regarding limits on public debt to GDP ratio	
1) the ratio in year *x* is greater than 47%, and not greater than 52%:	
-	a) the state budget deficit in adopted draft budget act by the Council of Ministers for the year x+2 must not be higher than for the year x+1;
2) 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; b) the state budget deficit to state budget revenue ratio adopted for the year x+2 is the upper limit on the deficit to revenue ratio in the budget act of each local government unit for the year x+2;	-

<table>
<tr><td colspan="2">3) the ratio in year x is greater than 52%, and not greater than 55%:</td></tr>
<tr><td>-</td><td>a) the state budget deficit in adopted draft budget act by the Council of Ministers for the year x+2 must ensure the decrease in State Treasury debt to GDP ratio in relation to the ratio announced for the year x;
b) expenditures on new investments of which the unit value exceeds PLN 500 million and an execution term exceeds 2 years are not allowed;</td></tr>
<tr><td colspan="2">4) the ratio in year x is greater than 55%, and lower than 60%:</td></tr>
<tr><td>a) the level of state deficit in adopted draft budget act by the Council of Ministers for the year x+2 must ensure a decrease in the ratio of the State Treasury debt to GDP in relation to the ratio announced for the year;
b) the upper limit on the deficit to revenue ratio of each local government unit for the year x+2 is calculated by multiplying the state budget deficit to revenue ratio adopted for the year x+2 by coefficient “R”, calculated as;
R = (0,6 - PD/GDP) : 0,05
where: GDP - gross domestic product, PD - public debt are amounts announced for the previous budget year (year x);</td><td>a) procedures in case of the ratio in year x is greater than 52%, and not greater than 55% are in force;
b) in adopted draft budget act by the Council of Ministers for the year x+2:
➢ increase in salaries of public sector employess is not expected,
➢ expenditures on new investments are not allowed,
➢ revaluation of pensions must not exceed the CPI in the budgetary year x+1,
➢ ban of granting new loans and credits from the State budżet is introduced,
➢ increase in expenditures of the Sejm Chamber (lower house of Polish Parliament), the Senate Chamber (upper mouse of Polish Parliament), Presidential Chamber of the Republic of Poland, Constitutional Tribunal (TK), Supreme Chamber of Control (NIK), Supreme Court (SN), Primary Administration Court (NSA) must not be higher than expenditures in the government administration;
c) announced ratio of non-matured payables arised from sureties and guaranties granted by State Tresury to GDP for the year x constitues upper limit for budgetary year x+2;
d) the Council of Ministers make a review of:
➢ State budget expenditures financed by foreign credits,
➢ long- term projects;</td></tr>
<tr><td colspan="2">e) the Council of Ministers presents a remedial program ensuring a fall In the ratio of public debt to GDP;</td></tr>
</table>

5) the ratio in year x is equal to or greater than 60%:	a) procedures in case of the ratio in year *x* is greater than 55%, and lower than 60% are in force;
b) both the state budget and budgets of local government units for the year x+2 must at least be balanced;	
c) a ban on granting new sureties and guarantees by public finance sector entities is introduced;	
d) 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;	
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: ➢ installments 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 given budgetary year 15%, in case when public debt to GDP ratio exceed 55%, it cannot exceed 12%;	➢ 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%;	e) Assumed and executed current expenditures must not be higher than assumed and executed current revenues including free funds and budgetary surpluses from pevious years;
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.	f) Executed current expenditures can be higher than executed current revenues including free funds and budgetary surpluses from pevious years only by amounts, which are connected with the execution of current tasks financed by UE funds and non-returnable financial means from admitted help by EFTA member countries, in case of not receiving them in the given year.

Table 5. Main differences in general government debt – Polish (current act and new project on act) and EU definition

Current Polish regulations	New 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) executive agencies -	➢ newly formed entities, are included in the public finance sector;	➢ are included in the general government sector;
b) funds formed within Bank Gospodarstwa Krajowego (BGK) ➢ are excluded from the public finance sector;		➢ State Road Fund (KFD) is included in the general government sector;
c) research and development units and science institutes ➢ are included in the public finance sector;	➢ are excluded from the public finance sector, with the exception of science institutes of Polish Academy of Science (PAN);	➢ are excluded from the general government units;
d) Open Pensions Funds (OFE) ➢ are excluded from the public finance sector;		➢ till March 2007 a transition period was applied during which Poland could include OFE in the general government sector [3];
e) local government earmarketd funds, local movie institutes, state and local budgetary entities, auxiliary entities ➢ are included in the public finance sector;	➢ are closed with the exception of the part of local budgetary entities;	➢ are included in the general government sector;
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; ➢ cash and deposits;
differences in liabilities depending on regulations		
➢ matured payables;		- [4]
3) contingent liabilities		
differences in treatment of contingent liabilities in debt-to-GDP ratio		
➢ is not included; since January 2006 in line with the Act of 30 June 2005 on Public Finance 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;

Current Polish regulations	New Polish regulations	EU regulations
public debt		**general government debt**
		➢ 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) Eurostat decision on classification of funded pension schemes in case of government responsibility or guarantee (Eurostat News Releases No 30/2004from 2 March 2004 and No 117/2004 from 23 September 2004).
4) 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 7. Public Debt in Poland – statistical annex

Table 6. Public debt in the period 2001-VI 2008

	2001	2002	2003	2004	2005	2006	2007	VI 2008
1. State Tresury debt								
a) PLN bn	283.9	327.9	378.9	402.9	440.2	478.5	501.5	507.3
domestic *	185.0	219.3	251.2	291.7	315.5	352.3	380.4	388.2
foreign *	98.9	108.6	127.8	111.2	124.7	126.2	121.1	119.1
b) GDP %	36.4%	40.6%	44.9%	43.6%	44.8%	45.1%	42.9%	-
2. Public debt								
a) PLN bn	302.1	352.4	408.3	431.4	466.6	506.3	527.4	529.0
b) GDP %	38.8%	43.6%	48.4%	46.7%	47.5%	47.8%	45.2%	-
3. General government debt (EU methodology)								
a) PLN bn	293.0	342.1	397.9	422.3	462.7	505.1	527.6	530.2
b) GDP %	37.6%	42.3%	47.2%	45.7%	47.1%	47.6%	45.2%	-

**) place of issue criterion.*

Table 7. GDP and exchange rates in the period 2001-VI 2008

	2001	2002	2003	2004	2005	2006	2007	VI 2008
1. Gross Domestic Produkt								
PLN bn	779.6	808.6	843.2	924.5	983.3	1 060.2	1 167.8	-
2. Exchange rate								
a) EUR	3.5219	4.0202	4.7170	4.0790	3.8598	3.8312	3.5820	3.3542
b) USD	3.9863	3.8388	3.7405	2.9904	3.2613	2.9105	2.4350	2.1194

Table 8. Number of indebted local government units with respect to the debt to proceeds ratio in the years 2006-07

	Group of units	Total number of units	Number of indebted units					
			Debt to proceeds ratio					
			ogółem	i<10%	10%<i<30%	30%<i<50%	50%<i<60%	i>60%
December 2006	Municipalities	2 413	2 316	688	1 256	339	23	10
	Cities with the county status	65	65	6	36	21	2	0
	Counties	314	306	95	156	49	4	2
	Provincies	16	16	2	9	5	0	0
	Total	**2 808**	**2 703**	**791**	**1 457**	**414**	**29**	**12**
December 2007	Municipalities	2 413	2 285	749	1 206	299	26	5
	Cities with the county status	65	65	6	37	20	2	0
	Counties	314	304	99	153	47	5	0
	Provincies	16	16	2	10	3	1	0
	Ogółem	**2 808**	**2 670**	**856**	**1 406**	**369**	**34**	**5**

Table 9. Debt of public finance sector before consolidation *

Debt of public finance sector		2006		2007				2008			
		December	Structure	Change Dec 2006 - Dec 2007		December	Structure	Change Dec 2007 - Dec 2008		December	Structure
		PLN mln	%	PLN mln	PLN mln	%	PLN mln	PLN mln	%	PLN mln	PLN mln
BEFORE CONSOLIDATION		**518 244.8**	**100.0%**	**19 187.5**	**3.7%**	**537 432.2**	**100.0%**	**2 554.7**	**0.5%**	**539 986.9**	**100.0%**
1.	Debt of central government sub-sector	482 251.4	93.1%	21 348.2	4.4%	503 599.6	93.7%	6 079.2	1.2%	509 678.8	94.4%
1.1.	State Tresury	478 526.4	92.3%	23 004.6	4.8%	501 531.0	93.3%	5 757.6	1.1%	507 288.6	93.9%
1.2.	National Heath Fund	80.2	0.0%	-80.2	-100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1.3.	State earmarked funds with legal personality	0.0	0.0%	0.7	100.0%	0.7	0.0%	-0.7	-100.0%	0.0	0.0%
1.4.	State higher schools	319.1	0.1%	-39.7	-12.4%	279.4	0.1%	-33.0	-11.8%	246.4	0.0%
1.5.	Research and development units	295.5	0.1%	18.9	6.4%	314.4	0.1%	19.8	6.3%	334.1	0.1%
1.6.	Independent public health care units	1 151.0	0.2%	-102.4	-8.9%	1 048.6	0.2%	48.1	4.6%	1 096.7	0.2%
1.7.	State culture units	38.8	0.0%	21.6	55.6%	60.4	0.0%	-12.9	-21.3%	47.5	0.0%
1.8.	Polish Academy of Science (PAN) and units established by it	17.5	0.0%	-8.6	-49.2%	8.9	0.0%	10.8	121.6%	19.7	0.0%
1.9.	Other State legal entities established under separate acts for public tasks execution. with the exception of enterprises. banks and companies organized under commercial law	1 823.0	0.4%	-1 466.6	-80.5%	356.4	0.1%	289.5	81.2%	645.8	0.1%
2.	Debt of local government sub-sector	30 933.1	6.0%	154.6	0.5%	31 087.8	5.8%	-2 157.3	-6.9%	28 930.4	5.4%
2.1.	Local government units and their associations	25 051.8	4.8%	936.7	3.7%	25 988.6	4.8%	-2 223.6	-8.6%	23 765.0	4.4%
2.2.	Local earmarked funds with legal personality	161.4	0.0%	-14.2	-8.8%	147.2	0.0%	-26.8	-18.2%	120.4	0.0%
2.3.	Independent public health care units	5 635.2	1.1%	-763.4	-13.5%	4 871.8	0.9%	102.9	2.1%	4 974.8	0.9%
2.4.	Local cultural units	74.4	0.0%	-11.0	-14.9%	63.3	0.0%	-13.1	-20.7%	50.2	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	10.3	0.0%	6.6	64.0%	16.8	0.0%	3.3	19.6%	20.1	0.0%
3.	Debt of social security sub-sector	5 060.3	1.0%	-2 315.4	-45.8%	2 744.9	0.5%	-1 367.2	-49.8%	1 377.6	0.3%
3.1.	Social Insurance Institution (ZUS)	0.0	0.0%	0.0	-45.5%	0.0	0.0%	0.0	33.3%	0.0	0.0%
3.2.	Funds managed by Social Insurance Institution	5 060.3	1.0%	-2 315.4	-45.8%	2 744.9	0.5%	-1 367.2	-49.8%	1 377.6	0.3%
3.3.	Farmer's Social Insurance Institution (KRUS) and funds manager by it	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

**) preliminary data on September 18, 2008*

Table 10. Debt of public finance sector after consolidation *

Debt of public finance sector		2006		2007				2008			
		December	Structure	Change Dec 2005 - Dec 2006		December	Structure	Change Dec 2007 - Jun 2008		June	Structure
		PLN mln	%	PLN mln	%	PLN mln	%	PLN mln	%	PLN mln	%
AFTER CONSOLIDATION		**506 263.5**	**100.0%**	**21 178.3**	**4.2%**	**527 441.8**	**100.0%**	**1 602.7**	**0.3%**	**529 044.5**	**100.0%**
1.	Debt of central government sub-sector	477 920.3	94.4%	22 293.5	4.7%	500 213.8	94.8%	4 449.8	0.9%	504 663.6	95.4%
1.1.	State Tresury	476 552.4	94.1%	22 410.2	4.7%	498 962.5	94.6%	4 412.3	0.9%	503 374.8	95.1%
1.2.	National Heath Fund	0.0	0.0%	0.0	-100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1.3.	State earmarked funds with legal personality	0.0	0.0%	0.4	100.0%	0.4	0.0%	-0.4	-100.0%	0.0	0.0%
1.4.	State higher schools	247.6	0.0%	-0.7	-0.3%	246.9	0.0%	-22.8	-9.2%	224.1	0.0%
1.5.	Research and development units	186.4	0.0%	17.2	9.2%	203.7	0.0%	20.7	10.1%	224.3	0.0%
1.6.	Independent public health care units	705.4	0.1%	28.7	4.1%	734.1	0.1%	45.2	6.2%	779.2	0.1%
1.7.	State culture units	38.2	0.0%	14.8	38.8%	52.9	0.0%	-13.0	-24.5%	40.0	0.0%
1.8.	Polish Academy of Science (PAN) and units established by it	9.0	0.0%	-4.2	-46.7%	4.8	0.0%	6.7	139.9%	11.5	0.0%
1.9.	Other State legal entities established under separate acts for public tasks execution. with the exception of enterprises. banks and companies organized under commercial law	181.3	0.0%	-172.8	-95.3%	8.5	0.0%	1.1	12.7%	9.5	0.0%
2.	Debt of local government sub-sector	23 283.0	4.6%	1 200.1	5.2%	24 483.1	4.6%	-1 479.8	-6.0%	23 003.3	4.3%
2.1.	Local government units and their associations	19 990.8	3.9%	1 212.5	6.1%	21 203.3	4.0%	-1 562.2	-7.4%	19 641.1	3.7%
2.2.	Local earmarked funds with legal personality	0.0	0.0%	14.4	100%	14.4	0.0%	-14.4	-100.0%	0.0	0.0%
2.3.	Independent public health care units	3 226.9	0.6%	-24.0	-0.7%	3 202.8	0.6%	105.8	3.3%	3 308.6	0.6%
2.4.	Local cultural units	56.5	0.0%	-8.3	-14.7%	48.2	0.0%	-13.1	-27.1%	35.1	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	8.8	0.0%	5.6	63.2%	14.4	0.0%	4.1	28.2%	18.4	0.0%
3.	Debt of social security sub-sector	5 060.3	1.0%	-2 315.4	-45.8%	2 744.9	0.5%	-1 367.2	-49.8%	1 377.6	0.3%
3.1.	Social Insurance Institution (ZUS)	0.0	0.0%	0.0	-45.5%	0.0	0.0%	0.0	33.3%	0.0	0.0%
3.2.	Funds managed by Social Insurance Institution	5 060.3	1.0%	-2 315.4	-45.8%	2 744.9	0.5%	-1 367.2	-49.8%	1 377.6	0.3%
3.3.	Farmer's Social Insurance Institution (KRSU) and funds managed by it	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

**) preliminary data on September 18, 2008*

STATE TREASURY DEBT according to the place of issue criterion, by instrument (PLN mln, at nominal value)

	Dec 2006	Dec 2007	Jun 2008	structure Jun 2008 %	change Dec 2006 - Dec 2007 PLN mln	change Dec 2006 - Dec 2007 %	change Jun 2008 - Dec 2007 PLN mln	change Jun 2008 - Dec 2007 %
State Treasury debt	478,526.4	501,531.0	507,288.6	100.0%	23,004.6	4.8%	5,757.6	1.1%
I. Domestic debt	352,328.0	380,409.2	388,220.6	76.5%	28,081.2	8.0%	7,811.4	2.1%
1. Treasury Securities 1)	350,533.7	380,169.0	388,001.2	76.5%	29,635.3	8.5%	7,832.2	2.1%
1.1. Marketable Treasury Securities	342,845.7	373,454.6	380,955.7	75.1%	30,608.9	8.9%	7,501.1	2.0%
Treasury bills	25,800.0	22,586.2	30,202.8	6.0%	-3,213.8	-12.5%	7,616.6	33.7%
Marketable bonds	317,045.7	350,868.4	350,752.9	69.1%	33,822.7	10.7%	-115.5	0.0%
marketable fixed rate bonds	271,773.0	289,325.8	285,520.6	56.3%	17,552.8	6.5%	-3,805.2	-1.3%
2-year zero-coupon bonds	52,461.4	38,289.3	34,366.7	6.8%	-14,172.1	-27.0%	-3,922.6	-10.2%
5-year fixed rate bonds	88,146.0	105,338.3	95,927.0	18.9%	17,192.3	19.5%	-9,411.3	-8.9%
5-year fixed rate bonds issued in retail network	2,736.0	1,404.9	1,220.2	0.2%	-1,331.1	-48.7%	-184.7	-13.1%
10-year fixed rate bonds	112,412.1	122,351.0	128,363.2	25.3%	9,938.9	8.8%	6,012.2	4.9%
20-year fixed rate bonds	13,449.2	18,374.0	21,688.0	4.3%	4,924.9	36.6%	3,313.9	18.0%
30-year fixed rate bonds	0.0	1,000.0	1,387.2	0.3%	1,000.0	-	387.2	38.7%
10-year fixed rate bonds (converted) 2)	2,568.3	2,568.3	2,568.3	0.5%	0.0	0.0%	0.0	0.0%
marketable floating rate bonds	38,796.2	53,347.2	54,349.4	10.7%	14,551.0	37.5%	1,002.1	1.9%
3-year floating rate bonds issued in retail network	2,825.9	2,349.2	1,152.3	0.2%	-476.7	-16.9%	-1,196.9	-50.9%
3-year floating rate bonds	4,558.6	0.0	0.0	-	-4,558.6	-100.0%	0.0	-
7-year floating rate bonds	19,670.4	19,670.4	19,670.4	3.9%	0.0	0.0%	0.0	0.0%
10-year floating rate bonds (WZ)	0.0	18,453.8	20,426.5	4.0%	18,453.8	-	1,972.8	10.7%
10-year floating rate bonds (DZ)	10,991.3	12,123.9	12,350.2	2.4%	1,132.6	10.3%	226.3	1.9%
private placement FRN	750.0	750.0	750.0	0.1%	0.0	0.0%	0.0	0.0%
marketable index-linked bonds	6,476.5	8,195.3	10,883.0	2.1%	1,718.9	26.5%	2,687.6	32.8%
12-year inflation linked	6,476.5	8,195.3	10,883.0	2.1%	1,718.9	26.5%	2,687.6	32.8%
1.2. Savings bonds	7,205.1	6,318.5	6,693.9	1.3%	-886.5	-12.3%	375.4	5.9%
2-year savings bonds	6,432.4	5,234.0	5,113.1	1.0%	-1,198.4	-18.6%	-120.9	-2.3%
4-year savings bonds	568.1	552.3	788.2	0.2%	-15.8	-2.8%	235.9	42.7%
10-year savings bonds	204.6	532.2	792.7	0.2%	327.6	160.1%	260.4	48.9%
1.3. Nonmarketable bonds	482.9	395.9	351.5	0.1%	-87.0	-18.0%	-44.3	-11.2%
Restructuring bonds	0.0	0.0	0.0	0.0%	-	-	-	-
Bonds issued for Bank BGŻ S.A.	482.9	395.9	351.5	0.1%	-87.0	-18.0%	-44.3	-11.2%
2. Other domestic ST debt 3)	1,794.3	240.2	219.4	0.0%	-1,554.1	-86.6%	-20.8	-8.7%
II. Foreign debt	126,198.4	121,121.8	119,068.0	23.5%	-5,076.6	-4.0%	-2,053.8	-1.7%
1. Treasury bonds	90,639.0	92,253.9	93,635.8	18.5%	1,614.9	1.8%	1,381.9	1.5%
Brady Bonds	1,761.1	1,319.0	882.0	0.2%	-442.1	-25.1%	-437.0	-33.1%
International Bonds	88,877.9	90,934.9	92,753.7	18.3%	2,057.0	2.3%	1,818.8	2.0%
2. Foreign Loans	35,559.4	28,867.9	25,432.2	5.0%	-6,691.5	-18.8%	-3,435.7	-11.9%
Paris Club creditors	17,941.3	10,526.1	6,830.6	1.3%	-7,415.1	-41.3%	-3,695.5	-35.1%
International Financial Institutions, of which	17,377.8	18,153.4	18,438.5	3.6%	775.6	4.5%	285.1	1.6%
the World Bank	11,365.3	13,042.5	13,826.3	2.7%	1,677.2	14.8%	783.8	6.0%
Other creditors	240.4	188.4	163.1	0.0%	-52.0	-21.6%	-25.3	-13.4%

1) Resulting from conversion of nonmarketable liabilities of Polish State Budget to NBP into marketable bonds, converted in September 1999 and December 1999.

2) bonds issued (2140 USD mln) for premature redemption of Polish debt towards Brazil

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, credit taken by the Labour Fund.

STATE TREASURY DEBT according to the place of issue criterion by holder (PLN mln, at nominal value)

	Dec 2006	Dec 2007	Jun 2008	structure Jun 2008 %	change Dec 2006 - Dec 2007 PLN mln	change Dec 2006 - Dec 2007 %	change Jun 2008 - Dec 2007 PLN mln	change Jun 2008 - Dec 2007 %
Domestic State Treasury debt	352,328.0	380,409.2	388,220.6	100.0%	28,081.2	8.0%	7,811.4	2.1%
DOMESTIC BANKING SECTOR	80,629.5	87,862.1	102,902.7	26.5%	7,232.6	9.0%	15,040.6	17.1%
Treasury Securities	79,029.5	87,862.1	102,902.7	26.5%	8,832.6	11.2%	15,040.6	17.1%
Marketable Treasury Securities	78,546.6	87,466.2	102,551.1	26.4%	8,919.7	11.4%	15,084.9	17.2%
Treasury bills	10,804.9	11,468.2	16,022.1	4.1%	663.3	6.1%	4,553.9	39.7%
2-year zerocoupon bonds	12,586.4	9,088.3	9,975.8	2.6%	-3,498.1	-27.8%	887.5	9.8%
3-year retail FRN	523.6	512.0	8.2	0.0%	-11.7	-2.2%	-503.7	-98.4%
3-year FRN	2,951.1	0.0	0.0	-	-2,951.1	-100.0%	0.0	-
5-year fixed-income bonds	22,063.8	23,498.9	27,270.7	7.0%	1,435.0	6.5%	3,771.8	16.1%
5-year fixed-income retails bonds	105.2	4.1	0.1	0.0%	-101.1	-96.1%	-4.0	-98.5%
7-year FRN	8,445.0	9,911.4	10,617.6	2.7%	1,466.3	17.4%	706.2	7.1%
10-year FRN (WZ)	0.0	4,977.8	7,377.6	1.9%	4,977.8	-	2,399.8	48.2%
10-year FRN (DZ)	2,909.2	3,219.2	3,271.6	0.8%	309.9	10.7%	52.4	1.6%
10-year fixed-income bonds	17,615.9	22,255.0	25,672.3	6.6%	4,639.1	26.3%	3,417.2	15.4%
10-year fixed-income bonds - conversion	150.2	189.0	199.0	0.1%	38.8	25.8%	10.0	5.3%
private placement FRN	15.0	15.0	15.0	0.0%	0.0	0.0%	0.0	0.0%
12-year index-linked	2.1	633.7	401.6	0.1%	631.7	30553.6%	-232.1	-36.6%
20-year fixed-income bonds	374.0	1,633.7	1,625.1	0.4%	1,259.7	336.8%	-8.6	-0.5%
30-year fixed-income bonds	0.0	60.0	94.6	0.0%	60.0	-	34.6	57.6%
Non-marketable T-bonds	482.9	395.9	351.5	0.1%	-87.0	-18.0%	-44.3	-11.2%
Bonds issued for Bank BGŻ S.A.	482.9	395.9	351.5	0.1%	-87.0	-18.0%	-44.3	-11.2%
Other domestic ST debt	1,600.0	0.0	0.0	0.0%	-1,600.0	-100.0%	0.0	-
matured payables	0.0	0.0	0.0	0.0%	0.0	-100.0%	0.0	-
Employment Fund debt	1,600.0	0.0	0.0	0.0%	-1,600.0	-100.0%	0.0	-
DOMESTIC NON-BANKING SECTOR	197,321.0	218,063.5	220,623.3	56.8%	20,742.5	10.5%	2,559.9	1.2%
Treasury Securities	197,126.7	217,823.2	220,403.9	56.8%	20,696.5	10.5%	2,580.6	1.2%
Marketable Treasury Securities	189,928.8	211,510.2	213,714.6	55.0%	21,581.4	11.4%	2,204.4	1.0%
Treasury bills	14,988.7	11,101.8	12,822.0	3.3%	-3,886.9	-25.9%	1,720.3	15.5%
2-year zerocoupon bonds	35,740.3	27,337.5	21,932.2	5.6%	-8,402.8	-23.5%	-5,405.4	-19.8%
3-year retail FRN	2,298.7	1,832.1	1,142.6	0.3%	-466.6	-20.3%	-689.5	-37.6%
3-year FRN	1,605.4	0.0	0.0	-	-1,605.4	-1.0	0.0	-
5-year fixed-income bonds	44,313.5	59,448.1	53,005.5	13.7%	15,134.6	34.2%	-6,442.6	-10.8%
5-year fixed-income retails bonds	2,625.6	1,396.2	1,215.7	0.3%	-1,229.4	-46.8%	-180.5	-12.9%
7-year FRN	11,223.1	8,921.3	8,316.0	2.1%	-2,301.8	-20.5%	-605.3	-6.8%
10-year FRN (WZ)	0.0	13,436.8	13,034.4	3.4%	13,436.8	-	-402.3	-3.0%
10-year FRN (DZ)	7,871.2	8,693.8	8,867.6	2.3%	822.5	10.4%	173.8	2.0%
10-year fixed-income bonds	57,805.5	63,366.8	70,759.8	18.2%	5,561.3	9.6%	7,393.0	11.7%
10-year fixed-income bonds - conversion	2,418.0	2,379.3	2,369.3	0.6%	-38.8	-1.6%	-10.0	-0.4%
private placement FRN	735.0	735.0	735.0	0.2%	0.0	0.0%	0.0	0.0%
12-year index-linked	1,274.2	3,825.8	5,737.2	1.5%	2,551.6	200.3%	1,911.4	50.0%
20-year fixed-income bonds	7,029.5	8,475.9	12,814.2	3.3%	1,446.3	20.6%	4,338.3	51.2%
30-year fixed-income bonds	0.0	560.0	963.2	0.2%	560.0	-	403.2	72.0%
Savings bonds	7,197.9	6,313.0	6,689.3	1.7%	-884.9	-12.3%	376.3	6.0%
2-year savings bonds	6,426.2	5,229.5	5,108.8	1.3%	-1,196.7	-18.6%	-120.7	-2.3%
4-year savings bonds	567.3	551.6	788.1	0.2%	-15.7	-2.8%	236.5	42.9%
10-year savings bonds	204.5	532.0	792.4	0.2%	327.5	160.2%	260.4	49.0%
Other domestic ST debt	194.3	240.2	219.4	0.1%	45.9	23.6%	-20.8	-8.7%
automobile prepayments	3.1	3.1	3.2	0.0%	0.0	-0.1%	0.0	0.5%
matured payables	36.7	129.5	133.0	0.0%	92.8	252.6%	3.5	2.7%
liabilities arising from not increasing wages in the budgetary sector	154.4	107.6	83.3	0.0%	-46.8	-30.3%	-24.3	-22.6%
TS's HELD BY FOREIGN INVESTORS	74,377.5	74,483.7	64,694.6	16.7%	106.1	0.1%	-9,789.0	-13.1%
Treasury Securities	74,377.5	74,483.7	64,694.6	16.7%	106.1	0.1%	-9,789.0	-13.1%
Marketable Treasury Securities	74,370.3	74,478.1	64,690.0	16.7%	107.8	0.1%	-9,788.1	-13.1%
Treasury bills	6.5	16.3	1,358.7	0.3%	9.8	151.7%	1,342.4	8230.7%
2-year zerocoupon bonds	4,134.7	1,863.4	2,458.7	0.6%	-2,271.2	-54.9%	595.3	31.9%
3-year retail FRN	3.6	5.2	1.5	0.0%	1.6	43.5%	-3.7	-71.6%
3-year FRN	2.2	0.0	0.0	-	-2.2	-1.0	0.0	-
5-year fixed-income bonds	21,768.7	22,391.3	15,650.8	4.0%	622.7	2.9%	-6,740.5	-30.1%
5-year fixed-income retails bonds	5.2	4.6	4.5	0.0%	-0.6	-11.6%	-0.1	-3.0%
7-year FRN	2.2	837.7	736.8	0.2%	835.5	38256.0%	-100.9	-12.0%
10-year FRN (WZ)	0.0	39.2	14.5	0.0%	39.2	-	-24.6	-62.9%
10-year FRN (DZ)	210.9	211.0	211.0	0.1%	0.1	0.0%	0.0	0.0%
10-year fixed-income bonds	36,990.6	36,729.1	31,931.1	8.2%	-261.5	-0.7%	-4,798.0	-13.1%
private placement FRN	0.0	0.0	0.0	0.0%	0.0	-	0.0	-
12-year index-linked	5,200.2	3,735.9	4,744.2	1.2%	-1,464.4	-28.2%	1,008.3	27.0%
20-year fixed-income bonds	6,045.7	8,264.5	7,248.7	1.9%	2,218.8	36.7%	-1,015.7	-12.3%
30-year fixed-income bonds	0.0	380.0	329.5	0.1%	380.0	-	-50.6	-13.3%
Savings bonds	7.2	5.5	4.6	0.0%	-1.7	-23.1%	-0.9	-15.7%
2-year savings bonds	6.2	4.5	4.3	0.0%	-1.7	-27.3%	-0.2	-5.0%
4-year savings bonds	0.8	0.7	0.1	0.0%	-0.1	-8.1%	-0.6	-88.1%
10-year savings bonds	0.1	0.3	0.3	0.0%	0.1	86.5%	0.0	0.0%

1) data covers flows between sectors, bonds by original maturity.