The Public Finance Sector DEBT MANAGEMENT STRATEGY in the years 2007-2009

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I. INTRODUCTION

The Public Finance Sector Debt Management Strategy in the years 2007-2009 covers the strategy of managing the State Treasury debt and the strategy of influencing public debt. In accordance with the Public Finance Act, the Minister of Finance supervises the level of public debt. In the case of the State Treasury debt, the Minister of Finance has at his/her disposal instruments that allow him/her to directly manage this debt, while in the case of other entities of the public finance sector, being autonomous in contracting liabilities, such supervision is of an indirect nature.

Public debt management is conducted at two levels:

- In broader sense, it covers decisions on State expenditure to be financed by means of contracting liabilities, that is, how high the volume of public debt will be. The subject of this analysis is the impact of public debt on economy, financial markets, public finance and monetary policy. The key issue is to determine a safe level of debt in relation to the size of economy (measured by debt-to-GDP ratio). The level considered to be safe means such debt volume that allows to service it on a timely basis and does not substantially affect the economy.
- In narrower sense, public debt management is understood as the manner of financing State borrowing needs, that is, selecting markets and instruments and constructing the issuance schedule.

Public debt management, particularly in the broader meaning, has significant consequences for economy and public finance. The Public Finance Act in force limits the freedom of action in respect of the construction of State budget after the debt-to-GDP ratio exceeds the safety thresholds of 50%, 55% and 60%. The said limits concern in particular the level of deficit. Severity of sanctions increases after exceeding the threshold of 55%. Taking into account the fact that the negative consequences connected with the sanctions do not concern the year following the one when the ratio exceeds the level provided for in the Act, but the next year, it might mean that the budget will have to be adopted even with a surplus.

In 2005 the public debt reached PLN 467.7 billion (47.7% of GDP) against PLN 468.1 billion (50.6% of GDP) forecasted in the previous strategy.

In the forecast perspective of this Strategy a gradual curbing of the public debt increase is expected. According to the adopted assumptions, the public debt level shall amount to PLN 510.2 billion (49.2% of GDP) in 2006 and in 2009 it shall reach PLN 645.0 billion (51.0% of GDP). In 2005 the State Treasury debt servicing costs reached PLN 25.0 billion (2.5% of GDP) while in 2006 the figure shall amount to PLN 27.9 billion (2.7% of GDP) and in 2009, to PLN 33.7 billion (2.7% of GDP).

Pursuant to the provisions of the Public Finance Act the forecasted exceeding of the 50% debt-to-GDP ratio threshold in 2007 will result in the need to adopt the State Budget Act for 2009 in which the State budget deficit to revenue ratio cannot be higher than a similar relation in 2008. Application of so called "budget anchor" in the form of a permanent deficit at PLN 30 billion adopted by the government should result in the next few years in a natural tendency to decrease the deficit to revenue ratio.

This Strategy is to a large extent a continuation of the strategy developed in 2005. The objective of the debt servicing costs minimisation over a longer time horizon with accepted constrains regarding the level of risk exposure as well as the most important tasks of the Strategy connected with the development of the primary and secondary market of Treasury Securities (TS) have been retained.

In implementation of the Strategy's objective in the period 2007-2009 it was assumed that:

• The domestic market shall remain the main source of financing the State budget borrowing needs.

- Foreign financing shall be applied in a flexible manner, to the extent that would contribute to minimisation of the debt servicing costs, with restrictions resulting from the exchange rate risk. Euro market shall be of a strategic importance.
- Creation of large and liquid fixed rate issues both on domestic and euro market shall be a priority of the issuance policy.
- The average maturity of domestic debt will continue to be increased, while its duration shall, in the time horizon of this Strategy, attain the level which is acceptable from the interest rate risk perspective. Thus it shall be possible to separate the management of refinancing risk and interest rate risk of domestic debt.
- In the case of foreign debt, refinancing risk as well as interest rate risk poses no limitation on the servicing costs minimisation.

II. IMPLEMENTATION OF THE STRATEGY IN 2005 AND IN THE FIRST HALF OF 2006

II.1. Volume of public debt¹

Changes in the volume of public debt in the period discussed resulted first of all from the changes in the State Treasury debt.

The change in the State Treasury debt resulted from the necessity to finance budget deficit (PLN 28.6 billion in 2005 and PLN 17.7 billion in the first half of 2006) and the remaining net borrowing needs (PLN 13.0 billion and PLN 12.7 billion respectively) with relatively low proceeds from privatisation (PLN 3.8 billion and PLN 0.3 billion respectively). In 2005 net State borrowing needs were lower by PLN 10.6 billion than assumed in the State Budget Act mainly due to lower budget deficit (by PLN 6.4 billion) and lower negative balance of prefinancing of tasks assumed to be financed from the EU funds (by PLN 2.7 billion). Table 1 presents the basic data on public debt volume in absolute terms and the debt-to-GDP ratio.

Specification		Dec 20	04	Dec 200	Dec 2006*	
		PLN million	% GDP	PLN million	% GDP	PLN million
State Treasury debt		402 860.3	43.6%	440 167.4	44.9%	476 991.8
By place of issue	- domestic	291 658.5	31.6%	315 478.6	32.2%	338 614.4
	- foreign	111 201.7	12.0%	124 688.8	12.7%	138 377.4
By resident	- domestic	232 352.2	25.2%	251 467.8	25.6%	275 203.6
	- foreign	170 508.1	18.5%	188 699.6	19.2%	201 788.1
Public debt		432 284.4	46.8%	467 749.1	47.7%	501 879.1

Table 1. Public debt in nominal value and debt-to-GDP ratio (end of period)

*) preliminary data as of 25th September 2006

The State Treasury debt increased by PLN 74.1 billion in the period from January 2005 to June 2006 (PLN 37.3 billion in 2005 and PLN 36.8 billion in the first half of 2006) which in 63% resulted from the increase in domestic debt (according to the place of issue criterion). Exchange rates changes contributed to decrease in the foreign debt amount expressed in PLN in 2005 and to its increase in the first half of 2006, however, this factor did not influence significantly the debt volume over the whole period.

II.2. Evaluation of the implementation of the objective

The Strategy's objective was **to minimise the debt servicing costs over a longer time horizon** with accepted limitations regarding the particular types of risk. This objective was understood as:

- minimisation of costs in the horizon limited by the redemption date of the instruments with the longest maturities and significant share in debt volume – through optimal selection of instruments of debt management, their structure and appropriate issuance schedule,
- measures aimed at increasing the efficiency of the Treasury Securities market so that their servicing costs were as low as possible for the adopted issuance strategy.

¹ Keeping the public debt at the safe level was one of the objectives of the *Public Finance Sector Debt Management Strategy in the years 2005-2007* and the previous strategies. In the *Public Finance Sector Debt Management Strategy in the years 2006-2008* this objective was abandoned due to the fact that after the accession to the EU the Convergence Program became an instrument determining fiscal policy. Volume of public debt and State borrowing needs remains the most important determinant for implementation of the public debt management strategy.

In the first sense, minimisation of debt servicing costs involved adjustment of the structure of the Treasury Securities (TS) issuance to the conditions on domestic and international financial market in the period discussed.

In the second half of 2005 the approach to implementation of the cost minimisation objective became more flexible in respect of the restrictions resulting from exchange rate risk, i.e. incurring foreign liabilities in amounts exceeding the needs connected with refinancing of foreign debt to be redeemed was admitted. The document which confirmed modification of the policy in this respect was the *Public Finance Sector Debt Management Strategy in the years 2006-2008*, adopted in September 2005. Increase of foreign financing share resulted from adopted macroeconomic assumptions, plans concerning the perspective of Poland's entry to the Eurozone and favourable situation on foreign markets.

Increased foreign financing aimed at:

- minimisation of debt servicing costs within a long time horizon through:
 - increasing of financing on foreign markets, particularly in the Eurozone, at historically low interest rates, much lower than domestic interest rates,
 - reducing the level of TS sales on the domestic market to the absorption ability of domestic non-banking sector which was to significantly diminish the negative impact of TS issuance on the level of interest rates;
- improvement of the domestic debt parameters through:
 - reduction of refinancing risk and interest rate risk to the level of the EU countries,
 - more flexibility with respect to the distribution of debt servicing costs over time.

A price for changing the approach to the minimisation of costs is a slight increase in exchange rate risk of the State Treasury debt and a possibility of psychological impact on market exchange rates. Minimisation of foreign debt servicing costs has been carried out through:

- appropriate policy in respect to foreign bonds issuance. Together with large issues on the euro market, which is of key importance for Poland, at historically low yields (the value of which in 2005 was EUR 6.25 billion, while in the first half of 2006 EUR 3.0 billion and yields from 3.70% to 4.49%) also relatively large issues on the markets with relatively low interest rates were carried out (bonds denominated in Japanese Yens and Swiss Francs). Total issuance on both markets was the equivalent of EUR 2.2 billion (i.e. 17% of all foreign issues in the period discussed), while the average interest rate came to 2% with the average maturity of 9.5 years.
- replacing liabilities which are more expensive in terms of service with lower cost liabilities. In 2005 it was carried out through early redemption of considerable part of debt to the Paris Club. Debt of face value equal to EUR 4.5 billion and average interest rate at 5% was redeemed.
- financial transactions on derivatives. Application of such transactions resulted in decrease of expenditures by around PLN 18 million in 2005 and around PLN 27 million in the first half of 2006.
- reduction of issuance costs related to commissions and fees paid to the organisers of bond issuance. As a result of the adopted criteria of selection of the banks which entered the competition for the organiser of bond issuance, fees connected with bond issuance in January 2006 were significantly lower than the costs incurred in the previous issues. As a consequence of withdrawal from unused revolving credit, obligation to pay readiness fee ceased.

Increase of foreign financing share allowed to decrease supply of TS on the domestic market and shape the instrument structure in a more flexible manner. Lower supply of TS on domestic market, favourable market conditions resulting e.g. from lowering inflation and from the easing of NBP monetary policy (yields on one-year bills decreased from 6.3% to 4.4%, while yields on 10-years bonds decreased from 5.8% to 5.1%) as well as high demand in medium and long-term bonds segment allowed in 2005 to adopt issuance policy aiming at,

apart from minimisation of costs, substantial reduction of refinancing and interest rates risks. In February 2006 NBP completed the series of interest rate cuts and a yield curve of Treasury Securities steepened (yields on one-year bills came to 4.5% while on 10-years bonds reached 5.7%), which contributed to lowering the pace of refinancing risk reduction.

The most important measures aimed at minimisation of debt servicing costs in the second sense (i.e. increase in efficiency of the Treasury Securities market) included the following:

- policy of reducing the number of bond issues on domestic market while increasing the face value of each benchmark. Until the second half of 2006 the face value of six issues of medium and long-term bonds approached or exceeded EUR 5 billion. One of the means applied was reopening of already existing long-term issues as medium term benchmarks.
- increasing the value of individual bond issues on international markets, including the principal market, i.e. euro market. The value of bond issue with maturity in April 2020 carried out in 2005 approached EUR 5.25 billion and currently it is the largest and most liquid issues on the electronic platform NewEuro MTS;
- communication and consultations with the market, taking the form of regular publications of financial plans and meetings with the banks acting as TS Dealers (in the form of regular meetings of the Market Participants Committee), non-banking sector investors and foreign investors.

Minimisation of debt servicing costs was carried out with the adopted restrictions with respect to the level of:

1) refinancing risk

The average maturity of marketable domestic debt increased from 3.15 to 3.57 years in 2005 and to 3.69 years in mid 2006, which mainly resulted from:

- considerable decrease in outstanding Treasury bills (from PLN 46.9 billion to PLN 24.4 billion in 2005 and to PLN 20.4 billion in the first half of 2006),
- relatively high sales of medium- and long-term bonds (i.e. 5 years minimum) which constituted respectively 66.9% and 69.0% of bonds sold on bond auctions²,
- large scale of switching auctions. In 2005 bonds nearing maturity were redeemed in total face value of PLN 16.2 billion (out of which bonds maturing in 2006 in the value of PLN 7 billion). In the first half of 2006 bonds in the value of PLN 9.9 billion were redeemed at switching auctions.

The share of Treasury Securities with maturity of 1 year or less dropped from 29.6% at the end of 2004 to 26.7% at the end of 2005 and to 25.4% in mid 2006. The share of Treasury bills in State Treasury domestic debt also significantly decreased from 16.1% at the end of 2004 to 7.7% at the end of 2005 and 6% in mid 2006.

The average maturity of foreign debt increased from 5.50 to 8.49 years in 2005 and slightly decreased to 8.35 years in mid 2006. The significant rise of average maturity in 2005 resulted mainly from the early redemption of debt towards the Paris Club and issuance of bonds with much longer maturity (with original maturity from 15 to 30 years) for refinancing of the redemption. Thanks to the operation the amount of maturing foreign debt in the years 2005-2009 was reduced by EUR 4.5 billion (principal instalments). Also an issuance of 50-years bonds denominated in EUR with the face value of EUR 500 million with fixed coupon of 4.25% carried out in July 2005 influenced the average maturity of foreign debt. The bonds were issued via private placement. Poland is the second European country, after France, which offered bonds with maturity of 50 years on the euro market.

The average maturity of total State Treasury debt increased from 3.83 to 5.00 years in 2005 and to 5.07 years in the first half of 2006.

² Including switching auctions.

2) exchange rate risk

The share of foreign debt in total State Treasury debt according to the place of issue criterion slightly increased - from 27.6% at the end of 2004 to 28.3% at the end of 2005 and to 29.0% in mid 2006. Such changes are the result of the following circumstances:

- a relatively high, particularly in 2005, positive balance of foreign financing (PLN 12.0 billion against PLN 26.7 billion of domestic financing in 2005 and, respectively, PLN 3.8 billion against PLN 23.2 billion in the first half of 2006),
- exchange rate changes (in 2005 net outcome of the changes was a decrease in debt by PLN 3.4 billion while in the first half of 2006 an increase by PLN 4.4 billion)

The share of the euro in the State Treasury foreign debt increased from 62.5% to 65.6% in 2005 and to 70.1% in the first half of 2006, while in total debt it increased respectively from 17.3% to 18.6% and 20.3%. The increasing share of the euro in debt structure resulted from the fact that 66.9% of the face value of total issuance on foreign markets in 2005 and the whole issuance in the first half of 2006 constituted bonds denominated in EUR.

3) interest rate risk

In 2005 duration of domestic marketable debt significantly increased from 2.44 years to 2.76 years, contributing to the reduction of interest rate risk and in the first half of 2006 it reached 2.77 years, resulting from the following factors:

- a considerable increase in the average maturity of debt (from 3.15 to 3.57 years at the end of 2005 and to 3.69 years in mid 2006),
- falling in 2005 and growing in the first half of 2006 yields of the Treasury Securities,
- increase of the floating rate instruments share (from 8.4% to 10.6% in 2005 and to 10.8% in the first half of 2006).

The average term to refixing (ATR) of domestic debt increased from 2.80 to 3.07 years in 2005 and to 3.16 years in the first half of 2006.

Duration of foreign debt increased from 3.78 to 6.14 years in 2005 and slightly decreased to 6.09 years in the first half of 2006. ATR of foreign debt increased from 4.80 to 7.77 years in 2005 and to 7.84 years in the first half of 2006. Almost all (99.3%) foreign bonds issued in 2005 and all the foreign bonds issued in the first half of 2006 are fixed rate bonds. Such a measure was also profitable due to historically low interest rates on foreign markets in 2005.

As a result duration of total debt increased from 2.83 to 3.74 years in 2005 and to 3.75 years in the first half of 2006, while ATR increased respectively from 3.38 to 4.44 and 4.55 years.

4) State budget liquidity risk

Keeping the safe level of liquidity of the State budget and management of liquid assets were mainly carried out by using the following instruments:

- switching auctions (for the reduction of refinancing risk at the redemption of large issues)
- interest-bearing PLN deposits with NBP,
- PLN deposits with commercial banks through BGK, covering buy-sell-back transactions and inter-bank deposits (since July 2005). Uncovered inter-bank deposits were introduced as a new instrument for liquidity management due to the fact that it was not possible to invest all budget funds in the form of transactions collateralised with Treasury Securities.
- interest-bearing foreign currency deposits with NBP and BGK.

The average level of State budget liquid assets in the PLN amounted to PLN 6.3 billion³ in 2005 and PLN 7.3 billion in the first half of 2006. The average balance in the foreign

³ Including deposits with NBP and BGK as well as balance of the State budget current account.

currency accounts with NBP and BGK in 2005 was around EUR 1.5 billion equivalent and in the first half of 2006 EUR 2.5 billion equivalent.

5) other risks, in particular credit risk and operational risk

Within the discussed period there were two types of transactions carried out by the State Treasury which generated the credit risk, namely, transactions on derivatives and uncovered PLN deposits.

- Financial transactions on derivatives carried out in 2005 which were related to the management of the State Treasury foreign liabilities allowed to decrease budget expenditure. The operation of the change of the structure of liabilities related to the financing of the multi-role aircraft programme and the issue of bonds denominated in USD was carried out. A part of the liabilities denominated in USD were converted by derivative transactions into liabilities denominated in EUR and their interest rate basis was changed from LIBOR USD to EURIBOR EUR. The total value of concluded transactions amounted to approximately USD 2 billion. The credit risk related to the concluded transactions was minimised by the selection of partners with high credit rating and the constraints imposed on the total value of transactions concluded with individual partners (in order to diversify the credit risk).
- The deposits placed on the inter-bank market until July 2005 were fully covered with Treasury Securities, and thus they did not generate credit risk. From July until the end of December 2005 the Ministry of Finance also made uncovered deposits through BGK on the inter-bank market. The credit risk related to uncovered deposits was reduced by the system of limits for individual banks and the term structure of deposits. In addition the deposits were placed only with the banks with the status of a primary dealer.

6) Distribution of debt servicing costs over time

In 2005 the State Treasury debt servicing costs amounted to PLN 25 billion, i.e. 2.5% of the GDP (as compared to PLN 22.7 billion, i.e. 2.5% of the GDP in 2004) out of which PLN 21.3 billion, i.e. 2.2% of the GDP, were domestic debt servicing costs (as compared to PLN 18.5 billion, i.e. 2.0% in 2004). The increase in the debt servicing costs was mainly due to the increase in debt in 2004 and 2005.

The even distribution of payments related to their servicing was taken into account upon the issuance of new TS series. In particular, the coupons of new wholesale bonds issued were similar to their yields in order to reduce the accumulation of debt servicing costs of the discount upon their redemption. The exception included 10-year bonds opened as 5-year benchmark bonds the coupons of which were set in different market conditions.

II.3. Conclusions from the implementation of the objective

The strategy was implemented in the condition of still high, though decreasing, net borrowing requirements of the State budget and the fast economic growth. As a result, the State public debt to GDP ratio in 2005 increased from 46.8% to 47.7%.

The objective of the minimisation of debt servicing costs was mainly implemented through an appropriate issuance policy. With the unchanged objective and constraints related to the risk, the approach to the selection of markets was more flexible as a result of the abandonment of the principle that contracting foreign debt is used for refinancing of maturing foreign debt. Thanks to lower interest rates on international markets where the issuance was made, it allowed to achieve better results in the minimisation of debt servicing costs at the cost of a slight increase of exchange rate risk and the possibility to exercise psychological impact on the foreign exchange market rate. Due to this last element combined with the decrease of differences between interest rates on the domestic market and on principal foreign markets and the strengthening of the Zloty, the Ministry of Finance has not sold foreign markets to the level of the requirements resulting from foreign debt servicing. At the same time the fulfilment of the remaining assumptions related to the more flexible approach

to the implementation of the objective of debt servicing costs minimisation and the selection of markets, including the significant improvement of the domestic debt structure, justify its maintenance in the subsequent Strategy.

The refinancing risk and the interest rate risk were significantly reduced in respect of both domestic and foreign debt. In the case of foreign debt the level of those risks does not pose a threat for the implementation of the objective of debt servicing costs minimisation. The introduction of new instruments for the management of State budget liquidity risk and credit risk contributed to the reduction of those risks.

III. ASSUMPTIONS OF THE STRATEGY

III.1. Macroeconomic situation in Poland

The major macroeconomic factors which influence the change of the nominal value of the public debt (in PLN) include: the borrowing requirements, including the deficit of the public finance sector, and the changes of the PLN exchange rate. The change of the debt to GDP ratio is 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.

1. GDP growth

In 2005 the real GDP growth amounted to 3.4%, while in 2004 it stood at 5.3%. The significant GDP growth in 2004 was a result of one-off acceleration of economic activity in the first half of 2004 which was related to Poland's accession to the EU. The effect of the increased base of 2004 to a large extent explains the lower growth rate in 2005.

The data for the first half of 2006 show that Poland is in the phase of fast economic growth. The real GDP growth amounted to 5.2% in the first quarter and 5.5% in the second quarter of this year. It is expected that those trends will be maintained in subsequent quarters which will allow to achieve a real GDP growth of approximately 5.2% in the whole 2006. According to the forecast for 2007, the real GDP growth should stabilize at the level of 4.6%, while in 2008 and 2009 the growth rate should increase to 4.8% and 5.0% respectively.

2. Fiscal deficit

According to the adopted assumptions for the budget bill for 2007, the State budget deficit in 2006 will amount to PLN 29.3 billion (2.8% of the GDP). It is planned that the nominal deficit will be maintained at the level of PLN 30 billion in the subsequent years (2.7% of the GDP in 2007, 2.5% of the GDP in 2008 and 2.4% of the GDP in 2009).

3. Inflation

After a period of very low inflation in 2005 (0.7% from December to December), the gradual return is forecasted towards the middle of continuous inflation target of the Monetary Policy Council which since 2004 has amounted to 2.5% with symmetrical deviation of ± 1 percentage point. It is forecasted that within next years the December to December inflation rate will increase to 2.0% in 2006, 2.2% in 2007, 2.5% in 2008 and 2.5% in 2009.

4. EUR-PLN exchange rate

It should be expected that the progressing convergence of price levels in the EU Member States will have an impact on the appreciation of Zloty as the currency of the country with relatively low level of prices. However, it is difficult to estimate the impact of this phenomenon on the nominal exchange rate because of the possibility of the convergence of prices through the higher inflation rate than in the "more expensive" EU Member States. It should also be noted that the appreciation process should be gradual and will set forth the general trend of the exchange rate changes which will be subject to fluctuations related to the current market situation. Another factor which will strengthen the Zloty will be the influx of funds from the EU (including structural funds and funds related to the implementation of the Common Agricultural Policy).

5. Interest rates

In the second half of 2004 and first three quarters of 2005 the domestic interest rates experienced a downward trend (to the level below 4.5% for 5-year and 10-year benchmark bonds). The fears related to the development of the political situation in Poland which overlapped with the increase of yields on foreign markets resulted in a significant increase in interest rates at the end of 2005. When the situation in the country calmed down, the interest rates also decreased (on 28 February 2006 the yields on 2-year and 5-year bonds reached the lowest levels in history and amounted to approximately 3.9% and 4.3% respectively). At the same time the yield on 10-year bonds approached the all-time low and amounted to 4.6%. At the end of first quarter of 2006, the yield on domestic (PLN) instruments began to

increase. The reasons behind this growth are of both global character, related to the increase in yields on foreign markets (in particular the continued increase in yields in the Eurozone) and internal character, in particular the expected stabilisation of the National Bank of Poland rates in 2006 and their growth in 2007. The PLN bonds market may be expected to remain strongly correlated with the market of the euro denominated securities and the spread between yields of Polish bonds and their euro denominated equivalents will result from the following factors:

- level of fulfilment of Maastricht criteria;
- prospects of Poland's entry to the monetary union;
- development of the TS market in Poland.

The assumed values of main macroeconomic parameters adopted in order to prepare the Strategy are presented in Table 2.

Specification		2005	2006	2007	2008	2009
Real GDP (%)		3.4	5.2	4.6	4.8	5.0
GDP at current	prices (PLN billion)	980.9	1.036.0	1.099.7	1.176.6	1.265.0
State budget de	eficit (% of GDP)	2.9	2.8	2.7	2.5	2.4
State budget de	eficit (PLN billion)	28.6	29.3	30.0	30.0	30.0
Average annual CPI (%)		2.1	1.1	1.9	2.5	2.5
Open market op	perations (%)					
	- annual average	5.30	4.10	4.30	4.70	4.80
	 end of period 	4.50	4.00	4.50	4.75	4.75
PLN/USD	- average	3.2348	3.1133	3.0365	3.0050	2.9750
PLN/EUR	- average	4.0254	3.9100	3.9019	3.8615	3.8229

Table 2. Key macroeconomic assumptions

III.2. International situation

According to the estimates, the global GDP growth rate in 2005 was by only 0.5 percentage point lower than the figure for exceptionally good 2004 when it exceeded 5%, despite high prices of commodities, in particular of oil, and gradual tightening of monetary policy.

The main international institutions forecast that the global GDP growth rate will remain at a relatively high level in 2006 and 2007. In particular, the situation in the Eurozone, which is the main export market for Poland, is expected to improve. However, the negative factors prevail over positive ones in the assessment of risks concerning the prospects of the global economy. The major threats include higher than forecasted increase in oil prices and the possibility of a rapid tightening of conditions on the financial markets, e.g. as a result of higher than expected inflationary pressure and the increasing imbalance on current accounts on a global scale. A possible significant growth of long-term interest rates may be especially dangerous for those countries where the prices on real estate markets are very high.

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

- situation on the interest rate markets for currencies in which liabilities aimed to meet the foreign budgetary borrowing requirements will be contracted. As a result of the adopted issuance policy Poland is interested the most in the development of the situation on the euro market (Swiss franc market is strongly correlated with the euro market), the yen and the American dollar;
- risk tolerance of investors operating on global market which influences the amount of the risk premium expected by the purchasers of Polish bonds (yield spread in respect to "base" instruments).

1. Euro market (EUR)

The European Central Bank continues to tighten the monetary policy. After the increase in August 2006, the basic interest rate amounts to 3.00%. Analysts forecast that the increase in interest rates will continue to 3.25% at the end of this year and 3.5% at the beginning of 2007.

2. American market (USD)

The period of tightening the monetary policy in the United States has probably come to an end in the first half of 2006. It is predicted that the increase in interest rates to 5.25% in June 2006 might have been the last one (or one of the last in a series). In view of the above, the stabilization of the interest rate for USD may be expected in 2006, as well as possible easing of the monetary policy in the first half of 2007 (relatively flat yield curve also points to the lack of expectations of further interest rates increase).

3. Japanese market (JPY)

As a result of the improving situation of the Japanese economy, the Japanese central bank has abandoned the policy of "zero interest rates". In July 2006 the Bank of Japan decided to increase the interest rate to 25 basis points (from zero level). The analysts differ with regard to the prospects of the interest rates in the future, though the majority of them point to the high probability of further increases and expect the interest rate of the Bank of Japan to increase to 1% by the end of 2007.

4. Credit margins

Despite turbulence in confidence in emerging markets which occurred in mid 2006, it is unlikely that the investors' attitude towards those markets will permanently deteriorate. The maintenance of persistent low credit margins is explained by the occurrence of high liquidity on a global scale and the related search for alternative places to invest capital. It is important that emerging economies are perceived as the economies possessing increasingly strong economic foundations. Low margins may be threatened with the increase of interest rates on principal markets (i.e. in the USA, Eurozone and Japan) which will decrease the attractiveness of potential additional return on investments in assets with higher risk.

IV. RISK FACTORS RELATED TO PUBLIC DEBT

As public debt management takes place in conditions of uncertainty concerning the future level of many decision-influencing factors it is inextricably associated with risk management. Risk management of public debt involves preventing the risk from exceeding the acceptable level during the implementation of the *Strategy* objective of the long-term minimisation of debt servicing costs.

The risk concerns in particular:

- macroeconomic environment (e.g. the economic growth rate in Poland and in the world, inflation rate, crises in the global economy),
- budget environment (e.g. the volume of budget borrowing requirements, including budget deficit in subsequent years, proceeds from privatisation),
- market environment (e.g. the level of domestic and foreign interest rates, foreign exchange rates, demand for Treasury Securities),
- institutional and legal environment (e.g. changes in legislation in force, European integration, organisational framework of debt management).

The existence of risk related to public debt may be considered in two aspects, as:

- a risk of a negative impact of public debt on the economy,
- a source of uncertainty in respect to the level of public debt and its servicing costs.

In addition one may distinguish the risk related to potential debt resulting from the possibility of the execution of guarantees and sureties granted by the public finance sector entities.

IV.1. Risk of negative impact of public debt on economy

The risk of negative impact of public debt on economy grows with the level of debt. Inappropriate structure of debt may additionally contribute to greater risk.

The main negative effects of excessive public debt include:

- 1) the perception of Poland as a country with increased risk and its negative impact on the level and volatility of interest rates and exchange rates,
- 2) negative consequences of Poland's violation of the Maastricht criterion concerning the general government debt,
- 3) negative consequences of the excess of the public debt to GDP ratio exceeding safety thresholds of 50% and 55% by from the Public Finance Act, as well as the 60% constitutional cap,
- 4) crowding out of private capital from the access to national savings,
- 5) a risk that large borrowing requirements will hit a demand barrier on the financial market,
- 6) a possible debt crisis and partial, or total, loss of capacity of servicing of debt on time.

The general government to GDP ratio in Poland, amounting in the end of 2005 to 41.9% (according to EU methodology), is lower as compared to the average ratio in the whole EU, where the general government debt to GDP ratio amounted in 2005 to 63.4% and 70.8% in the Eurozone⁴. Nevertheless, Poland, compared to the EU average, is still a country with a lower credit rating, therefore, the level of debt deemed as safe is lower accordingly.

The level and structure of public debt is influenced above all by the liabilities incurred by the State Treasury (ST). Table 3 presents the main factors influencing the change in ST debt to GDP ratio in previous years.

⁴ See. Annex 4.

Specification	2004	2005
State Treasury debt to GDP ratio	43.6%	44.9%
Change in ST debt/GDP ratio	-1.4%	1.2%
1. Primary balance of the State budget (deficit)	2.0%	0.3%
2. Interest (debt servicing costs – cash basis)	2.5%	2.5%
3. Nominal GDP growth	-4.0%	-2.6%
4. Other factors, including above all:	-1.9%	0.9%
4.1. State budget financing needs other than the deficit *	0.6%	1.7%
4.2. Net privatisation proceeds	-0.8%	-0.3%
4.3. Changes of foreign exchange rates	-2.2%	-0.3%
4.4. conversion of debt of Social Security Fund (FUS) into State Treasury Securities	0.1%	0.1%
4.4. Other factors**	0.4%	-0.4%

Table 3. Factors influencing changes of debt of the State Treasury in the years 2004-2005 (% GDP)

* Mainly: balance of liquid funds (from the previous and subsequent year), balance of loans granted, prefinancing, funds for FUS as compensation for contributions transferred to Open Pension Funds (OFE);

** change in debt due to TS discount, credits granted but not included in financing of the borrowing needs, debt cancellation and changes in other debt of the State Treasury.

IV.2. Risk of change in the level of public debt and of its servicing costs

The level of the public debt to GDP ratio is determined by the nominal level of debt and nominal GDP, depending on the real GDP growth and price fluctuations (measured by the GDP deflator). A one percentage point lower than assumed path of nominal GDP growth in 2007-2009 would result in the growth of the public debt to GDP ratio by 0.5 percentage points in 2007, 1.0 percentage point in 2008 and 1.5 percentage points in 2009.

At a defined level of State borrowing requirements, the nominal level of public debt, the costs of its servicing and the risk related to deviation from their expected values result from the adopted structure of financing (i.e. types of debt instruments applied) and operations performed on debt.

Types of risks related to costs of public debt that pose a limitation to the objective of the minimisation of costs include:

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

Ad a) Refinancing risk

The refinancing risk in domestic currency has been systematically reduced from the end of 2003. The average maturity till the second half of 2006 increased from 2.66 years to 3.69 years, and the share of Treasury Securities with maturities not exceeding one year decreased from 37.9% to 25.4%, which in nominal terms amounted to PLN 93.2 billion and PLN 85.3 billion respectively. From the beginning of 2004 Treasury bills do not finance the deficit. Despite a substantial progress with respect to the reduction of refinancing risk in domestic currency, the level of the risk is still higher in comparison to other EU countries, where the average maturity usually exceeds six years⁵.

Further refinancing risk reduction would require lowering the sales of short-term bonds (i.e. not exceeding 3 years) and increasing sales of long-term bonds (maturity of 10 years

⁵ In June 2006, the average maturity (in years) amounted to 5.6 in Portugal, 6.1 in the Czech Republic, 6.6 in Italy, 6.7 in Belgium, 6.8 in Spain, 6.9 in France and 13.2 in the U.K.

and more). This would mean a permanent shift from bonds with maturities of 2 years to bonds with maturities of 5 and 10 years as the main financing source, and a greater importance of bonds with the original maturity exceeding 10 years. The bonds switching auctions will remain the vital instrument in reducing the refinancing risk. Depending on the State budget liquidity requirements and the market participants' interest, they may be supplemented with the bond buy-back auctions.

An early repayment of a part of liabilities toward the Paris Club in 2005 and an increase in issuance of bonds with long maturities reduced the foreign currency refinancing risk to a safe level. The average maturity in the second half of 2006 amounted to 8.35 years, whereas the share of debt, which should be paid within a year, amounted only to 6.9%. The foreign debt refinancing risk does not pose any relevant limitation to the implementation of the objective of debt servicing costs minimisation.

Ad b) Exchange rate risk

The share of foreign debt (according to the place of issue criterion) in the State Treasury debt, which had been systematically decreasing till 2004, grew slightly in 2005, and thereafter stabilised at the level of approximately 29%. This fact can be derived from a more flexible approach to the implementation of the objective of cost minimisation under the restrictions resulting from exchange rate risk.

The most important conditions of exchange rate risk management in the strategy horizon are:

- the sensitivity of foreign debt and of its servicing costs to fluctuation in the exchange rate (in mid 2006 the depreciation of PLN, in relation to all currencies in which the debt is denominated, by 1% would result in an approximate PLN 1.4 billion debt growth (approx. 0.13% of the GDP), similarly, a weakening of the zloty in relation to the above mentioned currencies by 1% would result in an approximate PLN 60 million growth of debt servicing costs (approx. 0.01% of the GDP)).
- the difference in the expected debt servicing costs in different currencies, resulting from different levels of interest rates on the markets and Poland's position on these markets,
- the State budget currency requirements, related to servicing and repayment of foreign debt,
- possible side-effects resulting from the exchange of currencies on foreign markets the impact on the exchange rate in case of conversion on the FX market or the impact on money supply and the costs of neutralising open market operations in case of selling to the National Bank of Poland,
- the strategic role of the euro as the future national currency.

Ad c) Interest rate risk

Due to the dominant role of the fixed-rate instruments, the interest rate risk on the domestic market has been subject to similar changes as the refinancing risk in recent years. The duration of domestic marketable debt rose from 2.12 years at the end of 2003 to 2.77 years in the second half of 2006, while ATR rose from 2.44 years to 3.16 years.

The level of domestic debt interest rate risk is slightly higher in comparison to other EU Member States, where duration usually exceeds 3 years⁶. The duration of Polish domestic debt is similar to the level of duration in those EU Member States in which the ratio was the lowest.

Within the horizon of the *Strategy*, it will be advisable to specify the desired target level of duration. The need may also arise to separate the management of refinancing risk (extension of average maturity) and of interest rate risk (maintaining duration close to the target value). This will involve the increase in floating-rate TS issuance or the continuation of the policy of

⁶ In the second half of 2006, the duration amounted approx. 3.0 in Portugal, 4.4 in Belgium, 5.0 in Spain and 7.9 in the U.K. The data is not fully comparable due to differences in the scope and methodology.

selling fixed-rate medium- and long-term bonds and a change of flows profile by using interest rate swap transactions.

Similarly as in the case of domestic debt, due to the dominance of a fixed-rate debt, the duration of foreign debt remains closely related with the average maturity. After 6 months of 2006 the duration of foreign debt amounted to 6.09 years, while ATR to 7.8 years, interest rate risk of the foreign currency debt is therefore not high.

The change of interest rates from the beginning of 2007 by one percentage point will result in a change in debt servicing costs by approx. PLN 0.5 billion in 2007 for domestic debt and by approx. PLN 0.1 billion for foreign debt.

The sensitivity of State Treasury debt servicing costs to the fluctuation of interest rates, as compared to the adopted path from October 2006, are presented in Table 4.

Increase in debt servicing costs when interest rate	2007	2008	2009	
Demostia debt	PLN billion	0.8	1.8	2.8
Domestic debt	% GDP	0.07%	0.15%	0.22%
Foreign debt	PLN billion	0.2	0.4	0.6
	% GDP	0.02%	0.03%	0.05%
Total	PLN billion	1.0	2.2	3.5
	% GDP	0.09%	0.19%	0.27%

Table 4. Sensitivity of debt servicing costs (cash basis) to changes in interest rates in 2007-2009 (given the assumed strategy of financing)

Ad d) State budget liquidity risk

Liquidity risk management consists of two types of measures:

- The striving for maintaining liquid funds at the lowest possible yet safe level this can be achieved by improvement of the planning process, by monitoring the State budget liquidity, by developing an appropriate infrastructure and organisational solutions, including the planned implementation of a single State budgetary account and the possibility to monitor the accounts of the particular administrators on-line. This shall reduce the costs arising from the necessity to maintain a larger stock of liquid reserves and the risk of liquidity shortage in case of emergency.
- The liquid funds management, which should generate budgetary revenues compensating to the largest possible extent the costs resulting from the maintenance of the safe liquidity level.

The main instrument for managing State budget liquidity is maintaining financial liquid funds on budgetary accounts and depositing surpluses on short-term deposits with NBP and BGK (commercial banks). The level of deposits is the result of an unequal time distribution of flows on the budgetary account (revenue and expenditure, and proceeds and outlays). This level should guarantee the security of the budgetary needs for funds without the need for sudden changes in the TS issuance.

Ad e) Other risks

Other risks include all not yet mentioned sources of uncertainty related to the management of the public debt, the safe level of which constitutes a constraint to the accomplishment of the Strategy objectives.

1. Credit risk

Credit risk related to the management of State Treasury debt and State budget liquidity first occurred in Poland in 2004, when the liquid State budget funds began to be deposited with commercial banks and the first transaction with the use of derivatives was entered into. Since July 2005, apart from deposits covered with Treasury securities, also uncovered deposits have been made.

The reduction of credit risk associated with such transactions is enhanced by defining a list of entities with high credit rating, which may become partners in transactions, as well as specifying the limits, dependent on the risk associated with particular partners and types of transactions.

2. Operational risk

In order to reduce this risk, the integration of debt management into one organisational unit is sought for, the structure, applied procedures and supervision of which should combine the solutions used in commercial institutions and public administration.

The increasing complexity and sophistication of public debt management instruments as well as the progressing process of European integration require the adaptation of institutional and organizational structure of debt management in order to reduce operational risk. It is particularly important in the case of derivatives and deposit transactions carried out on financial market. Modern public debt management requires existence of efficient technical infrastructure and organizational procedures that ensure timely risk assessment and appropriate reactions to changing market conditions. The lack of such infrastructure and organisational procedures is a source of operational risk, which excludes or seriously reduces the use of modern debt management instruments which have been used in developed countries for years.

Ad f) Distribution of debt servicing costs over time

Debt servicing costs should be evenly distributed over time, so that their volatility does not have a destabilizing effect on construction of the State budget. In a cash-based budgetary accounting system, the stabilisation of costs over time is positively influenced by avoiding issuance of securities subject to high discount, which becomes a cost upon redemption of securities.

Efficient instruments of managing the distribution of debt servicing costs over time include bond switching and buy-back auctions used since 2001 mainly in order to reduce the refinancing risk.

IV.3. Risk related to sureties and guarantees granted and other operations of the sector

Granting of sureties and guarantees by public finance sector entities, including first of all the State Treasury, entails the risk of generating debt servicing costs when a guarantee or a surety is executed.

Pursuant to the Public Finance Act of 30 June 2005, from 1 January 2006 the anticipated payments of sureties and guaranties granted by public finance sector entities will not increase, as it happened previously, the amount of public debt, whose ratio to GDP is the point of reference for the safety thresholds of 50%, 55% and 60%, which the Act made provisions for. Therefore, the risk related to the growth of this ratio, as a result of the increase in the amount of anticipated payments of sureties and guaranties, is presently of an indirect character, due to the possibility of increasing borrowing requirements in case of higher costs related to the execution of sureties and guaranties.

Up to this day the activity of State Treasury related to sureties and guaranties does not pose any crucial threat to public finance. In 2005, despite the increase in the amount of potential liabilities, the long-term risk indicator for the whole portfolio decreased. Similarly to the recent years, the domestic sureties and guaranties generate a relatively greater risk. The risk-weighted sureties and guaranties granted by the State Treasury to GDP ratio has decreased from 1.28% in 2004 to 1.06% in 2005.

In order to reduce the risk related to the granting of sureties and guarantees by the State Treasury while keeping the benefits from using them as an instrument of economic policy, the principles formulated below should be maintained:

- concentration of granting sureties and guarantees on support for development-oriented investments in infrastructure, residential construction, protection of environment and creation of new jobs, mainly those carried out with the support of the EU funds (loans and bonds secured or guaranteed by the State Treasury should allow to receive the EU funds amounting to their multiple value),
- the risk-weighted payments of sureties and guaranties granted by the State Treasury to GDP ratio should not exceed 1.4%, and the ratio of potential State Treasury liabilities related to the granted sureties and guarantees to GDP should not exceed 4.5%,
- reduction of the role of sureties and guarantees granted under special acts, which pose a particular risk for the State Treasury.

An additional source of risk associated with an increase in public debt may be various types of transactions carried out by public finance sector entities. Such transactions include, in particular, public private partnership and securitization projects.

V. DEBT MANAGEMENT STRATEGY OBJECTIVE IN THE YEARS 2007-2009

The objective of the Strategy, which will govern the debt management, will remain as follows: minimisation of debt servicing costs over a long time horizon with accepted limitations regarding 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.

This objective is understood in two aspects, as:

- minimisation of costs in the time horizon set by the redemption date of the instruments having the longest maturities and significant share in debt volume through the optimal selection of markets, debt management instruments, structure of financing the borrowing requirements (i.e. share of respective instruments) and issuance dates;
- further increase in the TS market efficiency contributing to lower TS yields. Spreads of Polish TS to the EU the countries with the highest credit rating should in future result solely from the differences in the country's credit risk assessment and not from obstacles and restrictions with respect to the organisation and infrastructure of the TS market.

The attitude towards implementation of the objective of minimisation of debt servicing costs remained unchanged as compared to the previous Strategy. This provides for the possibility of flexible development of the financing structure as regards market, currency and instrument type selection. The implemented financing structure should result from the evaluation of the market situation (interest rates level, shape of the yield curve on respective markets and expectations concerning the exchange rates) and be the product of comparing the costs of obtaining funds over a long time horizon with limitations resulting from acceptable risk levels. In the case of selection of the currency of financing, also the borrowing requirements in foreign currencies will be considered.

The domestic market shall remain the main market of financing the State budget borrowing requirements. The instruments on the domestic market will be offered in a way that supply in respective segments of the yield curve does not result in excessive increase in yields. In relation to the above mentioned assumptions, issuance on foreign markets should:

- provide funds for repayment of principal and interest on foreign debt, including early redemption,
- strengthen the position of Poland on the euro market, which is of strategic importance due to the perspective of full integration under the Economic and Monetary Union,
- ensure Poland's presence on other main financial markets (i.e. on the U.S., Japanese and Swiss market),
- stabilise the domestic market through ensuring the safety of the financing the State budget borrowing requirements in the situation of temporary disturbances on the domestic market, taking into account the possibility of occurrence of side effects related to the exchange of foreign currencies into PLN (i.e. impact on the exchange rate and monetary policy of the Central Bank).

Minimisation of debt servicing costs over a long time horizon will be subject to constraints related to the debt structure. Therefore, the following was assumed:

a) as regards refinancing risk

- further increase in the role of medium- and long-term instruments in the financing of the State budget borrowing requirements on the domestic market at the pace dependent on demand from investors,
- aiming at an even distribution of payments arising from serviced and redeemed domestic and foreign debt in subsequent years (coordination of issuance policy with respect to maturity dates of bonds issued),
- achievement of average maturity of domestic debt at the level of about 4 years,
- the current level of foreign debt refinancing risk does not restrain cost minimisation;

b) as regards the exchange rate risk

- decrease in the exchange rate risk measured by the share of debt denominated in foreign currencies in the total debt in the period preceding the entry to the Eurozone to 25-27%. Joining the Eurozone, despite the fact that it will take place in the horizon exceeding the current Strategy, should mean a drop in exchange rate risk as debt denominated in EUR will become debt in the domestic currency,
- possibility of using financial derivatives in exchange rate risk management in order to establish a desired currency structure of the debt;

c) as regards the interest rate risk

- separation of interest rate risk management from the refinancing risk management on the domestic and foreign markets. Possible instruments include interest rate swaps and floating-rate bonds as well as inflation-indexed bonds,
- keeping duration of domestic debt between 2.5-3.5 years, which shall ensure the possibility of reaching the objective of minimisation of debt servicing costs in the situation of expectations for the increase in the level of interest rates and strongly steep yield curve,
- the current level of interest rate risk of foreign debt does not restrict minimisation of costs;
- d) as regards the State budget liquidity risk
 - maintenance of a safe level of State budget liquidity with efficient management of liquid funds;
- e) as regards other risks, in particular the credit risk and operational risk,
 - concluding transactions in derivatives with domestic and foreign entities with high creditworthiness,
 - use of instruments limiting the credit risk and solutions allowing for its diversification when concluding transactions in derivatives,
 - State budget liquidity management taking into account the credit risk generated by uncollateralised transactions,
 - reduction of operational risk related to technical infrastructure;
- f) as regards the distribution of debt servicing costs over time
 - reduction of volatility of debt servicing costs in the years covered by the Strategy using available instruments. The policy of issuing new medium- and long-term bonds and of early redemption of maturing debt, including switching auctions, should result in an even distribution of debt servicing costs beyond the horizon of this Strategy,
 - setting the bond coupons at the level close to the yield over the sales period.

VI. STRATEGY TASKS IN A THREE-YEAR HORIZON

The most important tasks of the Strategy resulting from the implementation of adopted objectives include the following:

- 1. Increasing in liquidity, efficiency and transparency of the TS market.
- 2. Development of the system of Primary Dealers.
- 3. Efficient communication with participants of financial markets.
- 4. Development of the system for managing State budget liquidity.

Ad 1. Increasing liquidity, efficiency and transparency of the TS market

Measures aimed at most efficient functioning of the TS market are a permanent task and relate to both primary and secondary market because of their interrelation. Such measures especially relate to such aspects as issuance policy or organisation of the primary and secondary market.

The period covered by this Strategy, despite the delay of Poland's planned entry to the Eurozone, will cover measures aiming at fuller integration of the TS market with the European market. Measures taken by EU authorities, aimed at the removal of obstacles to functioning of financial markets, are a supporting factor (the obstacles have been identified in the report prepared for the European Commission by Giovannini's group⁷).

Government's measures should be aimed at such organisation of the domestic TS market which may make it one of the segments of the European TS market upon adoption of common currency, thus facilitating the financing of borrowing requirements at the lowest possible cost. Experience of the European such spreads towards base securities (i.e. issued by Germany) result mainly from two factors:

- creditworthiness of the country,
- organisation of the TS market in a given country and the infrastructure in operation.

The former factor depends mainly on general macroeconomic policy of the government and on condition of the public finance and thus is not directly affected by the debt management unit, whereas the latter is influenced by the debt management unit as well. It concerns such aspects as issuance policy, organisation of primary market (including primary dealers) and of secondary market (settlement system, TS trading systems).

Measures aimed at increasing the attractiveness of the TS market and facilitating integration of Poland's financial market with the Eurozone market will be carried out through:

• Continuation of the medium- and long-term TS issuance policy aimed at reducing the number of bond issues while gradually increasing their value. The medium- and long-term fixed rate bonds issuance policy implemented since 2003 is to be maintained for the value of single issue to reach the equivalent of EUR 5 billion (the value of EUR 5 billion constitutes a minimum level required for listing the euro denominated bonds on the EuroMTS platform). Currently the EUR 5 billion threshold on the domestic market has been exceeded by 6 bond issues. Ensuring liquidity within conditions of limited supply in the segment of bonds with shortest maturities (two-year zero-coupon bonds) may be implemented by decreasing the number of issues per year. On the euro market Polish issues are traded on NewEuro MTS electronic platform and constitute benchmarks with greatest nominal value and greatest liquidity.

The instruments for fulfilment of this task will include the appropriate schedule of TS issuance, switching auctions, supplementary auctions and reopening of already existing issues.

• Further development of the electronic TS market.

⁷ The 2001 report identified 15 obstacles, the removal of which is the preliminary condition of ensuring fully integrated and effective settlements within the EU market. Ten of those obstacles relate to technical requirements and market practice, two – to taxation, and three relate to legal issues. <u>http://ec.europa.eu/economy_finance/giovannini/reports_en.htm</u>

Development of the electronic TS market will be continued. Since 2004 MTS-CeTO S.A., a company partially owned by the European MTS platform operator, has been the organiser of an electronic platform for TS trading. 27 banks, including 10 foreign banks, which have no branches in Poland, participate in the MTS Poland (as of 10 August 2006). The opportunity to apply the technology used on the majority of European markets facilitates access to the electronic market of Polish TS by foreign banks, which increases the value of transactions concluded on such market, simultaneously increasing transparency.

• Improvement of the TS market infrastructure by removing legal and technical obstacles as well as streamlining the settlement mechanisms.

The domestic TS market is seriously limited as regards foreign investors' participation by the lack of possibility to settle transactions on Polish, domestic TS by one of the clearing houses present on the international market. This has an impact on the assessment of the operational risk related to Polish bonds and on the level of costs incurred by investors connected with transactions settlement (additional charges for the depositary bank).

Measures taken by the National Depository for Securities in cooperation with the European clearinghouse (Euroclear) are to create infrastructure facilitating the settlement of transactions in Polish TS via Euroclear, i.e. the institution present on the majority of European markets. For foreign investors it will mean that the rules governing the functioning of the Polish market will become similar to those applied on the European market.

The increase of efficiency of TS issuance on international financial markets will be first of all carried out through:

- measures aimed at maximal tightening of spreads between the yields on Polish T-bonds and the base bonds on a given market through the appropriate placement of issuance. On the euro market this above all means creation of liquid benchmarks, whereas on other markets, appropriate adjustment of the structure, value and schedule of issuance to the needs of the investors.
- increase in the investor base on respective markets through marketing activities and measures aimed at country rating improvement.

Ad 2. Development of the system of Primary Dealers

The status of Primary Dealers for 2006 was obtained by 15 banks (including 2 foreign banks for the first time). Those banks and the State-owned bank BGK have exclusive access to primary TS market.

The quality of the functioning of the Primary Dealers system is one of the elements of the TS market organisation and thus of the activities aimed at the accomplishment of the objective of minimisation of debt servicing costs. It is essential that the regulations on privileges and obligations of banks-participants and on the issuer's side lead to the establishment of a transparent system ensuring stable TS allocation on the primary market and the building of a liquid and deep secondary market. Continuation of the process of extension of the Primary Dealers system, i.e. increase in the number of banks with great experience in fulfilling the function of Primary Dealers on the developed EU Member States markets, is of great importance. Changes in this respect which took place in primary dealer systems in other EU Member States have proved that the global nature of international banks' operations, experience in the cooperation with government issuers, scale of transactions conducted in TS and a wide portfolio of foreign non-banking customers should positively influence the growth of competition among the banks and the quality of the Primary Dealers system. Participation in the Primary Dealers system of acting globally foreign banks should influence the growth of participation of Primary Dealers in the implementation of operations concerning debt management, including bond issuance on foreign markets and operations with the application of derivatives.

The efficient organisation of the Primary Dealers system should allow:

- to lower the debt servicing costs through reduction of spreads towards Treasury Securities issued by other countries which may result from an insufficient organisational and infrastructural development of the Polish TS market,
- to increase the safety of financing of the State budget borrowing requirements,
- to increase the attractiveness of the Polish market,
- to successfully compete with other government issuers in acquiring funds from institutional investors.

Ad 3. Efficient communication with participants of financial markets

Constant communication with financial markets participants is one of the key conditions of effective debt management. Lack of information provided to market participants, concerning measures and plans of the debt management entity, is perceived as increasing the risk and is included in the TS prices level. On the other hand, the issuer requires feedback including evaluation of instruments applied and plans of financing the borrowing requirements while making decisions. Communication with market participants may be implemented through:

- Dissemination of current information concerning actions in the field of debt management on the part of the issuer, including information about objectives, tasks and debt management instruments as well as plans of financing (website of the Ministry of Finance and news services are main communication tools in this respect).
- Direct meetings with investors and consultations with market participants as regards plans of financing, structure of instruments offered and TS market organisation (including monthly meetings with banks participating in the Primary Dealers system, quarterly meetings with non-banking sector entities, meetings with foreign investors and banks, *ad hoc* meetings and telephone consultations with investors).
- Introduction of regular non-deal roadshows, i.e. series of visits and meetings with foreign investors as a permanent element of promoting Polish bonds among foreign investors. Their aim would above all be to:
 - establish relations with most important investors through regular contact with main international markets participants,
 - separate the process of executing specific issues of foreign bonds from measures promoting such issues (roadshow), which would facilitate issues at most suitable time, irrespective of marketing preparation, and to maintain contact with investors also in case of the lack of issuance of bonds on a given market,
 - promote all Polish Treasury securities, both on foreign and domestic markets,
- Participation in conferences and seminars attended by investors (presentations delivered by the Ministry of Finance representatives and participation in discussions).

Ad 4. Development of the system for managing State budget liquidity

The improvement of the system for liquidity management is an on-going task regarding the measures in respect of infrastructure, procedures and instruments. This task is understood as set of measures intended to secure State budget liquidity while efficiently using liquid funds. Such measures include:

- improvement of projecting budgetary transfers,
- works related to the development of technical and organisational infrastructure,
- streamlining the system of efficient depositing of surpluses,

The State budget liquidity management will be conducted under the conditions specified by:

- the legal framework laid down in the Public Finance Act of 30 June 2005,
- execution of the budget and maintained level of liquid funds denominated in PLN and foreign currencies,

- organisational and technical conditions regarding budgetary accounts and flows,
- the level of credit risk (deposits) and operational risk (related mainly to buy-sell-back transactions) with respect to transactions with BGK,
- the situation on the inter-bank market with respect to liquidity.

VII. INFLUENCING THE PUBLIC FINANCE SECTOR DEBT⁸

VII.1. Changes in legal regulations

The most important legislative changes introduced in 2006 that influence incurring liabilities by public finance sector entities include:

1. Entry into force (on 1 January 2006) of the Public Finance Act of 30 June 2005.

The changes with respect to incurring liabilities introduced by this Act concern mainly local government units and include the following:

- the following items were excluded from a 15% ratio limit (12% if the public State debt exceeds 55% of GDP) on expenditure and outlays related to servicing and repaying liabilities to the revenues planned for a given year:
 - repayment of the principal of credits or loans and redemption of securities incurred or issued to cover the temporary deficit of the local government units budget which occurs during a year,
 - sureties and guarantees granted to local government legal entities who carry out the tasks of local government units using resources from the EU structural funds or the EU Cohesion Fund;
- if local government units apply for a loan or plan to issue securities, the opinion of the regional clearinghouse with respect to the ability to repay this liability must be obtained;
- the management of local government units is obliged to prepare a forecast of total debt outstanding at the end of a budgetary year and for the following years, resulting from the planned and incurred liabilities;
- local government units are obliged to specify in the budget resolution the limit of liabilities resulting from incurred loans and issued securities.
- a provision concerning appropriate application by associations of local government units of the limits: 15% of repayment of liabilities and 60% of debt to revenues.
- 2. Entry into force of the Act of 1 August 2006 amending the act on public aid and restructuring of public health care units.

In relation to incomplete absorption of the limit (PLN 2.2 billion) established *in the Act of 15 April 2005 on public aid and restructuring of public health care units*, the legislator extended the possibility of granting loans from the State budget to independent public health care units in the following way:

- independent public health care units, which have already been granted a loan from the State budget for restructuring, will be allowed to apply for the increase of the loan by the amount no higher than the total due principals and interests for late payment of social security contributions in part financed by the unit in relation to payment of remuneration on account of the so called Act "203",
- research and development units carrying out restructuring basing on the Act on public aid and restructuring of public health care units, which could not apply for a loan, in the light of the provisions of the above mentioned Act, will be allowed to apply for it.

The amendment also provides for new principles concerning redemption of budget loans, enabling the borrowers to make a choice between the following two forms of redemptions:

- on terms similar to current ones, i.e. the unit which obtained the decision on completion of restructuring and which within 5 years repaid 30% of the principal of the loan and interests due shall have the remaining part of the loan written off.
- upon meeting specific conditions (obtaining the final decision on restructuring conditions, repayment of interests for the period until the day of a write off, having claims towards the National Health Fund, the State Treasury or other public finance

⁸ This chapter concerns contracting debts by public finance sector units, excluding the State Treasury.

sector unit on account of liabilities of the Act "203" and waiving those claims), the unit shall have the remaining amount of loan written off.

VII.2. Debt of public finance sector units other than the State Treasury

Data concerning the debt of public finance sector units in recent period both before and after consolidation are presented in Annex 6.

At the end of June 2006 the debt of entities other than the State Treasury amounted to 6.9% of the debt of the public finance sector before consolidation (i.e. 5.3% after the consolidation) as compared to 7.7% (6.0%) at the end of 2005. The basic changes in the debt of the units with the highest debt level are discussed below.

Table 5. Debt of public finance sector entities other than the State Treasury before consolidation within the sector (PLN million, end of period)

Specification	Dec.	Dec.	June 2006*	Change Dec	Dec'05- :l'04	Change June'06- June'05	
opcontoution	2004	2003	2000	PLN million	%	PLN million	%
Debt of other public finance sector entities	37 680.8	36 937.9	35 267.9	-742.9	-2.0%	-1 670.0	-4.5%
1. Central government subsector	3 140.7	2 526.4	2 468.3	-614.2	-19.6%	-58.2	-2.3%
National Health Fund	758.4	400.9	80.2	-357.6	-47.1%	-320.7	-80.0%
State earmarked funds with legal personality (excl. ZUS)	0.7	0.0	0.0	-0.7	-100.0%	0.0	-
State higher schools	214.8	185.1	182.8	-29.7	-13.8%	-2.3	-1.2%
Research and development units	258.9	275.5	280.5	16.6	6.4%	5.0	1.8%
Independent public health care units	938.1	952.7	1 082.9	14.6	1.6%	130.2	13.7%
State cultural units	38.2	34.8	33.3	-3.4	-8.9%	-1.4	-4.2%
Polish Academy of Science (PAN) and units established by it	18.8	7.7	8.7	-11.1	-59.1%	1.0	13.4%
Other State legal entities	912.7	669.8	799.9	-242.9	-26.6%	130.1	19.4%
2. Local government subsector	24 478.9	27 316.7	26 581.4	2 837.9	11.6%	-735.3	-2.7%
2.1. Local government units and their associations	19 104.7	21 268.9	20 644.2	2 164.2	11.3%	-624.7	-2.9%
2.2. Other local subsector	5 374.1	6 047.8	5 937.2	673.7	12.5%	-110.6	-1.8%
Local government earmarked funds with legal personality	76.1	186.9	177.4	110.8	145.7%	-9.5	-5.1%
Independent public health care units	5 230.9	5 789.9	5 686.1	559.0	10.7%	-103.8	-1.8%
Local cultural units	29.3	33.7	36.1	4.4	14.9%	2.4	7.1%
Other local government legal entities	37.9	37.3	37.6	-0.6	-1.5%	0.3	0.9%
3. Social security subsector	10 061.3	7 094.7	6 218.2	-2 966.5	-29.5%	-876.5	-12.4%
Social Insurance Institution (ZUS) and funds managed by ZUS	10 061.3	7 094.7	6 218.2	-2 966.5	-29.5%	-876.5	-12.4%
Agricultural Social Insurance Fund (KRUS) and funds managed by KRUS	0.0	0.0	0.0	0.0	-	0.0	-

* preliminary data as of 25th September 2006.

Memo: Act of 30th June 2005 on Public Finance introduced the division of public finance sector into 3 subsectors.

1) Debt of local government units⁹

In 2005 local government units as a group reached budget deficit of PLN 0.9 billion. Debt of those units increased by PLN 2.2 billion (11.3%) to reach the level of PLN 21.3 billion.

The tendency to incur liabilities especially in the last quarter of the year continued, which is connected with the path of the budget deficit of those units.

⁹ Data concerning local government units excluding local government units' associations.

Period	Specification	1. quarter	2. quarter	3. quarter	4. quarter	Year
2003	Balance	3 287.3	-871.0	-127.9	-4 102.4	-1 813.9
	Change of debt	-294.1	137.4	774.4	1 300.7	1 918.5
2004	Balance	5 174.0	181.0	759.5	-5 997.3	117.2
2004	Change of debt	-697.3	-124.5	856.0	1 793.6	1 827.9
2005	Balance	5 799.0	227.8	853.4	-7 775.4	-895.2
2005	Change of debt	-836.3	-427.5	308.1	3 119.8	2 164.2
2006	Balance	5.8	6 070.7			
2000	Change of debt	-744.8	113.4			

Table 6. Balance and change of debt of local government units on quarterly basis (PLN million)

Table 7. Number of units with a surplus / deficit (end of period)

Period	Deficit		Surplu	us	Total		
	No. of units	PLN billion	No. of units	PLN billion	No. of units	PLN billion	
2003	1 667	-2.8	1 141	1.0	2 808	-1.8	
2004	1 550	-2.8	1 258	2.9	2 808	0.1	
2005	1 273	-3.1	1 535	2.2	2 808	-0.9	
Jan-June 2006	323	-0.3	2 485	6.4	2 808	6.1	

The local government unit's debt structure is dominated by loans, whereas debt related to matured payables has decreased.

Table 8 Debt of local government units	(end of	neriod)
Table 0. Debt of local government units	(enu or	penou)

	Dec 2004		Dec 20	05	June 2006		
Specification	PLN million	%	PLN million	%	PLN million	%	
Total debt of local government units (PLN million)	19 104.7	100.0%	21 181.0	100.0%	20 549.6	100.0%	
1) loans and credits	15 590.0	81.6%	17 634.0	83.3%	16 969.3	82.6%	
2) securities	3 134.4	16.4%	3 282.7	15.5%	3 301.8	16.1%	
3) other debt, of which:	380.3	2.0%	264.3	1.2%	278.4	1.4%	
3.1) matured payables	361.7	1.9%	264.3	1.2%	278.4	1.4%	

The share of foreign debt in the total local government units' debt has gradually increased but remained on a relatively low level. As of the end of June 2006 it was 11.6% as compared to 10.9% at the end of 2005 and 8.1% in 2004. Local government units' debt consists mainly of liabilities with maturity exceeding one year (93.0% in June 2006 as compared to 94.7% at the end of 2005 and 90.0% in 2004).

The relation of total amount of local government units' debt to the revenues of those units' remains significantly below the statutory limit of 60%.

Table 9. Debt of local government units to their revenues

Specification	Dec 2004	Dec 2005	June 2006* ⁾
Debt-to-revenue ratio	20.9%	20.6%	18.1%

^{*)} debt of local government units at the end of June 2006 compared to revenues planned for 2006

In 2005 in 9 local government units (as compared to 16 in 2004) the debt to revenues ratio exceeded 60%. Similarly to the previous years, the main reasons included:

- excessive (in comparison with the financial capacity of a given unit) incurrence of loans for the implementation of investments in previous years,
- lower than planned revenues.

	Group of units	Total No.	otal No. of indebted units					
		of units	of units Debt-to-revenue indicator (i					
			total	i<10%	10% <i<30%< th=""><th>30%<i<50%< th=""><th>50%<i<60%< th=""><th>i>60%</th></i<60%<></th></i<50%<></th></i<30%<>	30% <i<50%< th=""><th>50%<i<60%< th=""><th>i>60%</th></i<60%<></th></i<50%<>	50% <i<60%< th=""><th>i>60%</th></i<60%<>	i>60%
Dec 2004	municipalities	2 413	2 304	727	1 121	389	51	16
	cities with the county status	65	65	9	33	21	2	-
	counties	314	298	150	119	29	-	-
	provinces	16	16	9	6	1	-	-
	Total	2.808	2.683	895	1 279	440	53	16
	municipalities	2 413	2 292	779	1 167	316	21	9
	cities with the county status	65	65	8	37	19	1	-
Dec 2005	counties	314	301	131	132	37	1	-
	provinces	16	16	3	10	3	-	-
	Total	2 808	2 674	921	1 346	375	23	9

Table 10. Number of indebted local government units with respect to debt-to-revenue ratio

As of the end of 2005 the value of potential liabilities of local government units resulting from the guarantees granted increased to PLN 1,587.4 million (as compared to PLN 1,099.3 million at the end of 2004). At the end of first half of 2006 these liabilities totalled PLN 2,338.1 million.

2) Debt of the Social Insurance Institution (ZUS) and funds managed by ZUS

The debt of this group of entities is practically as a whole the result of liabilities incurred by the Social Insurance Fund (FUS).

Table 11. Debt of Social Insurance Institution (ZUS) and funds managed by ZUS (PLN million)

Specification	Dec 2004	Dec 2005	June 2006
Debt of ZUS and funds managed by it, of which:	10 061.3	7 094.7	6 218.2
Loans from commercial banks	4 626.4	4 570.2	5 160.3
Matured payables	5 434.9	2 524.5	1 057.9

The loans contracted by FUS are short-term loans. Apart from contributions and budget subsidies, they constitute an additional source of financing of expenditure for the benefits paid out by FUS.

The matured payables of FUS result mainly from the difficulties related to a timely transfer of a part of pension insurance contributions to open pension funds (OFE) in the years 1999-2002. Since November 2003 these liabilities, along with accrued interest, have been taken over by the State Treasury and subsequently converted into T-bonds (10-year floating rate bonds).

Table 12. Conversion of debt of FUS towards OFE into Treasury Securities (PLN million)

Specification	Dec 2004	Dec 2005	June 2006
Face value of issued T-bonds (outstanding at the end of period)	1 178.4	2 545.8	3 040.5

3) Debt of independent public health care units (SPZOZ)

Matured payables resulting from the failure to meet obligations in a timely manner remain the main component of debt of independent public health care units. At the same time the debt of those units resulting from loans is increasing. The share of liabilities to the entities from outside the public finance sector in the total debt of those entities has systematically decreased (from 58.6% at the end of 2004 to 51.6% at the end of 2005 and 49.2% at the end

of the first half of 2006). The debt of SPZOZ belongs almost exclusively (in approximately 99.8%) to domestic creditors.

Specification	Dec 2004		Dec 2005		June 2006	
	PLN million	%	PLN million	%	PLN million	%
Debt of independent public health care units, of which:	6 169.0	100.0%	6 742.6	100.0%	6 769.0	100.0%
1) securities	12.1	0.2%	3.7	0.1%	27.1	0.4%
2) loans and credits	470.8	7.6%	1 860.9	27.6%	2 529.2	37.4%
3) others, <i>of which</i> :	5 686.1	92.2%	4 878.0	72.3%	4 212.7	62.2%
3.1) matured payables	5 684.4	92.1%	4 875.4	72.3%	4 210.5	62.2%

Table 13. Debt of independent public health care units

Table 14. Debt of independent public health care units (of central and local subsectors)

Specification	Dec 2004		Dec	2005	June 2006		
	PLN million	%	PLN million	PLN million	%	PLN million	
Debt of independent public health care units, of which:	6 169.0	100.0%	6 742.6	100.0%	6 769.0	100.0%	
1) up to one year (including one year)	5 804.9	94.1%	5 126.4	76.0%	4 469.2	66.0%	
2) beyond one year	364.1	5.9%	1 616.2	24.0%	2 300.9	34.0%	
1. Central subsector units	938.1	15.2%	952.7	14.1%	1 082.9	16.0%	
1.1. up to one year (including one year)	931.4	15.1%	842.2	12.5%	916.6	13.5%	
1.2. beyond one year	6.8	0.1%	110.5	1.6%	166.3	2.5%	
2. Local subsector units	5 230.9	84.8%	5 789.9	85.9%	5 686.1	84.0%	
2.1. up to one year (including one year)	4 873.5	79.0%	4 284.2	63.5%	3 549.7	52.4%	
2.2. beyond one year	357.3	5.8%	1 505.7	22.3%	2 136.4	31.6%	

4) Other units

As regards other units, the Agricultural Market Agency (AMA), research and development units, State higher schools and local government earmarked funds with a legal personality belong to the most indebted entities. The debt of the National Health Fund which results from the loans contracted by the Sickness Funds in 2000 from the State budget has been systematically decreasing.

The debt of the AMA results mainly from matured payables to the State Treasury being the result of the guaranteed loans for the financing of the Agency's activities related to interventions on the agricultural market. The debt of research and development units consists mainly of matured payables, the significant part of which (approximately 52% as of the end of June 2006) is the debt to public finance sector entities. The debt of higher schools is dominated by loans (approximately 86% of the whole debt of those institutions at the end of June 2006). It is similar in the case of local government earmarked funds with a legal personality, where the debt resulting from loans exceeded 99% at the end of June 2006.

The debt of other public sector entities is mainly the result of failure to timely meet obligations (matured payables).

Table 15. Debt of other entities

Specification	Dec 20	Dec	2005	June 2006		
	PLN million	%	PLN million	PLN million	%	PLN million
Debt of other entities, of which:	2 345.9	100.0%	1 919.6	100.0%	1 731.2	100.0%
National Health Fund	758.4	32.3%	400.9	20.9%	80.2	4.6%
Agricultural Market Agency	887.0	37.8%	573.5	29.9%	558.0	32.2%
Research and development units	258.9	11.0%	275.5	14.4%	280.5	16.2%
State higher schools	214.8	9.2%	185.1	9.6%	182.8	10.6%
Local government earmarked funds with	70.4	0.00/	400.0	0.70	477.4	10.00/
legal personality	76.1	3.2%	186.9	9.7%	177.4	10.2%
Others	150.6	6.4%	297.7	15.5%	452.3	26.1%

VIII. FORECASTED EFFECTS OF THE STRATEGY IMPLEMENTATION

The forecasted effects of the *Strategy* implementation cover forecasts of public debt and debt servicing costs, as well as changes in the risk profile of the public debt, as the expected result of the implementation of the objective of the *Strategy* with adopted macroeconomic and budgetary assumptions. The most important threats to the *Strategy* implementation have also been presented.

VIII.1. Forecasts of debt level and debt servicing costs

The forecasts of the public debt and the State Treasury debt servicing costs in the years 2006-2009 are presented in Table 16. The forecasts of the debt and debt servicing costs to GDP ratio are illustrated in Chart 1 and 2 respectively.

	2005	2006	2007	2008	2009		
1. State Treasury debt							
a) PLN billion	440.2	483.0	532.1	575.5	621.3		
b) relative to GDP	44.9%	46.6%	48.4%	48.9%	49.1%		
2. Public debt							
a) PLN billion	467.7	510.2	556.5	599.3	645.0		
b) relative to GDP	47.7%	49.2%	50.6%	50.9%	51.0%		
3. General government debt (UE meth	odology, OF	E within the	e sector) ^{*)}				
a) PLN billion	411.4	439.0	474.4	501.9	529.9		
b) relative to GDP	41.9%	42.4%	43.1%	42.7%	41.9%		
4. General government debt (UE meth	odology, OF	E outside t	he sector)				
a) PLN billion	463.9	510.4	562.4	607.4	653.5		
b) relative to GDP	47.3%	49.3%	51.1%	51.6%	51.7%		
5. State Treasury debt servicing costs	(on cash ba	asis)					
a) PLN billion	25.0	27.9	28.1	30.1	33.7		
b) as GDP ratio, of which:	2.5%	2.7%	2.6%	2.6%	2.7%		
- domestic debt	2.2%	2.2%	2.0%	2.0%	2.1%		
- foreign debt	0.4%	0.5%	0.6%	0.5%	0.5%		

Table 16. Forecasts of the public debt and ST debt servicing costs in the years 2006-2009

* Till March 2007 a transition period will have applied during which Poland can include Open Pension Funds (OFE) within the sector of general government; 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).

It is assumed that the public debt will increase by PLN 46.3 billion in 2007 and by PLN 42.8 billion and PLN 45.7 billion respectively in the following two years. In the years 2007-2009 the pace of the increase of the public debt to GDP ratio will be reduced. The ratio will amount to 50.6% in 2007 and is to stabilize within the next two years and amount to 50.9% and 51.0% respectively.

According to the provisions of the *Public Finance Act*, the excess of the 50% public debtto-GDP ratio threshold in 2007 will result in the necessity to adopt by the Council of Ministers the draft State budget act for 2009 in which a State budget deficit to budgetary revenues ratio cannot be higher than the same ratio in 2008. The excess of the first prudential threshold will also result in the constraints on the construction of the budgets of local government units.

In cash terms the planned expenditure for State Treasury debt servicing in 2007 is minimally higher in nominal values and lower in relation to GDP as compared to 2006, despite a significant increase of the State Treasury debt (by approximately PLN 49.1 billion). It results mainly from the following factors:

- significantly lower redemption of 5-year bonds sold at a discount, as compared to 2006;
- decrease in interest rates in 2005 and 2006, which had a significant impact on the discount of 2-year zero-coupon bonds (redeemed in 2007) and the level of coupons of other types of bonds;
- significant reduction of the supply of short-term instruments (T-bills and 2-year zerocoupon bonds) from the second half of 2005, as a result of increased foreign financing; the increase in the foreign debt servicing costs in 2007 has been lower than the decrease in the domestic debt servicing costs in this regard.

In 2008 and 2009 the increase in the debt servicing costs will mainly result from the increase in (domestic and foreign) debt and, in the case of 2009, also from high discount on redeemed fixed-coupon bonds sold in 1999 and 2000 and in 2004.



Chart 1. Public debt to GDP ratio

Chart 2. State Treasury debt servicing costs to GDP ratio



VIII.2. Changes with respect to risk

The changes of the structure of the State Treasury debt with respect to the refinancing risk and interest rate risk of domestic debt as well as the exchange rate risk are illustrated on Charts 3 to 5. It is envisaged that at the end of 2009 the selected risk parameters should reach the following levels:

- average maturity of domestic marketable debt will increase from 3.69 years in mid 2006 to around 3.9-4.2 years, and the maturity of the total debt will remain within the brackets of 4.7 and 5.3 years;
- debt in Treasury bills will remain at the level of approximately PLN 24 billion;
- duration of the domestic marketable debt which in mid 2006 amounted to 2.77 years will remain between 2.5 and 3.5 years;
- the share of foreign debt will decrease from 29.0% in mid 2006 and within the *Strategy* perspective it will remain between 25% and 27%.

Chart 3. Refinancing risk – average maturity of domestic marketable State Treasury debt (upper and lower limit of the forecast range)



Chart 4. Interest rate risk – duration of domestic marketable State Treasury debt (upper and lower limit of the forecast range as well as upper and lower bound)





Chart 5. Exchange rate risk – share of foreign debt in total State Treasury debt

VIII.3. Threats to the Strategy implementation

The threats to the implementation of the *Strategy* are first of all related to:

- 1) The situation in the public finance which is influenced by:
 - the level of the State budget borrowing requirements (the main component of an increase in the public debt);
 - the growth rate of the debt of public finance sector entities other than the State Treasury;
 - the direction of granting sureties and guarantees (sureties and guarantees granted to support traditional sectors of the economy generate a substantial risk of them being executed);
- 2) Development of the macroeconomic situation in Poland other than assumed, particularly the decrease in the growth rate or larger than forecasted growth of prices, increase in interest rates and the volatility of foreign exchange rate.
- 3) Uncertainty related to Poland's entry to the Eurozone and its impact on exchange rate and interest rates.

Annex 1. Glossary

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

$$ATR = \frac{\sum_{r \in R} rNZ_r + \sum_{t \in T} tNS_t + \sum_{j \in J} \frac{1}{12}NI_jI_0}{\sum_{r \in R} NZ_r + \sum_{t \in T} NS_t + \sum_{j \in J} NI_jI_0}$$

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_i (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 t,

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

Benchmark

- (*issue*) TS issue of large amount, 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 practices applied on a given market.
- 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.

Duration – 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*. *Duration* of domestic marketable TS is calculated according to the following formula:

$$Duration = \frac{\sum_{s \in S} \frac{rCFZ_s}{(1+i_s)^s} + \sum_{s \in S} \frac{sCFS_s}{(1+i_s)^s}}{\sum_{s \in S} \frac{CFZ_s}{(1+i_s)^s} + \sum_{s \in S} \frac{CFS_s}{(1+i_s)^s}}$$

where:

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

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

r=r(s), $(r \in R)$ – 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,

 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*.

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

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.

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).

Securitization – a financial operation of exchanging payments from owned assets (e.g. future receivables) to inflow from sale of securities. The purchaser of securities acquires the right to cash flows and related risk while the seller exchanges non-liquid assets into cash.

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.

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. For example, the exchange of payments (swap) often accompanies non-standard bond issuances in the private placement system, the structure of which is tailored to the specific needs of their purchasers.

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

Table 1. Public debt – basic legal regulations

Polish regulations	EU regulations
1. Constitution of the Republic of Poland	1. Treaty on European Union
 ban on contracting loans and granting guarantees and sureties resulting in the public debt exceeding 3/5 of gross domestic product (Article 216(5)); Act on Public Finances 	stock of general government debt and restrictions on general government deficit constitute the criterion on the basis of which the Commission examines the compliance with budgetary discipline in the Member States (Article 104); specifies the Excessive Deficit
➢ regulations on public debt: definitions, basic	Procedure (EDP);
principles of issuing public debt and debt management, prudential and remedial procedures applied to public debt levels (50%, 55%, 60% of	2. Protocol on the excessive deficit procedure annexed to the Treaty on European Union
GDP).> definition of the scope of sector of public finance;	 definition of general government debt and reference value of debt to GDP ratio (set at 60%);
	 Council Regulation on the application of the Protocol on the Excessive Deficit Procedure (EDP) annexed to the Treaty establishing the European Community
	 definition of general government debt, specifying categories of liabilities which constitute it;
	4. The European System of Accounts (ESA'95)
	 definition of categories of financial liabilities,
	 definition of general government;

Table 2. Limits of the Public finance Act on public debt to GDP ratio

Legal procedures regarding limits on public debt to GDP ratio are as follows: 1) the ratio in year *x* is greater than 50%, and not greater than 55%: a. the state budget deficit to state budget revenue ratio in the draft budget act adopted by the Council of Ministers for the year x+2 cannot be higher than in the year x+1, 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; the ratio in year x is greater than 55%, and lower than 60%: 2) a. the level of state deficit in adopted draft budget act for the year x+2 must ensure a decrease in the ratio of the State Treasury debt to GDP as compared with the ratio announced for the year x, 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) : 0.05where: GDP (gross domestic product) and PD (public debt) are amounts announced for the previous budget year (year x); c. the Council of Ministers presents a remedial programme ensuring a fall in the ratio of public debt to GDP: 3) the ratio in year x is equal to or greater than 60%: a. both the state budget and budgets of local government units for the year x+2 must at least be balanced; b. a ban on granting new sureties and guarantees by public finance sector entities is introduced; the Council of Ministers presents to the Parliament a remedial programme with the main C. objective to prepare and implement actions aimed at reducing the public debt-to-GDP ratio below 60%.

POLISH REGULATIONS	UE REGULATIONS
public debt	general government debt
1) scope of	the sector ¹⁾
 Act on Public Finance determines a limited catalogue of entities included in the public finance sector; 	 sector of general government is defined in ESA95²; no limited catalogue of entities has been defined;
differences in the scope of se	ctor depending on regulations
a) Open Pension Funds (OFE)	
 are outside the public finance sector; 	 till March 2007 a transition period applies during which Poland can classify OFE within the general government 3);
b) research and development units	
are within the public finance sector;	are excluded from the sector of general government;
2) liabilities which c	onstitute 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 of	lepending on regulations
matured payables	- ⁴⁾
3) poten	tial debt
Differences in treatment of pot	ential debt 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.	 EU limits do not take directly into account potential debt generated by issued sureties and guarantees; when specific criteria are met (in line with ESA'95 rules) potential debt should be treated as debt assumed by the entity which issued surety or guarantee.
 Polish Central Statistical Office holds the responsit with EU regulations). 	bility for the scope of general government sector (in line

Table 3. Main differences in Polish and EU definitions of public debt

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 activities of an entity and 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);

<sup>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).</sup>

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.

Table 4. Differences in Polish and EU definitions o	public debt in the years 2004-2005 (% GDF	(י
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Wyszczególnienie	2004	2005
Public debt	46.8%	47.7%
differences in the scope of sector, including:	-4.0%	-5.2%
Open pensions fund investments in general government securities	-4.0%	-5.3%
debt of research and development units (excluding matured payables)	0.0%	0.0%
Debt of Domestic Road Fund	0.0%	0.1%
differences in liabilities	-1.0%	-0.6%
matured payables	-1.0%	-0.6%
differences in treatment of potential debt		
debt assumption	0.0%	0.0%
General government debt (EDP)	41.8%	41.9%

Annex 3. Institutional framework for public debt management in the EU Member States

There is no unified institutional model of State Treasury debt management in the EU Member States. An analysis of applied solutions enables to identify three basic types of organizational arrangements:

- the bank model in which the debt management remains with the central bank,
- the government model in which the debt management remains within the structure of one ministry (usually the Ministry of Finance or State Treasury),
- the agency model in which issues of debt management are entrusted to a specialized institution (agency) whose fundamental (but sometimes not sole) task is the debt management.

The bank model is the most strongly criticized one. This criticism is the result of a potential conflict of interest that 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 not exclusively there is being used¹⁰. 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 associated with placing 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 given countries are significantly different, 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

¹⁰ The government model is used in such countries as Spain or Italy.

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,
- 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).

Entrusting debt management to a specialized institution does not mean that the government (Minister of Finance) loses control over this area of activities. The assignment of the agency is just to professionally carry out guidelines specified by the Minister of Finance and its activities should be 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 25 Member States of the enlarged EU the agency model is applied (in 11 out of 15 Member States before the enlargement).

Country	Model	Institution name		
Austria		Österreichische Bundesfinanzierungsagentur		
Belgium		Agence de la Dette (Agentschap van de Schuld)		
Finland	V A D	Valtiokonttori		
France		Agence France Trésor		
Greece		Debt Office		
the Netherlands		Agentschap van het ministerie van Financiën		
Ireland		National Treasury Management Agency		
Latvia	Agency	Valsts Kase		
Germany		Finanzagentur GmbH		
Portugal		Instituto de Gestão do Crédito Público		
Slovakia		Štátna pokladnica		
Sweden		Riksgäldskontoret		
Hungary		Magyar Állampapír		
United Kingdom		Debt Management Office		
Cyprus		Κεντρικη Τραπεζα Τησ Κυπρου		
Denmark	Bank	Dansk Nationalbanken		
Malta		Central Bank of Malta		
The Czech Republic		Ministerstvo financí		
Estonia		Rahandusministeerium		
Spain		Ministerio de Economia		
Lithuania	Government	Finansų Ministerija		
Luxembourg	Government	Ministère des Finances		
Poland		Ministerstwo Finansów		
Slovenia		Ministrstvo za finance		
Italy		Ministero dell'Ecomomia e delle Finanze		

Table 5. Institutions responsible for debt management the EU Member States

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

		2004			2005	
	General	General	10-year	General	General	10-year
	government net	government	rate ¹⁾	government net	government	rate ¹⁾
	borrowing/net	debt		borrowing/net	debt	
	lending	%GDP		lending	%GDP	
	%GDP			%GDP		
Greece	-6.9	108.5	3.77	-4.5	107.5	3.57
Italy	-3.4	103.8	3.79	-4.1	106.4	3.55
Belgium	0.0	94.7	3.66	0.1	93.3	3.39
Malta	-5.1	76.2	4.70	-3.3	74.7	4.39
Cyprus	-4.1	71.7	6.26	-2.4	70.3	4.09
Germany	-3.7	65.5	3.58	-3.3	67.7	3.34
France	-3.7	64.4	3.64	-2.9	66.8	3.38
Portugal	-3.2	58.7	3.64	-6.0	63.9	3.46
Austria	-1.1	63.6	3.66	-1.5	62.9	3.36
Hungary	-5.4	57.1	7.17	-6.1	58.4	6.89
The Netherlands	-1.9	52.6	3.63	-0.3	52.9	3.35
Sweden	1.8	50.5	3.90	2.9	50.3	3.37
Spain	-0.1	46.4	3.64	1.1	43.2	3.37
The United	-3.3	40.8	4.58	-3.6	42.8	4.27
Kingdom						
Poland ²⁾	-3.9	41.8	6.00	-2.5	41.9	5.16
Finland	2.3	44.3	3.68	2.6	41.1	3.30
Denmark	2.7	42.6	3.86	4.9	35.8	3.35
Slovakia	-3.0	41.6	4.58	-2.9	34.5	3.69
The Czech	-2.9	30.6	4.05	-2.6	30.5	3.61
Republic						
Slovenia	-2.3	29.5	4.07	-1.8	29.1	3.62
Ireland	1.5	29.4	3.62	1.0	27.6	3.36
Lithuania	-1.5	19.5	3.95	-0.5	18.7	3.79
Latvia	-0.9	14.6	4.58	0.2	11.9	3.59
Luxembourg	-1.1	6.6	3.64	-1.9	6.2	3.40
Estonia	1.5	5.4	4.28	1.6	4.8	3.94
UE 25	-2.6	62.4		-2.3	63.4	
Euro zone	-2.8	69.8		-2.4	70.8	

¹⁾ Harmonized long-term interest rates for convergence purposes, i.e. rates on the secondary market (with the exception of Cyprus and Latvia – 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 over 5 years; Statistics Pocket Book, ECB.

²⁾ Data for Poland – Ministry of Finance; other data Eurostat Euro-indicators, News Release 48/2006 of April 24 2006;

Annex 5. Long-term foreign currency government debt rating in the EU Member States

As of August 17, 2006

	Moody's	Standard&Poor's	Fitch
Austria	Aaa	AAA	AAA
Belgium	Aa1	AA+	AA+
Cyprus	A2	A	A+
The Czech Republic	A1	A-	А
Denmark	Aaa	AAA	AAA
Estonia	A1	A	А
Finland	Aaa	AAA	AAA
France	Aaa	AAA	AAA
Greece	A1	A	А
Spain	Aaa	AAA	AAA
The Netherlands	Aaa	AAA	AAA
Irland	Aaa	AAA	AAA
Lithuania	A3	A	A-
Latvia	A2	A-	A-
Luxembourg	Aaa	AAA	AAA
Malta	Aa1	A	А
Germany	Aaa	AAA	AAA
Poland	A2	BBB+	BBB+
Portugal	Aa2	AA-	AA
Slovakia	A2	A	А
Slovenia	Aa2	AA	AA
Sweden	Aaa	AAA	AAA
Hungary	A1	BBB+	BBB+
The United Kingdom	Aaa	AAA	AAA
Italy	Aa2	AA-	AA

Annex 6. Debt of the public finance sector and State Treasury debt in Poland

Table 6. Debt of the public finance sector before consolidation

Specification	Dec 2004	structure	Dec 2005	structure	Jun 2006**	structure	Change De	c 05-Dec04	Change Ju	n06-Jun05
	PLN million	%	PLN million	%						
Debt of the public finance sector before consolidation	440 541.1	100.0%	477 105.3	100.0%	512 259.7	100.0%	36 564.2	8.3%	35 154.4	7.4%
I. Central government subsector	406 001.0	92.2%	442 693.8	92.8%	479 460.1	93.6%	36 692.9	9.0%	36 766.2	8.3%
1. Debt of the State Treasury *	402 860.3	91.4%	440 167.4	92.3%	476 991.8	93.1%	37 307.1	9.3%	36 824.4	8.4%
2. Other central government entities	3 140.7	0.7%	2 526.4	0.5%	2 468.3	0.5%	-614.2	-19.6%	-58.2	-2.3%
2.1. National Health Fund	758.4	0.2%	400.9	0.1%	80.2	0.0%	-357.6	-47.1%	-320.7	-80.0%
2.2. State earmarked funds with legal personality	0.7	0.0%	0.0	0.0%	0.0	0.0%	-0.7	-100.0%	0.0	-
2.3. State higher schools	214.8	0.0%	185.1	0.0%	182.8	0.0%	-29.7	-13.8%	-2.3	-1.2%
2.4. Research and development units	258.9	0.1%	275.5	0.1%	280.5	0.1%	16.6	6.4%	5.0	1.8%
2.5. Independent public health care units	938.1	0.2%	952.7	0.2%	1 082.9	0.2%	14.6	1.6%	130.2	13.7%
2.6. State cultural units	38.2	0.0%	34.8	0.0%	33.3	0.0%	-3.4	-8.9%	-1.4	-4.2%
2.7. Polish Academy of Science (PAN) and units established by it	18.8	0.0%	7.7	0.0%	8.7	0.0%	-11.1	-59.1%	1.0	13.4%
2.8. Other State legal entities established under separate acts for public tasks execution, with the exception of enterprises, banks and companies organized under commercial law	912.7	0.2%	669.8	0.1%	799.9	0.2%	-242.9	-26.6%	130.1	19.4%
II. Local government subsector	24 478.9	5.6%	27 316.7	5.7%	26 581.4	5.2%	2 837.9	11.6%	-735.3	-2.7%
1. Local government units and their associations	19 104.7	4.3%	21 268.9	4.5%	20 644.2	4.0%	2 164.2	11.3%	-624.7	-2.9%
2. Other local government entities	5 374.1	1.2%	6 047.8	1.3%	5 937.2	1.2%	673.7	12.5%	-110.6	-1.8%
2.1. Local government earmarked funds with legal personality	76.1	0.0%	186.9	0.0%	177.4	0.0%	110.8	145.7%	-9.5	-5.1%
2.2. Independent public health care units	5 230.9	1.2%	5 789.9	1.2%	5 686.1	1.1%	559.0	10.7%	-103.8	-1.8%
2.3. Local cultural units	29.3	0.0%	33.7	0.0%	36.1	0.0%	4.4	14.9%	2.4	7.1%
2.4. Other local legal entities established under separate acts for public tasks execution, with the exception of enterprises, banks and companies organized under commercial law	37.9	0.0%	37.3	0.0%	37.6	0.0%	-0.6	-1.5%	0.3	0.9%
III. Social security subsector	10 061.3	2.3%	7 094.7	1.5%	6 218.2	1.2%	-2 966.5	-29.5%	-876.5	-12.4%
3.1. ZUS and ZUS-managed funds	10 061.3	2.3%	7 094.7	1.5%	6 218.2	1.2%	-2 966.5	-29.5%	-876.5	-12.4%
3.2. KRUS and KRUS-managed funds	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	-	0.0	-

* Act of 30th June 2005 on Public Finance introduced the division of public finance sector into 3 subsectors. President of KRUS is the representative of the central administration without legal status, hence under legal status of the State Treasury; In data on State Treasury debt only debt of KRUS is included under matured payables of State Treasury. In data on public debt, debt of KRUS is included in the social security subsector.

Specification	Dec 2004	structure	Dec 2005	structure	June 2006**	structure	Change Dec'05- Dec'04		Change June'06- June'05	
	PLN million	%	PLN million	%	PLN million	%	PLN million	%	PLN million	%
Debt of the public finance sector after consolidation	432 284.4	100.0%	467 749.1	100.0%	501 879.1	100.0%	35 464.7	8.2%	34 129.9	7.3%
I. Central government subsector	403 827.4	93.4%	440 484.7	94.2%	476 335.1	94.9%	36 657.3	9.1%	35 850.4	8.1%
1. Debt of the State Treasury	402 233.0	93.0%	439 567.0	94.0%	475 292.1	94.7%	37 334.0	9.3%	35 725.1	8.1%
2. Other central government entities	1 594.4	0.4%	917.7	0.2%	1 043.0	0.2%	-676.7	-42.4%	125.3	13.7%
2.1. National Health Fund	5.6	0.0%	0.0	0.0%	0.0	0.0%	-5.6	-100.0%	0.0	-
2.2. State earmarked funds with legal personality	0.7	0.0%	0.0	0.0%	0.0	0.0%	-0.7	-100.0%	0.0	-
2.3. State higher schools	162.3	0.0%	146.6	0.0%	152.0	0.0%	-15.8	-9.7%	5.4	3.7%
2.4. Research and development units	145.8	0.0%	152.9	0.0%	160.4	0.0%	7.0	4.8%	7.5	4.9%
2.5. Independent public health care units	633.1	0.1%	525.7	0.1%	593.4	0.1%	-107.4	-17.0%	67.7	12.9%
2.6. State cultural units	33.9	0.0%	34.5	0.0%	30.4	0.0%	0.6	1.8%	-4.0	-11.7%
2.7. Polish Academy of Science (PAN) and units established by it	12.3	0.0%	3.2	0.0%	5.0	0.0%	-9.1	-74.0%	1.8	57.8%
2.8. Other State legal entities established under separate acts for public tasks execution, with the exception of enterprises, banks and companies organized under commercial law	600.8	0.1%	54.9	0.0%	101.8	0.0%	-545.8	-90.9%	46.9	85.4%
II. Local government subsector	18 395.7	4.3%	20 169.7	4.3%	19 325.8	3.9%	1 774.0	9.6%	-843.9	-4.2%
1. Local government units and their associations	15 359.3	3.6%	17 155.7	3.7%	16 528.6	3.3%	1 796.4	11.7%	-627.1	-3.7%
2. Other local government entities	3 036.4	0.7%	3 014.0	0.6%	2 797.2	0.6%	-22.4	-0.7%	-216.8	-7.2%
2.1. Local government earmarked funds with legal personality	3.3	0.0%	1.3	0.0%	1.6	0.0%	-1.9	-59.2%	0.2	17.4%
2.2. Independent public health care units	2 980.8	0.7%	2 950.6	0.6%	2 733.7	0.5%	-30.3	-1.0%	-216.9	-7.4%
2.3. Local cultural units	15.6	0.0%	25.5	0.0%	25.0	0.0%	9.9	63.9%	-0.5	-1.9%
2.4. Other local legal entities established under separate acts for public tasks execution, with the exception of enterprises, banks and companies organized under commercial law	36.7	0.0%	36.6	0.0%	36.9	0.0%	-0.1	-0.2%	0.3	0.8%
III. Social security subsector	10 061.3	2.3%	7 094.7	1.5%	6 218.2	1.2%	-2 966.5	-29.5%	-876.5	-12.4%
3.1. ZUS and ZUS-managed funds	10 061.3	2.3%	7 094.7	1.5%	6 218.2	1.2%	-2 966.5	-29.5%	-876.5	-12.4%
3.2. KRUS and KRUS-managed funds	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	-	0.0	-

Table 7. Debt of the public finance sector after consolidation (public debt)

* preliminary data as of 25 September 2006

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

	Dec 2004	Dec 2005	Jun 2006	structure Jun 2006 %%	change Dec 2005 - Dec 2004 m PLN %%		char Jun 2006 - m PLN	nge Dec 2005 %%
State Treasury debt ¹⁾	402.860,3	440.167,4	476.991,8	100,0%	37.307,1	5,9%	36.824,4	8,4%
I. Domestic debt	291.658,5	315.478,6	338.614,4	71,0%	23.820,0	8,6%	23.135,8	7,3%
1. Treasury Securities	286.887,7	311.965,8	336.120,4	70,5%	25.078,1	10,2%	24.154,6	7,7%
1.1. Marketable Treasury Securities	273.500,7	302.780,8	328.099,6	68,8%	29.280,1	-8,2%	25.318,8	8,4%
Treasury bills	46.900,0	24.400,0	20.400,0	4,3%	-22.500,0	110,4%	-4.000,0	-16,4%
marketable bonds	226.600,7	278.380,8	307.699,6	64,5%	51.780,1	18,0%	29.318,8	10,5%
marketable fixed-income bonds	200.905,7	241.756,3	266.179,2	55,8%	40.850,7	2,1%	24.422,9	10,1%
2-year zerocoupon bonds	52.904,4	57.148,1	60.959,0	12,8%	4.243,7	30,1%	3.810,9	6,7%
5-year fixed-income bonds	70.785,3	86.728,3	87.929,9	18,4%	15.943,1	0,9%	1.201,6	1,4%
5-year fixed-income retail bonds	2.588,6	3.199,9	3.236,0	0,7%	611,3	658,5%	36,2	1,1%
10-year fixed-income bonds	68.654,9	85.700,3	103.574,6	21,7%	17.045,4	4,4%	17.874,3	20,9%
20-year fixed-income bonds	3.404,3	6.411,5	7.911,5	1,7%	3.007,2	0,0%	1.500,0	23,4%
10-year fixed-income bonds - debt conversion ²⁾	2.568,3	2.568,3	2.568,3	0,5%	0,0	346,4%	0,0	0,0%
marketable floating rate notes	23.049,0	31.945,2	35.292,3	7,4%	8.896,2	0,4%	3.347,1	10,5%
3-year retail FRN	3.400,2	3.496,1	3.162,2	0,7%	95,9	0,0%	-333,9	-9,5%
3-year FRN	6.738,2	6.738,2	6.738,2	1,4%	0,0	117,7%	0,0	0,0%
7-year FRN	1.130,6	9.063,5	13.363,5	2,8%	7.932,9	76,7%	4.300,0	47,4%
10-year FRN	11.030,0	11.897,5	11.278,4	2,4%	867,5	0,0%	-619,1	-5,2%
	750,0	750,0	750,0	0,2%	0,0	271,1%	0,0	0,0%
marketable index-linked bonds	2.646,0	4.679,2	6.228,1	1,3%	2.033,2	76,8%	1.548,9	33,1%
12-year index-linked	2.646,0	4.679,2	6.228,1	1,3%	2.033,2	-16,4%	1.548,9	33,1%
1. 2. Savings bonds	9.053,6	8.619,6	7.495,8	1,6%	-434,1	-2,4%	-1.123,7	-13,0%
2-year savings bonds	8.146,6	7.928,0	6.839,0	1,4%	-218,6	-3,6%	-1.088,9	-13,7%
4-year savings bonds	852,5	561,3	508,4	0,1%	-291,2	8,9%	-52,9	-9,4%
10-year savings bonds	54,5	130,3	148,4	0,0%	75,8	-6908,4%	18,1	13,9%
1.3. Non-marketable T-Bonds	4.333,3	565,5	525,0	0,1%	-3.767,8	-85,3%	-40,5	-7,2%
restructuring bonds	3.696,1	0,0	0,0	0,0%	-3.696,1	-1,9%	0,0	#DZIEL/0!
Bonds issued for Bank BGŻ S.A.	637,1	565,5	525,0	0,1%	-71,7	-197,5%	-40,5	-7,2%
2. Other domestic ST debt	4.770.9	3.512.8	2.494.0	0,5%	-1.258,1	0,0%	-1.018.8	-29,0%
automobile prepayments	3,2	3,2	3,2	0,0%	0,0	-2719,7%	0,0	-1,1%
matured payables ³⁾	98,7	12,0	16,5	0,0%	-86,7	-173,7%	4,4	36,7%
liabilities arising from not increasing wages in the budgetary sector	369,0	197,5	174,4	0,0%	-171,4	-271,0%	-23,2	-11,7%
Employment Fund debt ⁴⁾	4.300,0	3.300,0	2.300,0	0,5%	-1.000,0	0,0%	-1.000,0	-30,3%
II. Foreign debt	111.201,7	124.688,8	138.377,4	29,0%	13.487,0	31,8%	13.688,6	11,0%
1 Treasury Securities (international mkts.)	48 461 9	83 862 0	98 370 3	20.6%	35 400 1	0.7%	14 508 3	17.3%
Brady Bonds	3 568 3	3 891 5	3 796 4	0.8%	323.2	983.0%	-95.1	-2.4%
international bonds	44.893,6	79.970,5	94.573,9	19,8%	35.076,9	-48,8%	14.603,4	18,3%
2 Foreign Loans	62 730 0	40 826 8	40 007 1	8.4%	-21 913 1	-40 0%	-810 7	-2.0%
Paris Club	50 254 6	25 153 5	22 709 0	4.8%	-25 101 1	6.4%	-2 444 5	_9.7%
International Financial Institutions	12 032 8	15 260 7	17 009 5	3.6%	3 228 0	24.5%	1 748 8	11.5%
of which: European Investment Bank	6.387 8	9.340 4	10.980 2	2.3%	2.952 7	-0.6%	1.639.8	17.6%
other creditors	452.5	412.6	288.5	0,1%	-39.9	0,0%	-124.0	-30.1%

1) Treasury Securities by original maturity

2) On September 30 and December 29, 1999, convertible bonds, USD bonds for buy-back of Brady bonds, long-term liabilities towards NBP and bonds issued to implement the agreement with the Paris Club were converted to marketable bonds having redemption dates of - April 29, 2002 (KO0402); December 22, 2002 (TK1202); April 22, 2003 (CK0403); July 22, 2004 (PK0704) and August 22, 2008 (DK0809).

3) item includes matured liabilities of budgetary units, budgetary entities, ancillary entities and State earmarked funds without legal standing; debt in this item includes *inter alia* liabilities towards banks arising from ref 4) arising from loans drawn in commercial banks

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

	Dec 2004	Dec 2005	Jun 2006	structure	change		chan	ge
				Jun 2006 %%	m PLN %%		Jun 2006 - I m PLN	0ec 2005 %%
Domestic State Treasury debt	291.658,5	315.478,6	338.614,4	100,0%	23.820,0	8,2%	23.135,8	7,3%
DOMESTIC BANKING SECTOR	85.762,4	75.017,8	82.206,2	24,3%	-10.744,6	-12,5%	7.188,3	9,6%
Treasury securities	81.462,4	71.717,8	79.906,2	23,6%	-9.744,6	-12,0%	8.188,3	11,4%
Marketable Treasury securities	77.129,1	71.152,4	79.381,2	23,4%	-5.976,7	-7,7%	8.228,8	11,6%
Treasury bills	19.456,3	9.756,6	9.652,4	2,9%	-9.699,7	-49,9%	-104,2	-1,1%
2-year zerocoupon bonds	20.787,9	17.048,6	19.742,9	5,8%	-3.739,3	-18,0%	2.694,3	15,8%
3-year retail FRN	227,6	627,2	639,4	0,2%	399,6	175,5%	12,2	1,9%
3-year FRN	5.266,7	4.107,4	2.943,1	0,9%	-1.159,3	-22,0%	-1.164,3	-28,3%
5-year fixed-income bonds	19.855,7	21.325,8	22.225,7	6,6%	1.4/0,1	7,4%	899,8	4,2%
7-year fixed-income retail bonds	10,4	91,9 2 528 6	90,1 3 397 7	0,0%	2 402 3	1902 7%	3,2 869 1	3,4% 34.4%
10-year FRN	3.302,0	2.826,3	3.019,0	0,9%	-475,7	-14,4%	192,7	6,8%
10-year fixed-income bonds	7.426,7	12.366,3	17.012,0	5,0%	4.939,6	66,5%	4.645,7	37,6%
10-year fixed-income bonds - debt conversion	146,6	79,1	135,2	0,0%	-67,5	-46,0%	56,1	71,0%
private placement FRN	15,0	15,0	15,0	0,0%	0,0	0,0%	0,0	0,0%
12-year index-linked	216,1	16,3	25,5	0,0%	-199,7	-92,4%	9,1	56,0%
20-year fixed-income bonds	291,9	363,1	478,3	0,1%	/1,2	24,4%	115,2	31,7%
Non-marketable 1-Bonds	4.333,3	565,5	525,0	0,2%	-3./6/,8	-87,0%	-40,5	-7,2%
Other demostic ST debt	4 200 0	2 200,0	525,0	0,2%	-/ 1,/	-11,3%	-40,5	-1,2%
ourier domestic ST debi	4.300,0	3.300,0	2.300,0	0,7%	-1.000,0	-23,3%	-1.000,0	-30,3%
Employment Fund debt	4.300.0	3.300.0	2.300.0	0,0%	-1.000.0	-23.3%	-1.000.0	-30.3%
DOMESTIC NON-BANKING SECTOR	143.578.2	171.529.3	186.786.9	55.2%	27.951.1	19.5%	15.257.6	8.9%
Trasury securities	143 107 4	171 316 6	186 592 9	55.1%	28 209 2	19.7%	15 276 4	8.9%
Marketable Treasury accurities	124 059 2	162 702 0	170 104 5	52.0%	20.200,2	21 40/	16 400 6	10 10/
Treasury hills	27 176 3	102.703,9	179.104,5	3.2%	-12 807 2	21,470 _47.1%	-3 682 2	-25.6%
2-vear zerocoupon bonds	22.092.5	33.585.9	36.664.2	10.8%	11.493.4	52.0%	3.078.3	9.2%
3-year retail FRN	3.163,8	2.863,4	2.518,2	0,7%	-300,4	-9,5%	-345,2	-12,1%
3-year FRN	1.469,3	2.626,8	3.789,9	1,1%	1.157,4	78,8%	1.163,1	44,3%
5-year fixed-income bonds	32.315,7	41.574,1	43.743,8	12,9%	9.258,4	28,6%	2.169,7	5,2%
5-year fixed-income retail bonds	2.576,2	3.102,3	3.135,3	0,9%	526,1	20,4%	33,0	1,1%
7-year FRN	1.001,9	6.527,8	9.961,7	2,9%	5.526,0	551,6%	3.433,9	52,6%
10-year fixed income bonds	7.014,7	0.000,1 41.761.0	8.048,0 52 307 2	2,4% 15.5%	1.345,5	17,9%	-011,0 10,636,2	-9,2% 25.5%
10-year fixed-income bonds - debt conversion	2 421 7	2 489 2	2 433 1	0.7%	67.5	2.8%	-56 1	-2.3%
private placement FRN	585,0	735,0	735,0	0,2%	150,0	25,6%	0,0	0,0%
12-year index-linked	214,7	508,4	861,6	0,3%	293,6	136,7%	353,3	69,5%
20-year fixed-income bonds	2.469,9	3.700,8	4.129,1	1,2%	1.230,9	49,8%	428,3	11,6%
Savings bonds	9.049,1	8.612,7	7.488,5	2,2%	-436,4	-4,8%	-1.124,2	-13,1%
2-year savings bonds	8.142,8	7.921,9	6.832,6	2,0%	-220,9	-2,7%	-1.089,4	-13,8%
4-year savings bonds	851,8	560,6	507,6	0,1%	-291,2	-34,2%	-52,9	-9,4%
Other demostic ST debt	470.0	130,2	140,0	0,070	750.1	54 00/	10,1	0 00/
	470,9	212,0	194,0	0,1%	-200,1	-04,0%	-10,0	-0,0 %
matured pavables	98.7	3,2 12.0	3,2 16.5	0,0%	-86.7	-87.8%	4.4	-1,1%
liabilities arising from not increasing wages in the budgetary sector	369,0	197,5	174,4	0,1%	-171,4	-46,5%	-23,2	-11,7%
TS'S HELD BY FOREIGN INVESTORS	62.317,9	68.931,4	69.621,3	20,6%	6.613,5	10,6%	689,9	1,0%
Treasury securities	62.317,9	68.931,4	69.621,3	20,6%	6.613,5	10,6%	689,9	1,0%
Marketable Treasury securities	62.313.4	68.924.5	69.614.0	20.6%	6.611.2	10.6%	689,5	1,0%
Treasury bills	267,5	274,3	60,7	0,0%	6,8	2,5%	-213,6	-77,9%
2-year zerocoupon bonds	10.023,9	6.513,5	4.551,8	1,3%	-3.510,4	-35,0%	-1.961,7	-30,1%
3-year retail FRN	8,7	5,4	4,6	0,0%	-3,3	-37,5%	-0,8	-15,3%
3-year FRN	2,1	4,0	5,2	0,0%	1,9	87,4%	1,3	31,7%
5-year fixed-income bonds	18.613,9	23.828,4	21.960,4	6,5%	5.214,5	28,0%	-1.868,0	-7,8%
5-year fixed-income retail bonds	2,0	5,6	5,7	0,0%	3,6	176,2%	0,0	0,8%
7-year FRN	2,5	7,1	4,1	0,0%	4,6	181,8%	-3,0	-41,8%
10-year FRN	213,3	211,0	210,8	0,1%	-2,3	-1,1%	-0,2	-0,1%
10-year fixed-income bonds	30.171,7	31.573,0	34.165,4	10,1%	1.401,3	4,6%	2.592,4	8,2%
private placement FRN	150,0	0,0	0,0	0,0%	-150,0	-100,0%	0,0	-
12-year index-linked	2.215,3	4.154,5	5.341,0	1,6%	1.939,3	87,5%	1.186,5	28,6%
20-year lixed-income bonds	642,5	2.347,6	3.304,1	1,0%	1.705,1	205,4%	956,5	40,7%
Savings bonds	4,6	6,9	7,3	0,0%	2,3	51,0%	0,5	5,8%
2-year savings borrus 4-year savings bonds	3,8 0.7	0,0 0.7	0,4 0.9	0,0%	2,3	-2 N%	0,4	1,170
10-year savings bonds	0,0	0,1	0,0	0,0%	0,0	215,6%	0,0	0,0%

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