

**The Public Finance Sector  
DEBT MANAGEMENT STRATEGY  
in the years 2003 - 05**

**Warsaw, 28 September 2002**



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## I. INTRODUCTION

The *Public Finance Sector Debt Management Strategy in the years 2003 - 05* covers the strategy of managing the debt of the State Treasury and the strategy of influencing the debt of the public finance sector. The differentiation between these two terms results from the fact that the Minister of Finance (responsible for public debt management and control of its level) may directly influence only the debt of the State Treasury. The Minister of Finance does not directly manage the debt of other entities, including local governments. Only indirect actions, which reduce the debt level and affect its characteristics, are possible with regard to this sector.

The *Strategy* evaluates the achievement of the debt management objectives in 2001 and in the first half of 2002, defines the objectives, tasks, and tools of the strategy implementation for the years 2003-2005, and presents forecasts concerning the debt level, structure, and service costs.

It presents the Polish and the European Union's legal regulations concerning public debt. This was due to the approaching date of Poland's accession to the EU and the Economic and Currency Union (monetary union), the possibility of debt/GDP ratio exceeding the threshold of 50%, and the risk of it reaching the level of 55% in the years 2004-05. Exceeding these thresholds will mean the necessity of applying successive prudential and remedial procedures - in accordance with the *Public Finance Act*. The reasons for such risks have also been explained in the *Strategy*.

The problems of risk related to debt level and costs of its service have been singled out and an analysis of such risk as compared with the practice in the EU Member States and in other candidate countries has been made. The adoption of bracket assumptions concerning the level of budget deficits, proceeds from privatisation, foreign exchange rates and interest rates evolution in the years 2003-04 allowed to emphasise the risks to debt level, its relation to GDP, and service costs, relating to the realisation of the warning scenario.

Within the time horizon covered by the *Strategy*, Poland will become an EU member and should declare accession to the monetary union. These developments will add a new quality to debt management because they will reduce, to a significant extent, the problem of the Paris Club repayments which will pile up in the years 2004-09. This will be due mainly to Poland's increased credit rating, what will enable to make a wider use of the international market and will reduce the costs of funds. At the same time Poland will have to meet the convergence criteria concerning, inter alia, public debt and budget deficit while the infrastructure of the Treasury Securities market should be adjusted to the EU standards so as to enable full utilisation of the advantages coming from the participation in the European Union's financial system.

## II. IMPLEMENTATION OF THE STRATEGY OBJECTIVES IN THE YEAR 2001 AND IN THE FIRST HALF OF 2002

As at the end of 2001, the relation of the State Treasury debt to GDP amounted to 39.3% (39.0% in 2000), while the relation of public debt, increased by the amount of the anticipated payments under guarantees and sureties, to GDP amounted to 43.2% (42.3%). Table 1 below presents the amounts of debt after consolidation (i.e. after elimination of mutual financial flows between entities of the public finance sector) and their relation to GDP.

Table 1

PLN mn	DEC. 2000		DEC. 2001		JUNE. 2002
	X PLN mn	% GDP	X PLN mn	% GDP	X PLN mn
State Treasury debt	266,816.8	<b>39.0%</b>	283,937.5	<b>39.3%</b>	320,880.1
State public debt*	280,473.8	<b>40.9%</b>	302,088.7	<b>41.9%</b>	341,454.0
State public debt increased by the anticipated payments under sureties and guarantees	289,964.0	<b>42.3%</b>	311,584.8	<b>43.2%</b>	351,730.1

*\*comparability of data as at the end of respective periods is limited owing to the changes in public finance sector and debt reporting that were introduced in 2001*

### II.1. Evaluation of the objectives implementation

#### 1. To minimise the costs of debt service within the assumed horizon

This objective was defined as:

- a) minimising costs within the horizon specified by the redemption dates of Treasury Securities with the longest maturity - through the optimal selection of debt management instruments, their structure, and dates of issue,
- b) minimising the costs burden for public finance which was meant as reducing the increase in the cost/GDP ratio in the coming years and its gradual decline in the years to follow - this category being a limitation to the previous one.
- c) eliminating the reasons which keep the debt interest rate at a higher level than the attainable market minimum.

The scope for manoeuvre in structuring the sale of Treasury Securities (TS) in domestic market and transactions on debt components in 2001 was limited owing to the necessity of financing budget deficit which was bigger than planned (by ca. PLN 11.8 bn), with privatisation proceeds being lower by PLN 11.5 billion. In the first half of 2002 the situation was completely different. A low GDP growth rate, decline in current accounts deficit, fast dropping inflation followed by successive - though insufficiently deep - interest rates cuts by the central bank reduced the yield of and increased the demand for Treasury Securities. This enabled an increase in the sales of medium- and long-term bonds and a successful debut on the market of 20-year bonds. At the same time the rate at which the state budget deficit accumulated was linear in

time thus eliminating the necessity of selling bills with the shortest maturity.

Under these changing conditions, the minimisation of debt service costs was implemented mainly through adjusting the structure of TS supply to the situation in the financial market (yield curve evolution, demand for respective types of TS), while taking into account a gradual improvement in debt structure (implementation of contingent objectives) and debt service cost levels in the following years (aiming at reducing the increase in domestic debt service costs/GDP ratio in 2002 and its decline in the following years). The effectiveness of these last measures was considerably limited by the policy, carried out in the year 1999-2000 and at the beginning of 2001, of reducing debt service costs in the period 2000-01 and carrying them to the next year when budget deficit was to be limited until attaining budget equilibrium. This was possible owing to debt service costs being recorded in a cash system of accounting and bonds being sold at a considerable discount. In effect, in the years 2002-05 TS redemption will involve large service costs resulting from discount.

The sales policy for medium- and long-term bonds was to place them on the market in the period of high demand and dropping yields. This is illustrated by charts 1 and 2 which compare the sales of bonds (at classic auctions and switching auctions in possibly similar periods) and their yields.

Chart 1.

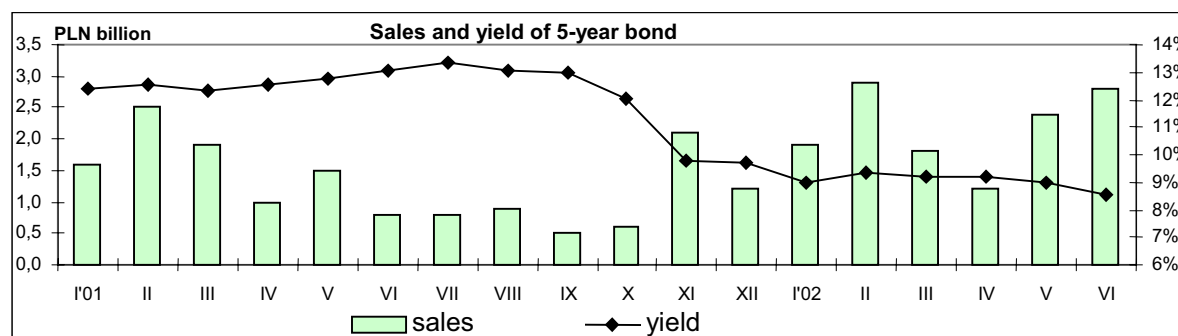
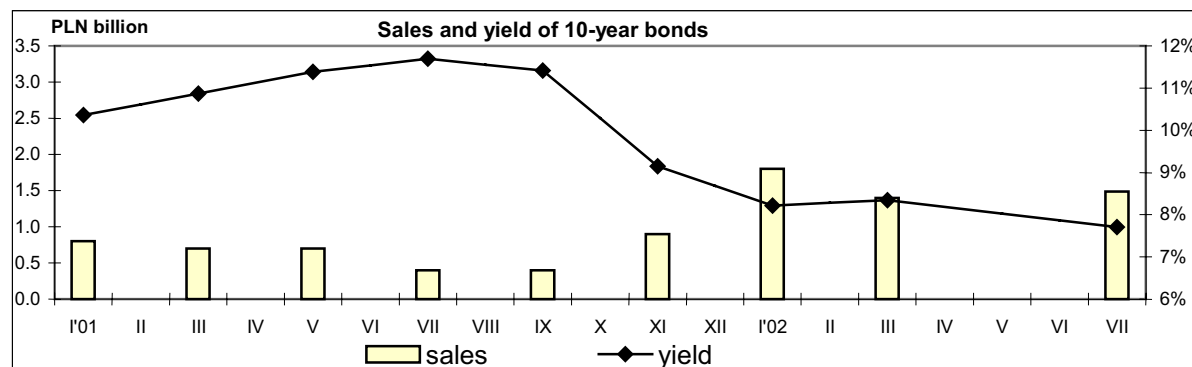


Chart 2



A rapid increase in the budget deficit in 2001 given lower proceeds from privatisation and further increase in the supply of medium- and long-term bonds being no longer justified (in the situation of a

downward trend in interest rates expected to continue) caused the treasury bills debt to increase by PLN 11.8 billion over the budget.

The scope of actions aimed to reduce the debt service costs to a level equal to the attainable market minimum, covers not only the TS issuer but also other institutions of the financial market. In the period under discussion such actions concerned:

- the start of a process of introducing a system of primary dealers,
- increase in TS market liquidity by:
  - reducing the number of bonds issues, given a simultaneous increase in the nominal value of respective issues,
  - deepening the primary market by reducing the number of bond auctions (this helps to find buyers who invest large funds)
- lower fees charged in the treasury bonds clearing system,
- introduction of real time gross settlements for treasury bonds (simultaneously to the existing netting system),
- introduction of intra-day credit in NBP (credit within one day on pledge of securities)
- elaboration of a standard agreement for repo transactions on securities and recording and clearing procedures for repo and buy-sell back transactions.

## **2. To limit foreign exchange risk and foreign currency refinancing risk**

These two risks are estimated with the use of the foreign debt share in total debt<sup>1</sup> and the currency structure of total debt. The share of foreign debt according to the criterion of the place of issue kept going down: from 45.3% in 2000 to 34,0% as at the end of June 2002. The share of foreign debt according to the resident criterion, after a decline in 2001 (from 51,2% to 41,1%), increased in the first half of 2002 to 42,4%. This was mainly the effect of an increased debt to foreign investors deriving from the thereby purchased Treasury Securities issued in the domestic market (increase by PLN 10.1 billion in the first half of 2002).

A positive trend in the area of foreign debt was an increase in the portion of the debt denominated in euro - from 36% to 47% in the period under discussion. This direction of changes is first and foremost related to the strong economic ties connecting Poland with the euro zone countries and with Poland's targeted membership in the monetary union which will eliminate the euro denominated debt portion exposure to foreign exchange risk.

## **3. To optimise the state budget's liquidity management**

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<sup>1</sup> From 2000 in addition to the criterion of the place of issue, the resident criterion has also been applied in measuring the share of foreign debt in the debt of the State Treasury. According to the resident criterion, foreign debt (i.e. debt towards non-residents) includes all Treasury Securities in the portfolio of foreign investors, irrespective of these instruments' place of issue. From the point of view of evaluating the implementation of the objectives specified in the Strategy, the criterion of the place of issue was assumed to be more important.

The scope of liquidity management instruments (liquid assets in the form of NBP deposits and issues of short-term treasury bills) was extended by the switching auctions introduced in November 2001. They now constitute the basic instrument allowing to reduce the refinancing risk and ease the accumulation of payments deriving from redemption of Treasury Securities. Bonds worth PLN 5.1 bn maturing in the second half of 2002 were converted in the first half of this year.

Funds accumulated in NBP deposits allowed to smoothly finance the state budget borrowing needs, eliminate the supply of treasury bills with the shortest maturity (for the first time in the history of these bills supplies) and create a surplus insuring the financing to some unplanned developments (financial market unrest, smaller proceeds from privatisation) and enabling the execution of other operations on debt components (e.g. early redemption of some restructuring bonds in August 2002). The interest rate of the accumulated reserves was based on treasury bills yield and on market interest rates.

#### **4. To limit the refinancing risk**

The implementation of this objective consists in ensuring an adequate profile of Treasury Securities with regard to average maturity and equal distribution of redemption dates in time.

In the period under review the average maturity of debt in the marketable Treasury Securities has slightly increased from 2.58 to 2.61 years. This small total change in the average maturity of debt in the Treasury Securities available on the market resulted from a considerable increase in the treasury bills debt and the suspended supplies of 10-year floating rate bonds.

The efforts aimed at an equal distribution of liabilities repayment in time encountered some difficulties in the period under discussion owing to a significant increase in the budget deficit in the years 2001-02 and the afore-mentioned limitation to the medium- and long-term bonds supply. In effect, the debt in treasury bills and 2-year bonds has increased considerably, thus increasing the value of Treasury Securities maturing in the years 2002-2004. Simultaneously, the repayments distribution in time was favourably impacted by the bonds switching auctions, easing their redemption within the horizon of the next 6-8 months.

#### **5. To limit the interest rates risk**

Factors which limit this risk are: the increase in the fixed rate medium- and long-term bonds portion and reduction of the t-bills and floating rate bonds portion of the debt. A summary measure is debt duration (see chapter V.2.). In the period under discussion the average debt duration increased from 1.69 to 1.96 year.

In the field of foreign debt, the entire newly contracted debt in the form of bonds issued on foreign markets bears fixed interest, like some of the credits contracted from international financial institutions. This has reduced the floating rate liabilities portion



from 53.1% as at the end of 2000 to 43.9% as at the end of June 2002.

#### **6. To obtain a more flexible debt structure**

An operation which had the biggest impact on reducing the State Treasury non-marketable foreign liabilities was early redemption of the debt towards Brazil in November 2001 (discussed in the previous strategy).

For domestic debt, the share of non-marketable debt dropped in the period under discussion from 18.2% to 8.7%. This was the effect of the increase in the marketable debt, the effected conversions, and regular repayment of non-marketable debt. The conversion of the State Treasury debt resulting from the taken over obligations of health care units to fixed rate bonds was completed in 2001. The value of the settled health care obligations totalled PLN 8.43 billion.

The State Treasury obligations deriving from return of the property lost by trade unions and social organisations owing to the introduction of martial law were converted in August and November 2001 and in April 2002. The value of the underlying obligations amounted to PLN 0.24 billion.

Early redemption of restructuring bonds worth PLN 198 mn took place in November 2001. A similar operation was executed in August 2002 (PLN 220 mn).

#### **7. To reduce debt monetization**

The reduction of debt monetization is related to the entity-wise structure of the State Treasury domestic debt and means a growing share of non-banking sector entities in domestic debt (or speaking more precisely the share of TS purchased by this sector in domestic debt).

In the period under discussion the share of the non-banking sector and the share of TS purchased by this sector in domestic debt has increased (from 42.2% to 46.6% and from 34.3% to 43.3%, respectively). This was the effect of increased investing in TS by first of all insurance institutions and pension funds. At the same time a decline in the remaining State Treasury debt towards this sector was noted. This was affected by debt repayments and the conversions described in the preceding point.

At the same time, due to considerable investments of foreign buyers in treasury bonds issued on the domestic market (the share of this sector in domestic debt increased from 12.2% to 14.5%), the share of the banking sector in domestic debt has gone down.

### **II.2. Conclusions from objectives implementation**

The presented results of implementing the objectives of the debt management strategy point to some positive changes in the profile of

the debt itself and a progress in the implementation of all the objectives. The least positive results were noted in limiting the refinancing risk in local currency. This was the effect of the unfavourable budget situation, financial market limitations, and implementation of the supreme objective, namely minimisation of debt service costs (assuming a reduction of market interest rates). The same conditions limited the possibility of reducing the increase in debt service costs/GDP ratio in 2002 and 2003.

The considerable degree of the implementation of some of the objectives (to reduce the interest rates risk, obtain a more flexible debt structure, reduce debt monetization), the realistic prerequisites of progress in implementing the remaining objectives (to reduce refinancing risk in local and foreign currency and foreign exchange rates risk) and the change in the circumstances (a faster increase of debt, deeper reduction of interest rates, considerable inflow of foreign capital to TS market) point to a possibility of a change in situating the existing objectives and to the necessity of taking into consideration an additional debt management objective. That is because the objective of limiting debt increase to a safe level (see point V.1) is becoming to be of key importance. At the same time the changed circumstances result in the fact that the existing objectives related to reducing certain risks may become a limitation to the implementation of the objective of minimising the debt service costs.

### III. ASSUMPTIONS OF THE STRATEGY

The basic assumptions adopted in the present strategy concern the macroeconomic situation of Poland and its expected development, international conditions (mostly the situation in the international financial market) as well as changes in public debt in 2001 and in the first half of 2002.

#### III.1. The macroeconomic situation of Poland and its expected development

The macroeconomic situation of Poland in the period covered by the strategy will to a significant extent be determined by accession to the EU and actions related to the implementation of the criteria of accession to the monetary union (years 2004-06). The conditions concerning the macroeconomic situation of Poland in the period 2003-05 are based on the assumptions of the *draft state budget act for 2003*. Some basic assumptions are presented in table 2.

Table 2.

	2002	2003	2004	2005
Real growth of GDP	1.2%	3.5%	4.9%	5.2%
GDP in current prices (PLN billions)	742.5	784.1	842.8	906.7
State budget deficit (% of GDP)	5.4%	4.9%	3.9-4.5%	2.9-3.9%
State budget deficit (PLN billion)	40.0	38.7	32.7-37.6	26.8-35.8
Result of local government unit (% of GDP)	-0.5%	-0.4%	-0.3%	-0.3%
Proceeds from privatisation (PLN billion)	3.7	7.4	5.0-6.6	5.0-6.6
Average annual CPI	2.1%	2.3%	2.8%	2.5%
Rate of open market operations				
- period average	9.0%	7.2%	6.0-6.4%	4.9-5.7%
- end of period	7.5%	6.5%	5.3-6.3%	4.5-5.3%

The scenario-based evolution of some parameters allows to present some variations in the projections of debt and its service costs as compared with the basic scenario. At the same time, for the needs of estimating the level of debt and the costs of its service, the exchange rates evolution was presented on the assumption of NBP continuing its present monetary policy (table 3).

Table 3.

	2002	2003	2004	2005
PLN/USD period average	4.13	4.16	4.18-4.28	4.23-4.38
PLN/USD end of period	4.20	4.12	4.23-4.38	4.23-4.38
PLN/EUR period average	3.91	4.16	4.18-4.28	4.23-4.38
PLN/EUR end of period	4.20	4.12	4.23-4.38	4.23-4.38

### **III.2. Impact of the situation in the international financial market.**

The significant processes which took place in 2002 and were related to the State Treasury debt management, include:

- a deterioration in the situation of countries falling into the wide category of emerging markets, in particular in Latin America (announced insolvency of Argentina, crisis in Uruguay, problems in Brazil). The fact that these developments did not directly affect the way Poland is perceived by foreign investors indicates that she was upgraded to the category of countries with lower investment risk and ensures maintenance of constant access to financial markets. This results mainly from a very advanced process of membership negotiations with the EU, perceived as a guarantee of our country's long-term credit rating.
- the maintenance by all the rating agencies of the long-term credit rating of Poland's foreign debt at BBB+/Baal with a stable tendency. At the same time Standard & Poor's, while reducing in August 2002 the credit rating for long-term Treasury Securities issued on the domestic market from A+ to A, emphasised the risks related to the high growth rate of the State Treasury debt. The reduced rating has however not impacted the behaviour of foreign investors on domestic TS market.
- The maintenance of short-term interest rates at a very low level and reduction of long-term rates. In the years 2001 and 2002 the short-term interest rates in USA were significantly reduced. Six months LIBOR rates for USD dropped in 2001 from about 6.2% to about 2%. They stayed at a similar level nearly throughout the part of 2002 which has elapsed hitherto, to reach a subsequent minimum of 1.72% in September. On the other hand, short-term interest rates in EUR dropped to a much smaller extent: 6 months EURIBOR from about 4.8% at the beginning of 2001 to about 3.2% towards the end of 2001. In 2002 there was no clear tendency towards a change in rates which ranged from 3.2 to 3.75%. The reduction of interest rates has a favourable effect on the costs of foreign debt service because a part of these costs is based on the floating interest rates ruling on the market.
- A quite high volatility of EUR to USD in 2001 and 2002 ranging from 0.84 to 1.01.

### **III.3. Changes in public debt in 2001 and in the first half of 2002.**

In 2001 the debt of the public finance sector (after consolidation) increased by PLN 21.6 billion (i.e. by 7.7%) and in the first half of 2002 by PLN 39.4 billion (13%) to reach PLN 341.5 billion as at the end of this period.

The debt of central government was responsible for the prevailing part of the debt of the whole sector (96.7% - 96.6%), while the share of local government debt stayed at the same level of 3.3%-3.4%.

It must be pointed out that the real increase in debt in 2001 may have been bigger than the presented data would imply. This is the result of overstating the debt level in 2000 owing to lack of information enabling complete consolidation of the debt (e.g. the lack of information on local government debt towards other units of the public finance sector) and lack of complete data about the remaining debt of the central and local governments.

The evolution of the whole sector's debt was impacted the most by liabilities taken by the State Treasury. In 2001 the State Treasury debt increased by PLN 16.7 billion (6.3%), therein domestic debt according to the place of issue increased by PLN 38.7 billion (26.6%) while foreign debt dropped by PLN 21.9 billion (-18.1%). According to the resident criterion, domestic debt increased by PLN 36.4 billion (28.1%) while foreign debt dropped by PLN 19.7 billion (-14.4%). Such changes were mostly the effect of early redemption of debt towards Brazil and a part of Brady bonds, as well as PLN appreciation and changes in cross currency rates.

Table 4. State public debt after consolidation<sup>2</sup> (in millions)

Description	Dec. 2000	Dec. 2001	June 2002	Change Dec.01 – Dec.00		Change June 02–Dec.01	
				PLN mn	%	PLN mn	%
<b>State public debt</b>	<b>280,473.8</b>	<b>302,088.7</b>	<b>341,454.0</b>	<b>21,614.9</b>	<b>7.7</b>	<b>39,365.4</b>	<b>13.0</b>
<b>I. Debt of the central government</b>	<b>271,096.7</b>	<b>291,320.5</b>	<b>329,983.7</b>	<b>20,223.8</b>	<b>7.5</b>	<b>38,663.2</b>	<b>13.3</b>
1. State treasury debt	265,887.9	282,617.1	319,023.1	16,729.2	6.3	36,406.0	12.9
1.1. Domestic State Treasury debt							
a) by place of issue	145,052.7	183,708.0	210,063.6	38,655.3	26.6	26,355.5	14.3
b) by resident	129,385.0	165,804.3	182,882.3	36,419.3	28.1	17,078.0	10.3
1.2. Foreign ST debt							
a) by place of issue	120,835.2	98,909.1	108,959.5	-21,926.1	-18.1	10,050.5	10.2
b) by resident	136,503.0	116,812.8	136,140.8	-19,690.2	-14.4	19,328.0	16.5
2. The remaining debt of the central government	5,208.7	8,703.4	10,960.6	3,494.7	67.1	2,257.2	25.9

<sup>2</sup> Comparable data (allowing for the new sector's scope and enabling full consolidation of the debt) have been available from June 2001. At the end of 2000 consolidation was possible only for some of the central government entities.

<b>II. Debt of local government sector</b>	<b>9,377.1</b>	<b>10,768.2</b>	<b>11,470.3</b>	<b>1,391.1</b>	<b>14.8</b>	<b>702.2</b>	<b>6.5</b>
1. Debt of local government units	9,377.1	9,008.8	9,642.5	-368.3	-3.9	633.8	7.0
2. The remaining debt of local government units	No data	1,759.4	1,827.8	1,759.4	-	68.4	3.9

In the first half of 2002 the increase noted in the State Treasury debt was higher (by PLN 36.4 billion, i.e. by 12.9%) than in the whole 2001. This resulted first and foremost from the necessity of financing the budget deficit (given low proceeds from privatisation) and weaker position of zloty to foreign currencies.

Domestic debt, according to place of issue, increased in the first half of 2002 by PLN 26.4 billion (14.3%) while foreign debt by PLN 10.1 billion (10.2%). According to the resident criterion domestic debt increased by PLN 17.1 billion (10.3%) and foreign debt by PLN 19.3 billion (16.5%).

The remaining debt of the central government increased in 2001 by PLN 3.5 billion (67.1%) and in the first half of 2002 by PLN 2.3 billion (25.9%). The debt of local government sector increased in 2001 by PLN 1.4 billion (i.e. by 14.8%) and in the first half of 2002 by PLN 0.7 billion, i.e. by 6.5%. A detailed presentation of changes in local government sector debt can be found in chapter X.

#### **IV. THE CAUSES AND CONSEQUENCES OF THE INCREASE IN DEBT TO GDP RATIO**

2001 saw an increase in debt to GDP ratio. With implementation of the assumptions presented in chapter III, this process will be continued until 2004.

##### **IV.1. Reasons for the increase in debt to GDP ratio**

The evolution of the relation of debt to GDP (debt in the widest category, namely the state public debt increased by the amount of the anticipated payments deriving from sureties and guarantees) results from:

- Nominal level of public debt at the end of respective year,
- Anticipated future level of payments deriving from sureties and guarantees granted by entities of the public finance sector,
- Nominal level of GDP in respective year.

The increase in public debt in the years 2001-04 results mainly from the financing of budget deficit (PLN 143.8-148.7 billion), payment of compensations (PLN 10.0 billion), increased debt of local governments (PLN 12.7 billion), and weaker zloty (debt increase by PLN 2.6-7.2 billion). A limiting impact on debt increase is that of the proceeds from privatisation (PLN 22.6-24.2 billion).

The expected increase in payments under sureties and guarantees would amount to PLN 7.2 billion. This is the effect of the expected State Treasury's involvement in supporting projects which will contribute towards accelerating economic growth.

The increase in State debt in the years 2001-04 is estimated to reach PLN 147.0-159.3 billion (52.4-56.8%) and including the amount of the anticipated payments under sureties and guarantees PLN 154.1-166.4 billion (53.2-57.4%). At the same time the increase in nominal GDP will amount to PLN 157.8 billion (23.0%). So the public debt growth rate is considerably bigger than GDP growth rate, thus increasing the relation of debt to GDP.

The low nominal growth of GDP is a consequence of a slowdown in the real economic growth rate in 2001 and 2002 and of the slower the rate of inflation. As a result of an excessive cooling down of the economic climate in the years 2000-01, the real GDP growth rate amounted in 2001 to only 1.0%, in 2002 it will reach 1.2%. At the same time the growth rate of inflation fell below the successive targets set by the Monetary Policy Council (to 3.6% as at the end of 2001 and below 2.0% as at the end of 2002, respectively).

Successive acceleration in economic growth in the years 2003-05, with inflation stabilised at a low level, will cause the debt to GDP ratio to decrease only in 2005.

## IV.2. Debt regulations in Poland and in the European Union

The general principles concerning State public debt are governed by the Constitution of the Republic of Poland. This principal act has introduced a rule that it is not allowed to take loans or grant sureties and guaranties which result in State public debt in excess of 60% of GDP.

The basic law which settles the State public debt in a complex way is the Public Finance Act. It stipulates that the State public debt covers nominal debt of the public finance sector entities determined after consolidation, namely after elimination of financial flows between entities belonging to this sector.

The Act creates a closed catalogue of entities included among the public finance sector. These are:

- 1) bodies of: public authorities, government administration, law protection and state control, courts and tribunals, as well as local government units and their bodies and unions,
- 2) budgetary units and their auxiliary estates as well as budgetary establishments,
- 3) earmarked funds,
- 4) state higher schools,
- 5) research & development units,
- 6) independent public health care units,
- 7) state or local government institutions of culture,
- 8) ZUS, KRUS and the thereby managed funds,
- 9) National Health Funds,
- 10) Polish Academy of Sciences and the thereby established organisational units,
- 11) State or local government legal persons established under separate acts for public tasks execution, with the exception of enterprises, banks, and companies organised under commercial law.

The prevent the state public debt to GDP ratio from exceeding the constitutional threshold of 60%, the Act assumes that the constitutional norms will be mainly implemented on the platform of prudential procedures. At the same time the provisions of the Constitution of the Republic of Poland and the potentially large impact on the debt level of sureties and guarantees granted (an impact delayed in time) are reflected by the fact that this risk is taken into account in the evolution of debt to GDP ratio.

The prudential and remedial procedures provided for in the Public Finance Act regarding the relation of the state public debt increased by the anticipated payments under sureties and guarantees to GDP are as follows:

- 1) relation in year x is bigger than 50% and not bigger than 55% of GDP:
  - a) a limit on the relation of the state budget deficit to its incomes is introduced, this relation in the draft State Budget Act adopted by the Council of Ministers for the year x+2 cannot be higher than in the year x+1,



- b) the relation of deficit to incomes, adopted in the State Budget Act for the next budget year, is the upper limit on the relation of each local government unit's deficit to its incomes that may be adopted in the budget of such unit.
- 2) relation in year x is bigger than 55% and smaller than 60% of GDP:
- a) The Council of Ministers adopts the draft budget for the year x+2, accepting as the deficit's upper limit its level ensuring a decrease in the relation of the State Treasury debt, increased by the anticipated payments under sureties and guarantees granted, to GDP as compared with such relation announced for the year x,
  - b) The adoptable deficits of respective local government unit's budgets are subject to limitations,
  - c) The Council of Ministers presents a recovery programme supposed to ensure a drop in the relation of state public debt, increased by the anticipated payments under sureties and guarantees granted by public sector entities, to GDP.
- 3) Relation in year x is equal to or bigger than 60% of GDP:
- a) The draft State Budget Act for the year x+2 does not include the state budget deficit while the budgets of local government units are adopted excluding the deficit,
  - b) A ban on granting new sureties and guarantees is introduced for entities of the public finance sector,
  - c) The Council of Ministers presents a recovery programme to the Parliament whose basic objective is to elaborate and implement actions aimed at reducing the relation of public debt to below 60% of GDP.

The problems related to excessive debt of the public finance sector were also reflected in the convergence criteria worded in Maastricht Treaty (The Treaty on the European Union), relating i.a. to the state public debt relation to GDP. In accordance with Maastricht Treaty and the thereto appended *Protocol on excessive deficit procedure*, the member countries are under the obligation to keep general government debt at a level below 60% of GDP.

The level of general government debt and deficit in the EU member countries constitute the criteria on the basis of which the Commission examines the observance of the budgetary discipline. With regard to the debt, subject to evaluation is whether the relation of general government debt to GDP does not exceed the base value (60%), unless this relation is decreasing to a sufficient degree and is approaching the base value at a satisfactory rate.

There are four basic differences between the state public debt, increased by the anticipated payments under sureties and guarantees granted by public finance sector entities, and the general government debt, according to the EU criteria:

- The anticipated payments under sureties and guaranties are not added to the debt of the general government,
- Matured liabilities (namely liabilities whose payment date has elapsed and which have not been limited or amortised),

constituting in Poland one of the public debt categories, in EU are treated as an expense on accrual basis and thus are not included in the debt (they affect net borrowing/net lending of the general government),

- Open pension funds (OFE) are not included among the public finance sector (in accordance with the Public Finance Act), while they should constitute an element of the general government sector (negotiations with the EU in this respect are under way),
- The Agricultural Market Agency is an entity of the public finance sector, however it is not a part of the general government sector.

The listed differences result in the fact that currently the Polish debt of the public finance sector, according to the EU criteria (debt of general government), is lower than the state public debt increased by the anticipated payments under sureties and guarantees granted by public finance sector entities, specified in the Constitution of the Republic of Poland and the Public Finance Act.

In 2001, the public debt according to the EU criteria (general government debt) amounted to PLN 279.2 billion (i.e. 38.7% of GDP) while the state public debt increased by the anticipated payments under sureties and guaranties amounted to PLN 311.6 billion (i.e. 43.2% of GDP).

## **V. RISK ANALYSIS OF THE PUBLIC DEBT**

Public debt management is a complex business. This results from the interdependence between public debt and other macroeconomic data, from debt instruments variety, and considerable extent of uncertainty concerning future values of variables impacting the effectiveness of decisions taken with regard to debt. This uncertainty is responsible for the fact that debt management is inseparably related to risk management. This risk concerns in particular:

- Macroeconomic environment (e.g. amount of budget deficit in subsequent years, proceeds from privatisation),
- Market environment (e.g. level of domestic and foreign interest rates in respective segments of the yield curve, foreign exchange rates, demand for Treasury Securities),
- Institutional and legal environment (e.g. changes in the binding law, European integration, organisational framework of debt management).

The permanent nature of the debt is responsible for the fact that its management should allow for a long-term horizon. Decisions concerning debt structure taken under risk circumstances affect future conditions of its service and refinancing. The particular importance of managing the risk related to public debt is responsible for it being included in the strategy objectives.

### **V.1. Risk related to public debt volume**

The first of the strategy objectives (to maintain public debt amount at a safe level) directly concerns the risk of the debt exceeding a safe level and the negative consequences involved therein.

One debt level that would be generally accepted as safe does not exist in the theory of economy or in the practice of the economic policy. Usually a debt level is considered to be safe if it enables timely service and refinancing over a long period. This level depends on the size of the country economy, hence a commonly applied measure of debt is to compare its absolute value to GDP.

A level of public debt to GDP which ensures its safe service depends on many factors, including: the level of economic development, economic growth rate, social and political stability, international relations, quality of public institutions functioning, level of inflation and interest rates, generic and entity-wise structure of the debt, advancement of domestic financial market, access to the international financial market. The lower the general level of the country's development, the higher the risk of disturbances in timely debt repayment and its refinancing. That is why financial markets require from such countries a successively lower relation of debt to GDP and a higher return on capital which finances public debt than from the highly advanced countries.

Table 5. Debt of the general government and 10-year bonds yield in states of the EU and in some candidate countries.

	2000		2001	
	Debt/GDP	10-year rate	Debt/GDP	10-year rate
Italy	<b>110.6%</b>	5.24%	<b>109.4%</b>	5.18%
Belgium	<b>109.3%</b>	5.21%	<b>107.5%</b>	5.19%
Greece	<b>102.8%</b>	5.45%	<b>99.7%</b>	5.23%
Austria	<b>63.6%</b>	5.15%	<b>61.7%</b>	5.17%
Spain	<b>60.4%</b>	5.13%	57.2%	5.25%
Germany	<b>60.3%</b>	4.84%	59.8%	5.00%
France	57.4%	4.99%	57.2%	5.07%
Holland	56.0%	4.97%	53.2%	5.11%
Sweden	55.3%	4.86%	56.0%	5.34%
Portugal	53.4%	5.22%	55.6%	5.14%
Denmark	46.8%	5.13%	44.5%	5.15%
Finland	44.0%	5.05%	43.6%	5.20%
Great Britain	42.4%	4.86%	39.0%	5.05%
Ireland	39.0%	5.08%	36.6%	5.04%
Luxembourg	5.6%	-	5.5%	-
European Union	<b>63.9%</b>	<b>5.08%</b>	<b>63.0%</b>	<b>5.15%</b>
Hungary	55.7%	8.13%	53.0%	7.08%
Slovakia	45.2%	8.40%	44.1%	7.63%
Poland	38.9%	11.18%	38.7%	8.82%
Czech Republic	17.0%	6.94%	23.7%	5.34%
Estonia	5.0%	-	4.8%	-

Table 5 shows the relation of public debt to GDP in Poland, in Member States of the EU and in some candidate countries against the background of 10-year bonds yield as at period end. The countries were arranged according to the descending value of debt to GDP ratio in 2000. The debt of Poland was presented in accordance with the methodology used in the EU.

It results from the table that public debt in Poland stayed at the level of the EU Member States with the lowest debt (excluding Luxembourg) and was much lower than the average for the EU. Poland's debt also looked good compared to the EU candidate countries - it was lower than in Hungary and in Slovakia, though significantly higher in relation to Estonia and the Czech Republic.

Given the present circumstances in Poland, a safe level should be considered to be such debt value which does not result in:

- Significant, negative impact on macroeconomic situation of the country, especially in the area of:
  - fiscal policy (excessive fiscalism),
  - monetary policy (inflationary pressure or impulses, interest rates staying at a high level),
  - rating (increase in a country risk),

- difficulties in structuring state budget owing to high level of debt service costs and limited possibilities of covering deficit by increasing debt,
- excess of limits imposed on debt level in the Constitution of the Republic of Poland, the Public Finance Act, and convergence criteria - an excess of these limits will limit or eliminate flexibility in shaping budget policy at central and local government level.

## **V.2. Risk related to debt service costs**

The second strategy objective (to minimise debt service costs within longer time horizon) allows for the risk by adopting limitations which specify the acceptable level of this risk. The amount of future costs of debt service is unknown and depends on future evolution of many variables. The longer the time horizon of the analysis, the higher the uncertainty concerning their level. Hence the aim of debt management is to minimise the anticipated value of debt service costs under uncertain conditions. A limitation in the endeavour to minimise costs is the level of the risk, namely of possible cost variations from the expected value. The endeavour to minimise debt service costs is subject to the condition that the accepted risk does not exceed the thresholds specified by the manager.

A correct definition of the risk enables an effective debt management. The endeavours to reduce debt service costs within the assumed time horizon and to reduce the risk involved in the incurred cost are competitive to each other. Risk preferences are of basic importance in choosing between different options in the decision making process. The State should be usually characterised by a strong risk aversion, this being a limitation on the way towards minimising costs. Therefore, in the State Treasury debt management higher anticipated costs are often accepted in exchange for a bigger immunity from the occurrence of developments which might adversely affect debt service and for a certainty that the amount of costs will not significantly differ from the assumed level.

The minimisation of debt service costs within longer horizon takes place under the assumption of financing the state budget borrowing needs and limitations concerning the level of:

- a) local currency refinancing risk,
- b) foreign exchange risk and foreign currency refinancing risk,
- c) interest rates risk,
- d) state budget liquidity risk,
- e) other risks, in particular of credit risks and operational risk,
- f) distribution of debt service costs in time.

### Ad a) Local currency refinancing risk

The refinancing risk is related to the issue of debt for the purpose of financing the state borrowing needs related to redemption of the existing debt. The risk concerns both the mere possibility of redeeming a maturing debt as well as the conditions in which it is

being refinanced (therein in particular the service costs generated by the newly issued debt). The higher the payment deriving from the maturing debt redemption and the closer its date, the higher the risk related to its refinancing. The refinancing risk volume is impacted by the amount of public debt and by its time structure. Longer debt maturity and its even distribution in time help to reduce the refinancing risk.

The refinancing risk is measured by average maturity as well as by the amount and share of short-term debt, therein the share of debt with maturity of up to 1 year in total debt. Both these measures are complimentary to each other. The amount and share of short-term debt show how much funds will have to be obtained within a short time to enable the repayment of this debt. On the other hand, the average maturity shows how fast the existing debt will become short-term. We should bear in mind that both these ratios are simplified measures of refinancing risk. They do not include information about the evenness of instalments distribution and avoidance of debt repayment piling up in one period.

From the end of 2000 till June 2002 the average maturity of domestic market debt has slightly increased (from 2.58 year to 2.61 year). A similar ratio in most states of the EU ranges from 5 to 6 years (with the exception of Great Britain where the average maturity is ca. 11 years). In Hungary the average maturity of domestic TS exceeds 3 years, in the Czech Republic it is close to 2 years.

The share of instruments maturing up to 1 year in domestic TS increased in 2001 from 33.7% to 37.8%, while until the middle of 2002 it slightly fell and reached 37.3%. This level should be considered as high and creating high refinancing risk. It means that over 1/3 of domestic TS value must be refinanced within a year. In nominal terms it was PLN 44.8 billion as at the end of 2000, PLN 66.5 billion in 2001, and PLN 76.0 billion as the end of first half of 2002. In this amount treasury bills represented PLN 23.4 billion (52.2%), PLN 35.2 billion (53.0%), and PLN 45.6 billion (60.0%), accordingly.

The following actions can help reduce refinancing risk:

- to reduce the role of treasury bills in financing the state borrowing needs so that their role be limited to an instrument of managing the state budget liquidity,
- to use switching auctions and buy-backs of bonds,
- to allow for equal distribution of repayments when planning redemption dates for new TS issues.

An obstacle for the last one of these actions can become the endeavour to increase the volume and liquidity of issues, as resulting from the objective of minimising costs. Large issues result in accumulation of repayments on redemption dates. Hence a bigger importance of limiting the role of treasury bills in the financing and using bonds buy-backs and switching auctions.

Ad b) Foreign exchange risk and foreign currency refinancing risk

Foreign exchange risk is a risk of a change in debt value and in amount of payments deriving from its service, therein repayment of principal and debt service costs denominated in foreign currencies, owing to changes in foreign exchange rates.

The experience of recent years shows that the exchange rate of zloty was characterised by a volatility noticeably affecting the volume of public debt and amount of debt service costs, though this volatility did not substantially differ from the changes in the basic rates of world currencies. A change in PLN to USD rate in 2003 by 1% (4 gr.) would change the relation of State Treasury debt to GDP by about 0.16%, and debt service costs by about PLN 56 million.

The process of European integration is of big importance to foreign exchange rate. Poland's accession to the monetary union will mean adoption of one common European currency. This will eliminate the foreign exchange risk related to the debt denominated in EUR (at the end of 1st half of 2002 it represented 15.9% of the State Treasury debt, namely 42.9% of total debt denominated in foreign currencies) and subordination of the exchange rate to external factors, i.e. market trends and policy of the European Central Bank.

Foreign exchange risk management consists in actions on debt components which actions may be active or passive. The passive method will be to reduce the amount of foreign debt, while the active one to shape the debt currency structure through new issues, early redemptions and use of derivative instruments, currency swaps in particular.

A basic measure of foreign exchange risk is the portion of debt denominated in foreign currencies in total debt. Towards the end of 2001 it amounted to 47.7%, towards the end of 2001 to 39.4% (of which 15.0% was denominated in EUR) and until the end of I half of 2002 it went down to 37.1% (15.9% in EUR). Despite a significant decrease, this ratio takes on a much higher value than in a vast majority of states of the EU, where the share of debt in foreign currencies does not usually exceed 5%. This is related to adoption of a uniform currency by 12 Member States. The share of debt in foreign currencies in the EU states not belonging to the euro zone differs and amounts respectively to 33% in Sweden (of which over a half is in euro), to ca. 8% in Denmark, and a little under 2% in Great Britain. We should point out that a widely used instrument of shaping an effective debt currency structure in the countries of the European Union is currency swaps which allow to flexibly manage the foreign exchange risk. From among the candidate countries, in Hungary and in Slovakia the share of foreign debt amounts to ca. 30%, thus being slightly smaller than in Poland, while in the Czech Republic the share of debt in foreign currencies does not exceed 10%.

The basic measure of foreign currency refinancing risk is the share of debt serviced in foreign currencies in total debt, being slightly lower than in relation to debt denominated in foreign currencies. Its share went down from 45.3% towards the end of 2000 to 36.0% in the middle of 2002.

Owing to a declining disparity of interest rates between the Polish market and the markets of advanced countries, the potential advantages related to smaller foreign debt service costs are becoming less significant. This tendency is expected to be maintained in the years 2003-05 due to interest rates convergence to the euro zone level. At the same time the risk involved in the unknown level of the exchange rate at which zloty will stand to euro and to foreign exchange rates in the world markets is significant from the point of view of debt management.

The period of the present strategy covers the commencement of repayment of high principal instalments of the debt to Paris Club maturing in 2004-09. This means that amounts obtained from the foreign market will gradually increase to a degree resulting from the repayment of the maturing debt. Moreover it is also possible to obtain some additional amounts for early repayment of some components of foreign debt and to contract long-term credits in international financial institutions for investment and infrastructure expenses. To increase the issues of foreign debt above these levels would be unjustified.

The perspective of Poland soon joining the euro zone makes further increase of the role of euro in the debt currency structure beneficial.

#### Ad c) Interest rate risk

Interest rate risk is a risk of a change in the value of payments deriving from debt service, owing to changes in the amounts of interest rates. It stems from the necessity of refinancing the debt which will mature in the future at interest rates that are unknown and from the volatility of coupon payments against floating rate TS.

The interest rates risk is measured by duration. This ratio shows the length of the average period of matching debt service costs to the changing level of interest rates. Thus it is a measure of debt service costs sensitivity to interest rates volatility. The higher the level of interest rates and the bigger the share of short-term instruments, the higher the interest rate risk and the lower the duration.

Domestic debt duration was successively lengthened - from 1.69 year at the end of 2000, 1.76 in 2001, to 1.96 year towards the end of June. This was to a bigger extent the effect of falling interest rates (ranging from over 4 percentage points to nearly 9 points for respective Treasury Securities in the period under discussion) than of increased maturity (from 2.60 to 2.62). In states of the European Union the duration ratio takes on significantly higher values, from about 2.5 years in Sweden, through ca. 3 years in Greece and Portugal, to ca. 7.5 years in Great Britain. In Hungary and in the Czech Republic the duration ratio of domestic market debt is comparable to that in Poland (1.89 and 2.09, respectively).

Further decrease of TS yield is anticipated in subsequent years, owing to interest rates convergence to the level of the European



Union states. This process will enable to increase the share of medium- and long-term instruments in financing the state budget borrowing needs and to raise the average maturity and duration of the debt to the level of the EU countries.

Ad d) State budget liquidity risk

The state budget liquidity risk is the risk of the state budget losing the ability to settle current liabilities and settle budget expenses when due. The limitation of this risk requires that the state budget have access to an adequately large stock of assets with the highest and high liquidity. Liquidity reserve makes the state budget immune to interim crises which prevent or render ineffective the raising of funds by borrowing in the financial market.

The liquidity risk management consists of two types of actions:

- striving to keep a safety reserve at possibly the lowest level - this is helped by improving the process of planning and monitoring state budget liquidity, building adequate infrastructure and organisational solutions,
- managing liquid assets, which should generate budget incomes in order to counterbalance, to the biggest extent, the costs involved in maintaining a specified, safe level of liquidity.

Ad e) Other risks

Other risks include all yet unmentioned sources of uncertainty related to public debt management, the safe level of which constitutes limitation to the objective of minimising the anticipated costs of debt service. The most important risks in this category are the credit risk and the operational risk.

Credit risk is the danger that the other party to the transaction will default in full or in part on the terms of the agreement. Public debt constitutes liabilities for the party which contracts such debt, the issue of this debt does not involve credit risk. On the other hand this risk is taken by the investor who buys the debt instruments. For Treasury Securities it is unusually small and relates to potential crises. Its price is the premium for credit risk reflected by higher yield of Treasury Securities. Hence, the higher the State Treasury credit rating, the lower are the debt service costs.

Credit risk for the debt manager is related to transactions whose subject-matter are assets. This is the case of using derivative instruments, in particular swaps, i.e. exchange of specified payments between parties to the agreement. Another instance of credit risk is the management of liquid assets, e.g. through making deposits in banks and buying securities. The most common method of limiting credit risk is to conclude transactions with entities having high credit rating and to diversify counterparties.

Operational risk is the danger that costs involved in debt management or the level of remaining risks will go up due to debt management control and organisation as well as infrastructure being

inadequate to the tasks scope. To limit this risk one aims at integrating debt management in one organisational unit, whose structure, procedures applied, and supervision combine solutions applied both in market institutions and in state administration.

Ad f) Distribution of debt service costs in time

An even distribution of debt service costs in time is defined as a stable relation of costs to GDP. The relation of debt service costs to GDP is a summary ratio of the debt service burden suffered by the community. The State Treasury debt service costs are an expense of the state budget and thus impact its deficit. This makes the structuring of the budget and its planning a difficult process. High volatility of debt service costs is also responsible for the fact that the state budget borrowing needs are unevenly distributed over subsequent years. Its consequence is an increased refinancing risk.

An even distribution of costs is helped by shaping an even debt maturity profile and by adjusting the principles of accounting for the debt service costs (as a part of the entire budget of the state) to the real economic costs related to its service (the so-called accrual system of accounting).

### **V.3. Risk related to sureties and guarantees granted**

The existence of the so-called contingent debt also contributes towards increasing the risk related to the level of public debt and the risk related to debt service costs. This category consists of guarantees and sureties granted by entities of the public finance sector, therein in particular the guarantees and sureties of the State Treasury.

That is because in the event of a party's default on the obligation covered by the guarantee or surety, the obligation of its performance rests with the entity granting such guarantees. Payments deriving from execution by the State Treasury of a guarantee or surety are recorded against debt service costs, thus contributing towards increasing the expenses and deficit of the state budget, and thus also the public debt.

Owing to the risk of the liabilities covered by a State Treasury's surety or guarantee turning into public debt, they are included in the limitations imposed on debt to GDP ratio by the Constitution of the Republic of Poland and by the Public Finance Act. In addition to public debt, this relation includes the anticipated payments deriving from guarantees and sureties. The amount of the anticipated payments is the anticipated expenses that public finance sector entities are supposed to incur in a long-term perspective in relation to guarantees and sureties granted. This amount is calculated on the basis of evaluating the probability (risk) of each entity's default on the obligations covered by a guarantee or surety. As at the end of 2001, the amount of the anticipated payments deriving from sureties and guarantees granted by entities of public finance sector amounted to PLN 9.5 billion.

A measure of the risk related to a single guarantee or surety is the probability that its execution will become necessary. A measure of the anticipated cost related to all sureties and guarantees granted is the anticipated value of payments thereunder, namely the sum total of the amounts of respective sureties and guarantees, weighted by the probability of its execution. A measure of the anticipated burden of contingent debt service is the relation of the anticipated payments deriving from sureties and guarantees to GDP. The higher is this relation, the higher is the macroeconomic and budget risk involved.

## VI. STRATEGY OBJECTIVES IN THE YEARS 2003-05

The objectives of debt management strategy can be defined depending on the accepted meaning of the term debt management. In a broad sense, public debt is one of the basic macroeconomic categories, while its management is correlated with meeting the social and economic objectives. In a narrow sense, debt management should be defined as meeting the debt management objectives, given a defined social and economic policy and specified external conditions. The formulating of the objectives results from the evaluation of the market risk, and budgetary and macroeconomic hazards generated by the level and structure of the debt.

For reasons listed in chapter IV.1. there was an increase in debt to GDP ratio which threatened with exceeding the first prudential threshold (50%) in 2002 or rather in 2003 and, in a special though unlikely case, the second threshold (55%) in the years 2004-05. In an extreme situation - of foreign exchange rates evolution unfavourable to debt level - this would amount to a risk of approaching the constitutional limit of 60%.

It is therefore necessary to define the strategy objectives in such a way that their implementation allow both to limit the risk related to debt increase and to be a continuation of actions aimed at minimising the costs and building a debt portfolio with the level of risk similar to that in the EU states (resulting from the conclusions from implementing the previous strategy objectives). The presented strategy has adopted two basic objectives:

- 1. To maintain the amount of public debt at a safe level.**
- 2. To minimise debt service costs within a longer time horizon with the accepted limitations concerning the level of:**
  - a) local currency refinancing risk,
  - b) foreign exchange risk and foreign currency refinancing risk,
  - c) interest rates risk,
  - d) state budget liquidity risk,
  - e) other risks, credit risk and operational risk in particular,
  - f) debt service costs distribution in time.

Ad 1) To maintain the amount of public debt at a safe level

In accordance with the analysis of risk related to public debt amount, presented in chapter V, a safe level was considered to be such debt value which does not involve a material adverse influence on the macroeconomic situation of the country, difficulties in structuring the state budget, or excesses of the limits imposed on debt level.

The exceeding of the 50% threshold in 2003 will result in the fact that in accordance with the Public Finance Act the relation of budget deficit to budget incomes as adopted in the draft budget for 2005 will not be allowed to be higher than the one resulting from the budget for 2004. Should the 50% threshold be exceeded in 2002, the restrictions will apply to the state budget for 2004. These restrictions are taken into consideration in the macroeconomic projection for the years 2004-05 (table 6)

Table 6.

	2003	2004	2005
State budget deficit budžetu	38.7	32.7-37.6	26.8-35.8
Deficit/income	25%	20%-23%	15%-21%

To prevent the risk of exceeding subsequent threshold the fiscal and economic policy must allow for such a risk. Actions in this area will concern:

- Limiting the level of state budget deficits in subsequent years through:
  - stable increase in incomes resulting mostly from an accelerated GDP growth rate, as a result of the economic policy of the government,
  - shaping expenses at a level correlated with the financial situation of the state, so that the dynamics of their growth be lower than GDP growth rate; this will allow to reduce the degree of fiscalism in the economy,
  - public finance restructuring through the implementation of a complex programme of a more effective allocation of budgetary funds; such programme will be prepared by the Government Plenipotentiary for Public Finance Restructuring,
- Limiting new sureties and guarantees granted only to support the investments contributing towards accelerating the economic growth; stricter evaluation criteria are anticipated for sureties and guarantees requests from the point of view of reducing financial risk encumbering the budget, as well as non-granting of sureties and guarantees being actually a substitute of budget subsidies,
- Checking the process of debt growth in the public finance sector outside of the State Treasury and local government units,
- Introducing prudential procedures resulting from the Public Finance Act in the case of exceeding the threshold of 50%.

The execution of the a/m actions should enable the statutory relation to reach the level slightly exceeding 50% in the years 2004-05 and create conditions to reduce this relation to below 50% in the following years.

Ad 2) to minimise debt service costs within longer time horizon given the assumed limitations - this objective is defined in two categories:

- to minimise the costs within the horizon specified by the redemption dates of instruments with the longest maturity and substantial share in the debt (currently 10 years) - through the optimal selection of debt management instruments, their structure, and dates of issue,
- to minimise the service costs as constant actions improving the efficiency of TS market (these actions have been presented in chapter VII).

The minimisation of debt service costs should be done under the assumption of financing the state budget borrowing needs and limitations resulting from:

- a) *local currency refinancing risk* - assuming:
  - increasing average maturity of the debt - at a rate depending on the market situation,
  - striving for an even distribution of payments deriving from debt serviced and redeemed in subsequent years,
  - reducing the share of treasury bills in domestic debt,
- b) *foreign exchange risk and foreign currency refinancing risk* - assuming:
  - reduction of the share of foreign debt in total debt through contracting debt in foreign markets at a level resulting from the redeemed liabilities (taking into consideration the peculiarity of credits in international financial institutions),
  - that when contracting new debt the piling up of foreign payments falling in the years 2004-09 will be taken into account,
- c) *interest rate risk* - assuming increase in domestic debt duration at a rate depending on the market situation, including interest rates convergence,
- d) *state budget liquidity risk* - assuming that state budget liquidity will stay at a safe level given effective management of liquid assets,
- e) *other risks* - assuming conclusion of transactions with domestic and foreign entities with the highest credit rating and limitation of operational risk related to technical infrastructure and debt management structure,
- f) *distribution of debt service costs in time* - assuming successive reduction, starting from 2003, of debt service costs ratio to GDP.

## VII. TASKS OF THE STRATEGY IN THREE-YEAR HORIZON

The following should be considered as the most important tasks of the strategy resulting from the implementation of the objectives:

1. To increase the liquidity, efficiency, and transparency of the Treasury Securities market.
2. To start the programme of refinancing repayments of foreign debt falling in the years 2004-09 in the best way from the point of view of risk and cost incurred,
3. To improve the primary dealers system,
4. To develop a system of state budget liquidity management,
5. To develop a system of retail instruments sale.
6. To continue the conversion of non-marketable debt to market instruments.

Ad 1) To increase the liquidity, efficiency, and transparency of the Treasury Securities market.

The interaction between the primary and the secondary market of Treasury Securities demands care for the efficiency of the two markets. Markets are efficient if they are liquid and transparent. The liquidity of the secondary market materially affects the level of prices in the primary market while the structure and level of the securities offered in the primary market affect, in turn, the liquidity of the secondary market. In effect, the liquidity of the securities market directly impacts the costs of debt service. The endeavours aimed at improving the efficiency of the securities market are based on the recommendations of IMF and OECD, and in particular on the standards binding in states of the EU and will concern areas related to:

- Adjusting the issues of securities to the EU standards. Actions aimed at creating an efficient and liquid TS market, comparable to TS markets in other countries will be necessary here. One of the means to realise this task is an adequate issuing policy, which consists in limiting the number of bonds issues, with a simultaneous increase in their value (to an equivalent of ca. EUR 5 billion). This was the direction in which the calendar of issues for 2002 was modified and the calendar for 2003 was prepared. In view of the continuing switching auctions and in order to increase the depth of the primary market a simultaneous reduction of the number of sale auctions is planned.
- Continuation of the switching auctions as an instrument of reducing refinancing risk and increasing the value of benchmark issues.
- Development of electronic platform for TS trading. The Ministry of Finance has ordered organization and administration of the electronic platform to the company CeTO S.A. on the basis of the existing IT system. In the area of developing electronic TS trading, actions oriented towards full integration of the electronic platform with its European equivalents are planned to be undertaken.

- Efforts to eliminate barriers of technical and legal nature and in the clearing infrastructure. Many improvements and new solutions relating to the bonds clearing system have been implemented by the National Depository of Securities (KDPW) within the last months, such as multi-batch settlements, recording and clearing procedures for repo and buy-sell back transactions or the recently introduced RTGS (real time gross settlements) for the treasury bonds market. From the point of view of the Treasury Securities issuer and the market, however, important is the flexibility of the introduced implementations, so that they may be put to practical use (especially in the field of repo, buy-sell back, borrowing market, or RTGS). Also needed is an adequate policy of fees charged by KDPW (encouraging development of respective market segments) and a good marketing and information policy addressed to market participants.
- A material element resulting from the experience of countries which have completed full integration with the financial market of the euro zone is to create conditions for co-operation in the area of securities clearing with the European systems of settlements (such as Euroclear and Clearstream) thus enabling large foreign investors to settle transactions in a familiar environment.

Ad 2) To start the programme of refinancing the foreign debt instalments falling in the years 2004-09 in the best way from the point of view of risk and cost incurred

It is assumed that starting from the year 2003 the maturing foreign debt principal repayments will be financed by debt issue in foreign markets, through the so-called structured finance, namely issue of long-term obligations, covering the state budget's demand for funds necessary to effect the planned principal repayments and possible operations of early debt repayment. The maturity of the newly issued debt will take into account the distribution of foreign obligations repayments. Foreign investors base will be diversified, what in practice amounts to choosing different markets, currencies, maturity dates, and types of instruments.

Ad 3) To improve the Primary Dealers System

The introduction of the Primary Dealers System was preceded by launching a procedure for selecting the most active market participants. The first period of the competition ended as planned on 30 September 2002, the signing of agreements with the most active banks on performance of the function of primary dealer is planned for the end of 2002, while the start of the system for 1 January 2003. An integration of the Primary Dealers System with the NBP supervised money market dealers system is also planned starting from 2003.

In addition to increasing the transparency and liquidity of TS market, the Primary Dealers System will allow for a more efficient co-operation with banks in the field of the issuing policy, conversion and redemption of Treasury Securities, as well as budget liquidity management (deposits, repo transactions).



Ad 4) To develop a state budget liquidity management system

An element which improves the efficiency of the state budget liquidity management will be the introduction of an integrated state budget account, which will make full information about total budgetary funds balance available at day end. Further actions should aim at combining all the accounts of all the budgetary units into a system operating on-line.

The scope of liquidity management instruments is assumed to grow wider - at the first stage by adding the placing of funds in commercial banks. This will become possible once the banking sector's overliquidity is eliminated, the Primary Dealers System is launched, procedures for co-ordination of Finance Ministry and Central Bank actions are prepared, as well as technical and legal solutions are in place.

At a later stage the set of liquidity management instruments should be extended as the Polish financial market develops in accordance with the practice of other countries.

Ad. 5) To develop a retail instruments sale system

A system of retail bonds sale covers instruments issued for natural persons. In the period covered by the present strategy first of all an extension of the sales network is anticipated.

The basic requirements to be imposed on the new issuing agent (from August 2003) will be to increase bonds availability through:

- Increasing the number of customer service outlets which sell retail bonds,
- Starting sale by telephone orders and in more distant future through a network of cash points,
- Further development of bonds sale through the Internet.

The acceptance of the function by the new issuing agent will also involve remote management of bonds by introducing an on-line register of bonds buyers. The new solutions will enable to shorten procedures related to handling bonds what will be advantageous for both the State Treasury and the investors.

Ad. 6) To continue the conversion of non-marketable debt to marketable instruments

The conversion of the domestic non-marketable to marketable debt can mainly apply to non-marketable bonds and ZUS (Social Insurance Company) obligations deriving from overdue contributions to OFE (Open Pension Funds) (should these obligations be taken over by the State Treasury).

## VIII. CHARACTERISTICS OF NEW INSTRUMENTS OF IMPLEMENTING THE STRATEGY OBJECTIVES

The basic instruments of implementing the strategy objectives and tasks cover: decision making procedures, debt instruments, operations on debt components, as well as legal/organisational instruments. New elements are related to development of the market, improvement in technical infrastructure, and progress in the field of debt management methodology. The following should be included among the most important items:

1. IT system for public debt management - the system implementation is mainly supposed to enable automation of the process of entering and aggregating data within an integrated base, risk analysis and management, and adoption of simulation methods in debt management. Introduction of an IT system with a standardised data base will reduce the operational risk related to debt management.
2. Introduction and development of optimising methods and techniques to support debt management  
Own optimising methods and techniques are being developed in addition to the standard risk analysis and simulation methods. These works will be continued and put to practical use.
3. Legal/organisational solutions, therein mostly amendment of the Public Finance Act, enabling inter alia:
  - More efficient management of state budget liquidity,
  - Adjustment of accounting methods to the peculiarity of operations on derivative instruments,
  - More flexible approach to debt service costs when structuring the State Budget Act.
4. Derivative instruments for more efficient and flexible risk and cost management (mainly swaps). Transactions on derivative instruments are supposed to enable:
  - Management of interest rate, foreign exchange and refinancing risks related to debt structure, by changing its characteristics,
  - Management of liquidity by adequate shaping of cash flows related to debt service costs and principal payments.
5. New debt instruments to be introduced depending on the situation in the financial market, the needs of investors, and compliance with strategy objectives. Such instruments can apply to retail and wholesale market.

## IX. FORECAST OF DEBT VOLUME AND DEBT SERVICE COSTS

The presented forecasts result from solutions adopted in the strategy and from implementation of its objectives. The forecasts for the years 2004-05 were presented within certain brackets owing to scenario-based assumptions concerning the level of budget deficit, proceeds from privatisation, evolution of foreign exchange rates, and interest rates.

Table 7.

	2001	2002	2003	2004	2005
<b>1. State Treasury debt</b>					
a) in PLN billion	283.9	332.5	374.6	403.7-416.0	421.1-446.1
b) in relation to GDP	39.3%	44.8%	47.8%	47.9-49.4%	46.4-49.2%
<b>2. State public debt</b>					
a) in PLN billion	302.1	358.2	395.4	427.5-439.8	447.6-472.6
b) in relation to GDP	41.9%	48.2%	50.4%	50.7-52.2%	49.4-52.1%
<b>3. State public debt increased by the amount of anticipated payments under sureties and guarantees</b>					
a) in PLN billion	311.6	370.1	411.7	444.1-456.4	464.2-489.3
b) in relation to GDP	43.2%	49.8%	52.5%	52.7-54.2%	51.2-54.0%
<b>4. State Treasury debt service costs</b>					
a) in PLN billion	20.9	25.7	27.3	28.2-28.5	29.2-30.2
b) in relation to GDP of which:	2.90%	3.46%	3.48%	3.34-.38%	3.22-.33%
- domestic debt	2.37%	2.87%	2.79%	2.60-.62%	2.47-.55%
- foreign debt	0.53%	0.59%	0.69%	0.74-.76%	0.75-.78%

Table 8.

	2001	2002	2003	2004	2005
<b>1. Debt of the general government sector</b> <u>acc. to EU methodology</u> in relation to GDP	38.7%	43.8%	44.7%	44.6-46.0%	42.7-45.4%

The presented data show that:

- The State Treasury debt will increase in 2002 by ca. PLN 48.6 billion, while its relation to GDP from 39.3% in 2001 to ca. 44.8%. In the period 2003-05 the State Treasury debt will increase by PLN 88.6-113.6 billion, while the relation of this debt to GDP will increase in 2005 to 46.4%-49.2%,
- The state public debt will increase in 2002 to a bigger extent: by about PLN 56.1 billion, while its relation to GDP will increase from 41.9% in 2001 to about 48.2%. In the period 2003-05 the state public debt will increase by PLN 89.4-114.4 billion, while its relation to GDP will increase in 2005 to 49.4%-52.1%.
- **The state public debt increased by the amount of the anticipated payments under sureties and guarantees granted by public finance sector entities will increase in 2002 by about PLN 58.5 billion, while the relation of this debt to GDP will increase from 43.2% in 2001 to 49.8%. In the period 2003-05 the said debt will increase by PLN 94.2-119.2 billion, while the relation of this debt to GDP will increase in 2005 to 51.2%-54.0% (in 2004 it will be 52,7%-54.2%) .**
- In the years 2004-05 nominal costs of the State Treasury debt service should increase at a significantly slower pace than in 2002; the relation of debt service costs to GDP after the increase in 2002 and 2003 to: 3.46% and 3.48%, respectively, should fall down in 2004 and 2005 to 3.34-3.38% in 2004 and to 3.22-3.33% in 2005;
- From 2003 the relation of domestic debt service costs to GDP should successively diminish (from 2.87% in 2002 to 2.47-2.55% in 2005); at the same time the relation of foreign debt service costs to GDP in this period will increase (from 0.53% in 2002 to 0.75-0.78% in 2005).

For comparison sake the results of debt to GDP evolution were presented according to the EU methodology (on the assumption that OFEs are included in the general government sector).

## **X. INFLUENCING THE DEBT OF THE PUBLIC FINANCE SECTOR `**

### **X.1. Analysis of the level of debt of the central government excluding the State Treasury debt**

In the period July 2001 - June 2002 the debt of the remaining central government sector (i.e. the debt of entities belonging to the central government with the exception of the State Treasury) before the consolidation within the public finance sector increased by PLN 3.9 billion (27.7%) to reach, as at the end of the first half of 2002, the level of PLN 18.1 billion. Including consolidation it increased by PLN 4.0 billion and reached PLN 11.0 billion. At the same time the share of debt taken by these entities outside of the public finance sector in their total debt has increased (from 48.9% to 60.4%).

The debt of ZUS and ZUS-managed funds had a dominant influence on the evolution of the level and structure of the debt of central government excluding the State Treasury. In the said period the debt of this entity (together with the thereby managed funds) increased by PLN 3.8 billion (i.e. by 33.9%). This increase was a consequence of untimely payment of contributions to OFE (increase in liabilities from PLN 4.8 billion to 6.7 billion) and credits taken by ZUS in commercial banks (as at the end of June ZUS did not disclose any therefrom deriving liabilities while at the end of June 2002 they reached the level of PLN 2.2 billion). The process of ZUS liabilities towards OFE growing bigger has intensified in the period under review. In the first half of 2002 this debt increased by as much as PLN 1.3 billion (of which in the second quarter by PLN 0.9 billion), while in the second half of 2001 it increased by PLN 0.6 billion. On the other hand, the bank loans taken by ZUS are of a short-term nature and are used for current management of this entity's liquidity.

In the first half of 2002 the increase in the debt of health care centres (ZOZ) of the central government sector before consolidation was close to that noted in the second half of 2001 (PLN 81 million, as compared to PLN 79 million). The share of liabilities taken by these entities inside the public finance sector in their total debt increased at the same time (from 12.4% to 17.7%). The growing debt of these units is first and foremost a consequence of untimely payment of liabilities.<sup>3</sup>

The debt of the remaining state legal persons, after a decline in the period of the second half of 2001 (by PLN 75.1 million, i.e. by 16.3%), increased by over PLN 210 million (54%) in the first half of 2002. The increased debt against this item in 2002 resulted first and foremost from the growing liabilities of the Agricultural Market

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<sup>3</sup> As at the end of June 2001 the share of matured liabilities in total ZOZ debt was at the level of 97.1% before consolidation and 96.7% after consolidation. As at the end of June 2002 it amounted to 98.3% and 98.2%, respectively. These were liabilities related i.a. to purchase of services (e.g. laboratory research), equipment, training, to lease of premises, as well as vis-a-vis revenue offices, ZUS or National Health Funds.

Agency deriving from credits taken in commercial banks for financing and refinancing of corn purchase as well as financing the Agency's statutory activity (from PLN 0.27 billion at the end of 2001 to PLN 0.57 billion at the end of June 2002).

In the period under discussion a systematic decline was noted in the debt of higher schools. On the other hand the debt of the remaining entities was subject to some slight fluctuations.

Tables 9-10 below show some detailed data concerning the debt of central government excluding the State Treasury in the period end of June 2001 - June 2002.

Table 9. Debt of the remaining central government sector before consolidation.

Description	June 2001	Dec. 2001	June 2002	Change	
	PLN mn	PLN mn	PLN mn	June 02-June 01	
1	2	3	4	5 = 4-2	6
Debt of the central government excluding the State Treasury	14,202.0	15,910.3	18,140.1	3,938.1	27.7
- ZUS and ZUS managed funds	11,262.9	13,173.5	15,084.9	3,822.0	33.9
- National Health Funds	1,025.1	1,052.8	1,053.3	28.2	2.8
- State earmarked funds with personality at law (excluding ZUS)	244.3	192.8	231.8	-12.5	-5.1
- State higher schools	405.8	237.9	215.0	-190.8	-47.0
- Research & development units	372.0	368.6	381.2	9.3	2.5
- Independent public health care units	397.2	476.0	557.2	160.0	40.3
- State institutions of culture	5.1	5.5	3.7	-1.3	-25.9
- Polish Academy of Science and the thereby established organisational units	27.7	16.5	16.2	-11.5	-41.6
- Other state legal persons	461.9	386.8	596.7	134.8	29.2

Table 10. Debt of the remaining central government sector after consolidation.

Description	Dec. 2001	Dec. 2001	June 2002	Change June 02–June 01	
	PLN mn	PLN mn	PLN mn	PLN mn	%
1	2	3	4	5 = 4-2	6
Debt of the central government excluding the State Treasury	6,947.6	8,703.4	10,960.6	4,013.0	57.8
- ZUS and ZUS managed funds	5,262.9	7,173.5	9,084.9	3,822.0	72.6
- National Health Funds	137.8	154.4	146.7	8.8	6.4
- State earmarked funds with personality at law (excluding ZUS)	244.3	192.8	231.8	-12.5	-5.1
- State higher schools	248.0	186.4	173.2	-74.8	-30.2
- Research & development units	268.3	254.3	257.1	-11.2	-4.2
- Independent public health care units	347.8	389.7	458.4	110.6	31.8
- State institutions of culture	4.2	4.3	2.8	-1.4	-33.9
- Polish Academy of Science and the thereby established organisational units	17.9	11.6	12.1	-5.8	-32.6
- Other state legal persons	416.3	336.3	593.7	177.4	42.6

## X.2. Analysis of the level of debt of the local government sector

In the period July 2001 - June 2002, the debt of the local government sector before consolidation within the public finance sector increased by PLN 4.3 billion (38.2%) to reach the level of PLN 15.5 billion (after consolidation it increased by PLN 3.8 billion to the level of PLN 11.5 billion). The share of debt taken by these entities outside the public finance sector in their total debt increased at the same time (from 68.1% to 74.2%).

Changes taking place in the debt of the local government sector were considerably affected by the liabilities taken by local government units<sup>4</sup>. After a significant increase in the debt of these units in the second half of 2001 (before consolidation by PLN 3.2 billion, after consolidation by PLN 2.9 billion), a slight increase in liabilities was noted in the first half of 2002 (by PLN 0.5 billion and PLN 0.6 billion, respectively). Such an evolution of the debt is first and foremost the effect of most local government units obtaining a positive financial result during the first six months of the year. On the other hand, a majority of these entities

<sup>4</sup> The share of the debt of these entities in the indebtedness of the local government sector as at the end of June 2001 and at the end of the first half of 2002 stayed at the level of: before consolidation within the public finance sector: 81.4% and 82.4%, after consolidation: 79.8% and 84.1%, respectively.

closes the budgetary year at a deficit. It should also be emphasised that a tendency towards an increased investment activity of these entities (financed mostly by contracting credits) has appeared in recent years.

Taking into consideration the limitations concerning the undertaking of liabilities by local government units (see chapter X.3.), it should be stated that the consolidated results of these units were far from the assumed limits. The relation of debt to the incomes of all the units at the end of 2001 amounted to 15.4% (the individual limit for respective entity being 60%), whereas at the end of the first half of 2002 to 16.1%, in relation to the incomes planned for 2002. In the present market situation an essential limitation to an increase in the debt of local government units is first and foremost the limit imposed on the level of total payments falling in respective budgetary year against the maturing debt, costs of its service, and payments deriving from sureties granted. This amount cannot exceed 15% of the incomes of local government units planned for a given year.

Among the remaining entities of the local government sector the highest debt was disclosed by independent public health care units. It should be emphasised that the high growth rate of the debt of these units observed in the second half of 2001 slowed down in the first half of 2002 (even a slight decline in the debt of these units was noted in the first quarter of 2002). Like in the case of ZOZes included among the central government sector, their debt was first of all the result of untimely payment of liabilities. The share of ZOZes' debt to the public finance sector in their total debt increased in the period July 2001 - June 2002 (from 22.9% to 32.6%).

Tables 11 and 12 present detailed data on the debt of the local government sector before and after consolidation.

Table 11. Debt of the local government sector before consolidation



Description	June 2001	Dec. 2001	June 2002	Change	
				June 02–June 01	
	PLN mn	PLN mn	PLN mn	PLN mn	%
1	2	3	4	5 = 4-2	6
Debt of the local government sector	11,191.1	14,845.0	15,463.2	4,272.1	38.2
I. Debt of local government units	9,104.3	12,266.4	12,745.7	3,641.4	40.0
1. Domestic debt	8,890.8	11,989.2	12,443.9	3,553.1	40.0
- long-term	7,394.3	10,472.3	10,761.9	3,367.6	45.5
- remaining	1,496.5	1,516.9	1,681.9	185.5	12.4
2. Foreign debt	213.5	277.2	301.8	88.3	41.4
- long-term	213.5	275.2	299.8	86.3	40.4
- remaining	0.0	1.9	2.0	2.1	-
II. Remaining debt of the local government sector	2,086.8	2,578.6	2,717.6	630.7	30.2
- Earmarked funds with personality at law	38.8	36.4	22.1	-16.7	-43.1
- Independent public health care institutions	1,881.7	2,432.8	2,577.7	695.9	37.0
- Local government institutions of culture	47.2	61.9	53.8	6.6	14.0
- Other local government legal persons	119.1	47.5	64.0	-55.1	-46.3

Table 12 Debt of the local government sector after consolidation

Description	June 2001	Dec. 2001	June 2002	Change	
				June 02–June 01	
	PLN mn	PLN mn	PLN mn	PLN mn	%

1	2	3	4	5 = 4-2	6
Debt of the local government sector	7,620.6	10,768.9	11,470.3	3,849.8	50.5
I. Debt of local government units	6,083.7	9,008.8	9,642.5	3,558.8	58.5
1. Domestic debt	5,870.3	8,731.6	9,340.8	3,470.5	59.1
- long-term	4,846.3	7,666.4	8,041.5	3,195.2	65.9
- remaining	1,024.0	1,065.2	1,299.3	275.2	26.9
2. Foreign debt	213.5	277.2	301.8	88.3	41.4
- long-term	213.5	275.2	299.8	86.3	40.4
- remaining	0.0	1.9	2.0	2.1	-
II. Remaining debt of the local government sector	1,536.8	1,759.4	1,827.8	290.9	18.9
- Earmarked funds with personality at law	5.7	2.7	6.1	0.4	6.3
- Independent public health care institutions	1,451.4	1,683.4	1,738.2	286.8	19.8
- Local government institutions of culture	34.7	33.8	29.6	-5.1	-14.6
- Other local government legal persons	45.1	39.5	54.0	8.9	19.6

### **X.3. Influence on the debt of the public finance sector**

The Minister of Finance has powers to manage the debt only concerning the State Treasury. With regard to the units of the public finance sector, whose indebtedness is included among the state public debt but which does not constitute the indebtedness included among the State Treasury debt one may only speak of influence. Therefore, provisions were included in the Public Finance Act, relating to the local government units, which:

- reduce the level of debt burden (repayment of principal instalments and debt service costs as well as payments under sureties granted) in relation to the planned incomes to 15%,
- reduce the debt level in relation to incomes to 60%,
- reduce the debt service costs distribution in time (cost of debt service must be incurred at least once a year, discount against issued securities may not exceed 5% of nominal value, and capitalisation of interest is not allowed),
- reduce the possibilities of contracting obligations whose maximum nominal value, expressed in zlotys, was not established on the day of concluding the transaction,
- set forth a requirement of obtaining a credit rating opinion from the regional reckoning chambers.

A special attention must also be paid to the issue of obligations contracted by respective groups of public finance sector entities. This problem concerns in particular ZUS and ZUS-managed funds as well as independent public health care units.

The problems of ZUS and ZUS-managed funds in timely payment of contributions to OFE are mainly related to the defective functioning of the IT system. Such situation brought about a systematic increase

in mature liabilities and the necessity of incurring additionally the costs of the thereon accruing interest. Works are about to be completed on introducing a modified IT system allowing a timely payment of pension contributions to OFE. With regard to the already existing ZUS debt to OFE a general outline is being worked out for these obligations take-over by the State Treasury and conversion to marketable bonds.

The problem of the growing indebtedness of independent public health care units also requires a solution. It is first of all necessary to create some systemic solutions to make their functioning rational and eliminate the possibility of uncontrolled borrowing.

## **XI. THREATS TO THE STRATEGY IMPLEMENTATION**

We may presently indicate the following risks in the evolution of the main relations characterising the public debt and the debt management strategy implementation:

- a) unfavourable development of the country's macroeconomic situation, i.a.:
- GDP growth rate being lower than assumed,
  - Inflation increasing over the assumed safe level,
  - Slowdown in interest rate reduction,
  - significantly weaker rate of zloty to foreign currencies,
- b) limited effects of the public finance reform resulting in budget deficit and public finance sector deficit staying at a high level; this will result in increased indebtedness and will affect the level of interest rates,
- c) low proceeds from privatisation, meaning: the necessity of increasing debt in TS,
- d) unfavourable situation as concerning the balance of payments, increasing the risk of significant devaluation of zloty and limiting the possibilities of contracting debt in the international market,
- e) the risk of a delay in the process of the European Union's enlargement by new countries, what will reduce the confidence of foreign investors in investments in Poland,
- f) unfavourable evolution of the relations between the short- and long-term interest rates (following the increase in investment risk in Poland), resulting in lack of progress concerning the reduction of risk related to debt structure,
- g) deterioration of the international economic situation or a slump (at a wider or regional scale) preventing the implementation of the macroeconomic objectives.

The risks concerning the situation of the state finance, the dynamics of economic growth (internal factors) as well as deterioration of the international economic situation (foreign factor) should be considered as the most important. The materialisation of these risks will increase the relation of the debt service costs and the debt level to GDP and will enforce the necessity of applying stricter prudential procedures and budgets of local government units in subsequent years.

In turn the risk of postponement of the date of Europe's enlargement by new countries will mean the necessity of financing the borrowing needs in the domestic and foreign market in much less favourable conditions and with a limited participation of foreign investors.

## **XII. THE EFFECTS OF STRATEGY IMPLEMENTATION**

The present Strategy is a document which treats in a complex manner the problems of the debt of the public finance sector in Poland. For the first time since the enforcement of the Public Finance Act it has become possible that the threshold of 50% for the relation of state public debt, increased by the amount of anticipated payments under sureties and guarantees, to GDP will be exceeded and will approach the level of 55% in the years 2004-05. The strategy presents the consequences of such a situation, should it appear. At the same time we have discussed the regulations relating to public debt in Poland and in the EU. A separate analysis of the risk related to debt and the costs of its service enabled to emphasise the correlation between minimisation of debt service costs and debt management.

The basic effects of strategy implementation can be comprised in the following points.

1. According to the current assumptions, the relation of the State public debt increased by the anticipated payments under guarantees and sureties to GDP will amount in 2002 to 49.8% and in 2003 to 52.5%. In the years 2004-05 it will reach the level of: 52.7-54.2% and 51.2-54.0%, respectively. Actions in the area of fiscal and economic policy may limit the risk of approaching the threshold of 55%.
2. The State Treasury debt service costs will increase in 2003 to PLN 27.3 billion (3.48% of GDP) from PLN 25.7 billion (3.46%) in 2002. In the years 2004-05 the debt service costs will increase to ca. PLN 28.2-28.5 billion (3.34-3.38%) and to PLN 29.2-30.2 billion (3.22-3.33%), respectively,
3. As a result of implementing the strategy the following parameters of the State Treasury debt should be expected to be achieved until 2005:
  - the share of foreign debt will drop from 34.8% at the end of 2001 to about 30.2% - 30.9%,
  - the average maturity of domestic market debt will increase from 2.51 year in 2001 to about 3.3 - 3.5 years,
  - the debt duration will increase from 1.75 year at the end of 2001 to about 2.5-2.7 year,
  - the share of non-marketable debt in domestic debt will drop from 11.0% at the end of 2001 to about 0.3%-0.6%,
  - the share of TS purchased by domestic non-banking sector in domestic debt will increase from 42.6% at the end of 2001 to about 57.7%-61.2%.

## STATE BUDGET DEBT, by place of issue by instrument (at nominal value) in mln PLN, eop

	XII 2000	VI 2001	XII 2001	VI 2002	structure VI 2002 %	change XII 2001 - XII 2000 min PLN %		change VI 2002 - XII 2001 min PLN %	
<b>State Treasury Debt</b>	<b>266 816,8</b>	<b>271 562,8</b>	<b>283 937,5</b>	<b>320 880,1</b>	<b>100,0%</b>	<b>17 120,7</b>	<b>6,4%</b>	<b>36 942,6</b>	<b>13,0%</b>
<b>I. State Treasury Domestic Debt</b>	<b>145 981,6</b>	<b>160 314,1</b>	<b>185 028,4</b>	<b>211 920,5</b>	<b>66,0%</b>	<b>39 046,8</b>	<b>26,7%</b>	<b>26 892,1</b>	<b>14,5%</b>
<b>1. Treasury Securities</b>	<b>132 984,4</b>	<b>149 874,9</b>	<b>176 048,4</b>	<b>203 794,6</b>	<b>63,5%</b>	<b>43 064,0</b>	<b>32,4%</b>	<b>27 746,2</b>	<b>15,8%</b>
<b>1.1. Marketable Treasury Securities</b>	<b>117 505,2</b>	<b>134 182,5</b>	<b>158 689,9</b>	<b>186 451,4</b>	<b>58,1%</b>	<b>41 184,8</b>	<b>35,0%</b>	<b>27 761,5</b>	<b>17,5%</b>
Treasury Bills	23 442,3	29 613,8	35 215,6	45 638,6	14,2%	11 773,3	50,2%	10 423,0	29,6%
Marketable Treasury Bonds	94 062,9	104 568,7	123 474,3	140 812,8	43,9%	29 411,5	31,3%	17 338,5	14,0%
Marketable fixed rate bonds	75 411,8	87 205,9	97 526,0	117 737,1	36,7%	22 114,3	29,3%	20 211,1	20,7%
2-year zero-coupon bonds	11 711,7	17 811,7	21 973,8	29 045,4	9,1%	10 262,1	87,6%	7 071,8	32,2%
5-year fixed rate bonds	42 111,6	45 805,8	51 935,9	62 104,5	18,4%	9 824,2	23,3%	10 168,6	19,6%
5-year fixed rate bonds issued in retail network	-	-	384,8	887,5	0,3%	384,8	-	502,7	130,7%
10-year fixed rate bonds	5 149,5	7 349,5	9 049,5	13 024,0	4,1%	3 900,0	75,7%	3 974,6	43,9%
20-year fixed rate bonds	-	-	-	400,0	0,1%	-	-	400,0	-
2-year zero-coupon bonds (converted)1)	4 133,9	4 133,9	1 877,1	0,0	0,0%	-2 258,8	-54,6%	-1 877,1	-100,0%
3-year fixed rate bonds (converted)1)	3 076,3	3 076,3	3 076,3	3 046,9	0,9%	0,0	0,0%	-29,4	-1,0%
4-year fixed rate bonds (converted)1)	3 076,3	3 076,3	3 076,3	3 076,3	1,0%	0,0	0,0%	0,0	0,0%
5-year fixed rate bonds (converted)1)	3 076,3	3 076,3	3 076,3	3 076,3	1,0%	0,0	0,0%	0,0	0,0%
10-year fixed rate bonds (converted)1)	3 076,3	3 076,3	3 076,3	3 076,3	1,0%	0,0	0,0%	0,0	0,0%
Marketable floating rate bonds	18 651,1	17 362,8	25 948,3	23 075,7	7,2%	7 297,2	39,1%	-2 872,6	-11,1%
3-year floating rate bonds	10 684,9	8 796,7	8 061,5	6 737,0	2,1%	-2 623,4	-24,6%	-1 324,5	-16,4%
10-year floating rate bonds	7 966,1	8 566,1	9 356,1	9 851,6	3,1%	1 390,0	17,4%	466,5	5,3%
Bonds denominated in USD (01)	-	-	8 530,7	6 487,1	2,0%	8 530,7	-	-2 043,6	-24,0%
<b>1.2. Savings Bonds</b>	<b>1 953,4</b>	<b>3 354,4</b>	<b>6 058,3</b>	<b>7 001,3</b>	<b>2,2%</b>	<b>4 104,9</b>	<b>210,1%</b>	<b>943,0</b>	<b>15,6%</b>
2-year savings bonds	1 480,9	2 795,5	5 168,7	5 985,8	1,9%	3 707,8	253,8%	827,2	16,0%
4-year savings bonds	462,6	558,9	889,6	1 005,5	0,3%	397,1	80,6%	115,8	13,0%
<b>1.3. Non-marketable Treasury Securities</b>	<b>13 525,8</b>	<b>12 338,0</b>	<b>11 300,1</b>	<b>10 341,8</b>	<b>3,2%</b>	<b>-2 225,7</b>	<b>-16,5%</b>	<b>-958,3</b>	<b>-8,5%</b>
Restructuring bonds	6 402,6	6 316,0	6 148,0	6 024,3	1,8%	-254,6	-4,0%	-123,7	-2,0%
Bonds issued for Bank BGZ S A	788,3	794,8	795,2	785,0	0,2%	6,8	0,9%	-10,1	-1,3%
Bonds denominated in USD (91)	6 335,0	5 227,1	4 357,0	3 532,5	1,1%	-1 977,9	-31,2%	-924,5	-18,9%
<b>2. Other Domestic Debt</b>	<b>12 997,2</b>	<b>10 439,2</b>	<b>8 980,0</b>	<b>8 126,0</b>	<b>2,5%</b>	<b>-4 017,2</b>	<b>-30,9%</b>	<b>-854,1</b>	<b>-9,5%</b>
current settlements with banks 3)	41,4	-	-	-	-	-41,4	-100,0%	-	-
advances for cars 4)	-3,7	-3,7	-3,6	-3,6	0,0%	-0,1	-3,4%	0,0	-1,1%
matured payables 4) 5)	2 484,1	1 479,9	728,0	378,3	0,1%	-1 756,1	-70,7%	-349,7	-48,0%
liabilities to the budgetary sphere for non-indexation of wages in the early 1990s	9 564,5	8 636,3	7 337,0	6 638,7	2,1%	-2 227,4	-23,3%	-698,4	-9,5%
liabilities to trade unions and other groups	158,4	179,3	7,1	5,4	0,0%	-151,4	-95,5%	-1,7	-23,4%
credit taken by the Labour Fund	745,1	140,0	904,3	1 100,0	0,3%	159,2	21,4%	195,7	21,6%
<b>II. State Treasury Foreign Debt</b>	<b>120 835,2</b>	<b>111 248,7</b>	<b>98 909,1</b>	<b>108 959,5</b>	<b>34,0%</b>	<b>-21 926,1</b>	<b>-18,1%</b>	<b>10 050,5</b>	<b>10,2%</b>
<b>1. Treasury Securities</b>	<b>22 536,9</b>	<b>22 826,6</b>	<b>23 366,4</b>	<b>27 299,1</b>	<b>8,5%</b>	<b>829,4</b>	<b>3,7%</b>	<b>3 932,7</b>	<b>16,8%</b>
Brady Bonds	18 074,3	16 239,2	16 136,8	16 261,0	5,1%	-1 937,5	-10,7%	124,1	0,8%
Other Bonds	4 462,6	6 587,4	7 229,6	11 038,1	3,4%	2 766,9	62,0%	3 808,6	52,7%
<b>2. Loans, of which:</b>	<b>98 298,2</b>	<b>88 422,2</b>	<b>75 542,7</b>	<b>81 660,4</b>	<b>25,4%</b>	<b>-22 755,6</b>	<b>-23,1%</b>	<b>6 117,7</b>	<b>8,1%</b>
Paris Club creditors	87 724,8	79 967,9	64 987,7	69 612,0	21,7%	-22 737,1	-25,9%	4 624,2	7,1%
International Financial Institutions, of which	9 572,9	8 880,8	9 795,9	11 218,8	3,5%	223,0	2,3%	1 422,9	14,5%
the World Bank	7 260,1	6 554,6	6 934,0	7 474,0	2,3%	-326,1	-4,5%	539,9	7,8%
Other creditors	1 000,6	793,6	759,1	829,7	0,3%	-241,5	-24,1%	70,6	9,3%
Exchange rate used for calculations (1PLN/1USD) (fixing NBP)	4,1432	3,9871	3,9863	4,0418	-	-0,1569	-3,8%	0,0555	1,4%

\*) State Treasury debt before consolidation with the public finance sector.

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

2) Bonds issued to finance pre-mature redemption of debt towards Brazil.

3) since March 2001 r. ST debt due to current settlements with banks is included in item "matured payables".

4) data on quarterly basis.

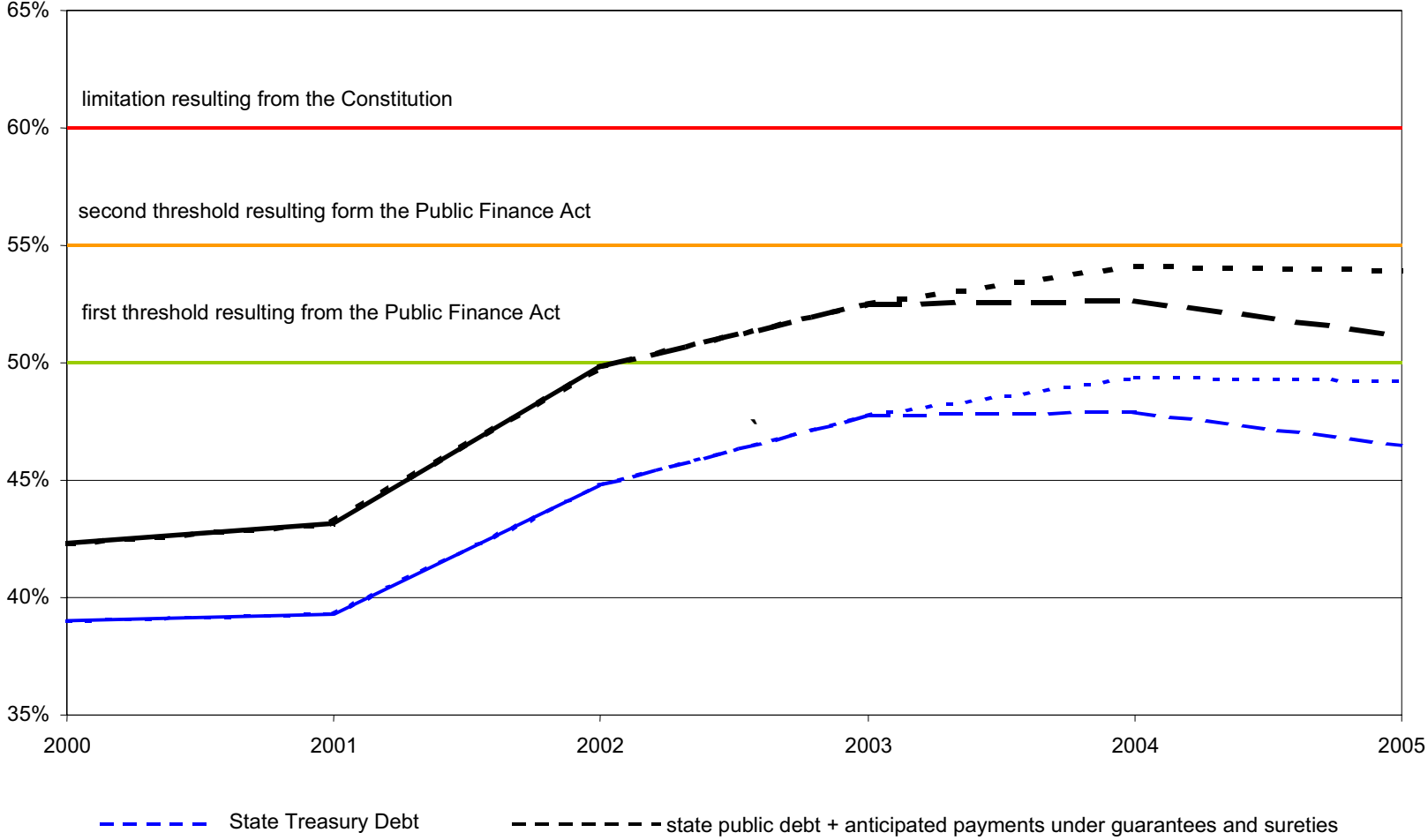
5) till February 2001 only matured payables of budgetary units were included; since March 2001 matured payables of extra-budgetary units are also included.

STATE TREASURY DOMESTIC DEBT, by place of issue, by holder (at nominal value) in mln PLN, eop\*

	xii.2000	vi.2001	xii.2001	vi.2002	structure vi.2002	change xii.2001 - xii.2000		change vi.2002 - xii.2001	
						min PLN	%	min PLN	%
<b>State Treasury Domestic Debt</b>	<b>145 981,6</b>	<b>160 314,1</b>	<b>185 028,4</b>	<b>211 920,5</b>	<b>100,0%</b>	<b>39 046,8</b>	<b>26,7%</b>	<b>26 892,1</b>	<b>14,5%</b>
<b>Central Bank</b>	<b>16 781,6</b>	<b>12 011,9</b>	<b>18 159,0</b>	<b>12 899,8</b>	<b>6,1%</b>	<b>1 377,4</b>	<b>8,2%</b>	<b>-5 259,2</b>	<b>-29,0%</b>
<b>Treasury Securities</b>	<b>16 781,6</b>	<b>12 011,9</b>	<b>18 159,0</b>	<b>12 899,8</b>	<b>6,1%</b>	<b>1 377,4</b>	<b>8,2%</b>	<b>-5 259,2</b>	<b>-29,0%</b>
<b>Marketable TSs</b>	<b>14 217,0</b>	<b>9 823,0</b>	<b>16 249,6</b>	<b>11 250,7</b>	<b>5,3%</b>	<b>2 032,6</b>	<b>14,3%</b>	<b>-4 998,9</b>	<b>-30,8%</b>
Converted Bonds:	14 217,0	9 823,0	5 898,1	3 281,8	1,5%	-8 318,9	-58,5%	-2 616,3	-44,4%
2-year zero-coupon bonds	3 280,9	2 266,9	-	-	-	-3 280,9	-100,0%	-	-
3-year fixed rate bonds	2 722,3	1 682,3	784,3	0,0	0,0%	-1 938,0	-71,2%	-784,3	-100,0%
4-year fixed rate bonds	2 733,3	1 813,3	1 363,3	395,3	0,2%	-1 370,0	-50,1%	-968,0	-71,0%
5-year fixed rate bonds	2 905,3	2 506,3	2 386,3	1 817,3	0,9%	-519,0	-17,9%	569,0	-23,8%
10-year fixed rate bonds	2 575,3	1 554,3	1 364,3	1 069,3	0,5%	-1 211,0	-47,0%	-295,0	-21,6%
5-year fixed rate bonds	-	-	1 820,8	1 481,8	0,7%	1 820,8	-	-339,0	-0,2%
Bonds denominated in USD (01)	-	-	8 530,7	6 487,1	3,1%	8 530,7	-	-2 043,6	-0,2%
<b>Non-marketable TSs</b>	<b>2 564,6</b>	<b>2 188,9</b>	<b>1 909,4</b>	<b>1 649,1</b>	<b>0,8%</b>	<b>-655,2</b>	<b>-25,5%</b>	<b>-260,4</b>	<b>-13,6%</b>
Bonds denominated in USD (91)	2 564,6	2 188,9	1 909,4	1 649,1	0,8%	-655,2	-25,5%	-260,4	-13,6%
<b>Domestic Commercial Banks</b>	<b>49 901,8</b>	<b>55 719,5</b>	<b>59 154,1</b>	<b>69 362,0</b>	<b>32,7%</b>	<b>9 252,3</b>	<b>18,5%</b>	<b>10 207,9</b>	<b>17,3%</b>
<b>Treasury Securities</b>	<b>48 371,3</b>	<b>54 961,5</b>	<b>58 249,1</b>	<b>68 261,8</b>	<b>32,2%</b>	<b>9 877,8</b>	<b>20,4%</b>	<b>10 012,7</b>	<b>17,2%</b>
<b>Marketable TSs</b>	<b>37 410,1</b>	<b>44 812,4</b>	<b>48 858,3</b>	<b>59 569,0</b>	<b>28,1%</b>	<b>11 448,2</b>	<b>30,6%</b>	<b>10 710,7</b>	<b>21,9%</b>
TS Bills	11 838,9	13 266,2	19 722,8	26 900,0	12,7%	7 863,9	66,6%	7 177,2	36,4%
2-year zero-coupon bonds	4 159,3	7 866,8	7 729,0	11 087,2	5,2%	3 569,7	85,8%	3 358,2	43,4%
2-year zero-coupon bonds (converted)	460,5	1 155,6	1 176,2	0,0	0,0%	715,7	155,4%	-1 176,2	-100,0%
3-year floating rate bonds	1 761,3	1 373,5	898,9	231,9	0,1%	-862,4	-49,0%	-666,9	-74,2%
3-year fixed rate bonds (converted)	194,0	896,7	1 539,7	2 261,2	1,1%	1 345,7	693,6%	721,5	46,9%
4-year fixed rate bonds (converted)	205,4	347,7	752,6	1 567,7	0,7%	547,3	266,5%	815,0	108,3%
5-year fixed rate bonds	16 361,9	17 174,1	14 729,1	13 269,8	6,3%	-1 632,9	-10,0%	-1 439,3	-9,9%
5-year fixed rate bonds issued in retail network	-	-	22,4	74,1	0,0%	22,4	-	51,7	231,2%
5-year fixed rate bonds (converted)	15,0	77,8	80,4	387,4	0,2%	65,4	435,9%	307,1	382,0%
10-year floating rate bonds	2 247,2	2 309,0	1 923,0	2 653,0	1,3%	-324,2	-14,4%	730,0	38,0%
10-year fixed rate bonds	166,5	318,8	254,3	1 082,3	0,5%	87,8	52,7%	808,0	325,6%
10-year fixed rate bonds (converted)	0,0	26,2	30,1	30,0	0,0%	30,1	-	0,1	-0,2%
20-year fixed rate bonds	-	-	-	4,5	0,0%	-	-	4,5	-
<b>Non-marketable TSs</b>	<b>10 961,2</b>	<b>10 148,1</b>	<b>9 390,7</b>	<b>8 692,8</b>	<b>4,1%</b>	<b>-1 570,5</b>	<b>-14,3%</b>	<b>-697,9</b>	<b>-7,4%</b>
Bonds denominated in USD (91)	3 770,3	3 038,2	2 447,6	1 863,5	0,9%	-1 322,7	-35,1%	564,1	-23,0%
Restructuring bonds	6 402,6	6 316,0	6 148,0	6 024,3	2,8%	-254,6	-4,0%	-123,7	-2,0%
Bonds issued for Bank BGZ S.A.	788,3	794,8	795,2	785,0	0,4%	6,8	0,9%	-10,1	-1,3%
<b>Other Domestic Debt</b>	<b>1 530,5</b>	<b>758,0</b>	<b>905,0</b>	<b>1 100,2</b>	<b>0,5%</b>	<b>-625,5</b>	<b>-40,9%</b>	<b>195,2</b>	<b>21,6%</b>
current settlements with banks	41,4	-	-	-	-	-41,4	-100,0%	-	-
matured payables	744,1	618,0	0,7	0,2	0,0%	-743,4	-99,9%	-0,5	-65,2%
credit taken by the Labour Fund	745,1	140,0	904,3	1 100,0	0,5%	159,2	21,4%	195,7	21,6%
<b>Domestic Non-banking Sector</b>	<b>61 546,2</b>	<b>72 755,4</b>	<b>86 972,2</b>	<b>98 836,4</b>	<b>46,6%</b>	<b>25 426,0</b>	<b>41,3%</b>	<b>11 864,2</b>	<b>13,6%</b>
<b>Treasury Securities</b>	<b>50 079,5</b>	<b>63 074,3</b>	<b>78 897,2</b>	<b>91 810,6</b>	<b>43,3%</b>	<b>28 817,7</b>	<b>57,5%</b>	<b>12 913,4</b>	<b>16,4%</b>
<b>Marketable TSs</b>	<b>48 126,0</b>	<b>59 719,9</b>	<b>72 838,9</b>	<b>84 809,3</b>	<b>40,0%</b>	<b>24 712,9</b>	<b>51,4%</b>	<b>11 970,4</b>	<b>16,4%</b>
TS Bills	10 947,3	15 644,9	14 560,3	18 166,1	8,6%	3 613,0	33,0%	3 605,8	24,8%
2-year zero-coupon bonds	3 484,5	6 293,6	9 821,9	11 310,3	5,3%	6 337,4	181,9%	1 488,4	15,2%
2-year zero-coupon bonds (converted)	392,5	711,4	700,8	0,0	0,0%	308,4	78,6%	-700,8	-100,0%
3-year floating rate bonds	8 888,5	7 387,7	7 128,6	6 465,4	3,1%	-1 759,9	-19,8%	-663,1	-9,3%
3-year fixed rate bonds (converted)	160,0	497,3	752,3	785,7	0,4%	592,3	370,2%	33,4	4,4%
4-year fixed rate bonds (converted)	137,6	915,3	960,4	1 113,3	0,5%	822,7	597,9%	153,0	15,9%
5-year fixed rate bonds	14 445,7	16 100,8	22 464,5	27 530,4	13,0%	8 018,9	55,5%	5 005,8	22,6%
5-year fixed rate bonds issued in retail network	-	-	362,3	812,7	0,4%	362,3	-	450,4	124,3%
5-year fixed rate bonds (converted)	156,0	492,2	609,6	871,6	0,4%	453,6	290,8%	261,9	43,0%
10-year floating rate bonds	5 718,2	6 226,2	7 178,4	7 142,3	3,4%	1 460,3	25,5%	-36,1	-0,5%
10-year fixed rate bonds	3 294,9	3 954,6	6 617,8	8 334,4	3,9%	3 323,0	100,9%	1 716,6	25,9%
10-year fixed rate bonds (converted)	501,0	1 495,8	1 681,9	1 977,0	0,9%	1 180,9	235,7%	295,1	17,5%
20-year fixed rate bonds	-	-	-	300,0	0,1%	-	-	300,0	-
<b>Savings Bonds</b>	<b>1 953,4</b>	<b>3 354,4</b>	<b>6 058,3</b>	<b>7 001,3</b>	<b>3,3%</b>	<b>4 104,9</b>	<b>210,1%</b>	<b>943,0</b>	<b>15,6%</b>
2-year savings bonds	1 460,9	2 795,5	5 168,7	5 995,8	2,8%	3 707,8	253,8%	827,2	16,0%
4-year savings bonds	492,6	558,9	889,6	1 005,5	0,5%	397,1	80,6%	115,8	13,0%
<b>Other Domestic Debt</b>	<b>11 466,7</b>	<b>9 681,2</b>	<b>8 075,0</b>	<b>7 025,7</b>	<b>3,3%</b>	<b>-3 391,7</b>	<b>-29,6%</b>	<b>-1 049,3</b>	<b>-13,0%</b>
advances for cars	3,7	3,7	3,6	3,6	0,0%	-0,1	-3,4%	0,0	-1,1%
matured payables	1 740,0	861,9	727,3	378,1	0,2%	-1 012,7	-58,2%	-349,2	-48,0%
liabilities to the budgetary sphere for non-indexation of wages in the early 1990s	9 564,5	8 636,3	7 337,0	6 638,7	3,1%	-2 227,4	-23,3%	-698,4	-9,5%
liabilities to trade unions and other groups	158,4	179,3	7,1	5,4	0,0%	-151,4	-95,5%	-1,7	-23,4%
<b>TSs held by Foreign Investors</b>	<b>17 752,0</b>	<b>19 827,2</b>	<b>20 743,1</b>	<b>30 822,4</b>	<b>14,5%</b>	<b>2 991,1</b>	<b>16,8%</b>	<b>10 079,3</b>	<b>48,6%</b>
<b>Marketable TSs</b>	<b>17 752,0</b>	<b>19 827,2</b>	<b>20 743,1</b>	<b>30 822,4</b>	<b>14,5%</b>	<b>2 991,1</b>	<b>16,8%</b>	<b>10 079,3</b>	<b>48,6%</b>
TS Bills	656,1	702,7	932,6	572,6	0,3%	276,5	42,1%	-360,0	-38,6%
2-year zero-coupon bonds	4 067,9	3 451,2	4 422,9	6 647,9	3,1%	355,1	8,7%	2 225,0	50,3%
3-year floating rate bonds	35,1	35,5	34,0	39,6	0,0%	-1,1	-3,0%	5,6	16,3%
5-year fixed rate bonds	11 304,1	12 530,8	12 921,4	19 802,5	9,3%	1 617,3	14,3%	6 881,1	53,3%
5-year fixed rate bonds issued in retail network	-	-	0,1	0,7	0,0%	0,1	-	0,6	941,7%
10-year floating rate bonds	0,8	30,9	254,7	56,3	0,0%	253,9	33412,3%	-198,4	-77,9%
10-year fixed rate bonds	1 688,1	3 076,1	2 177,3	3 607,3	1,7%	489,2	29,0%	1 430,0	65,7%
20-year fixed rate bonds	-	-	-	95,5	0,0%	-	-	95,5	-

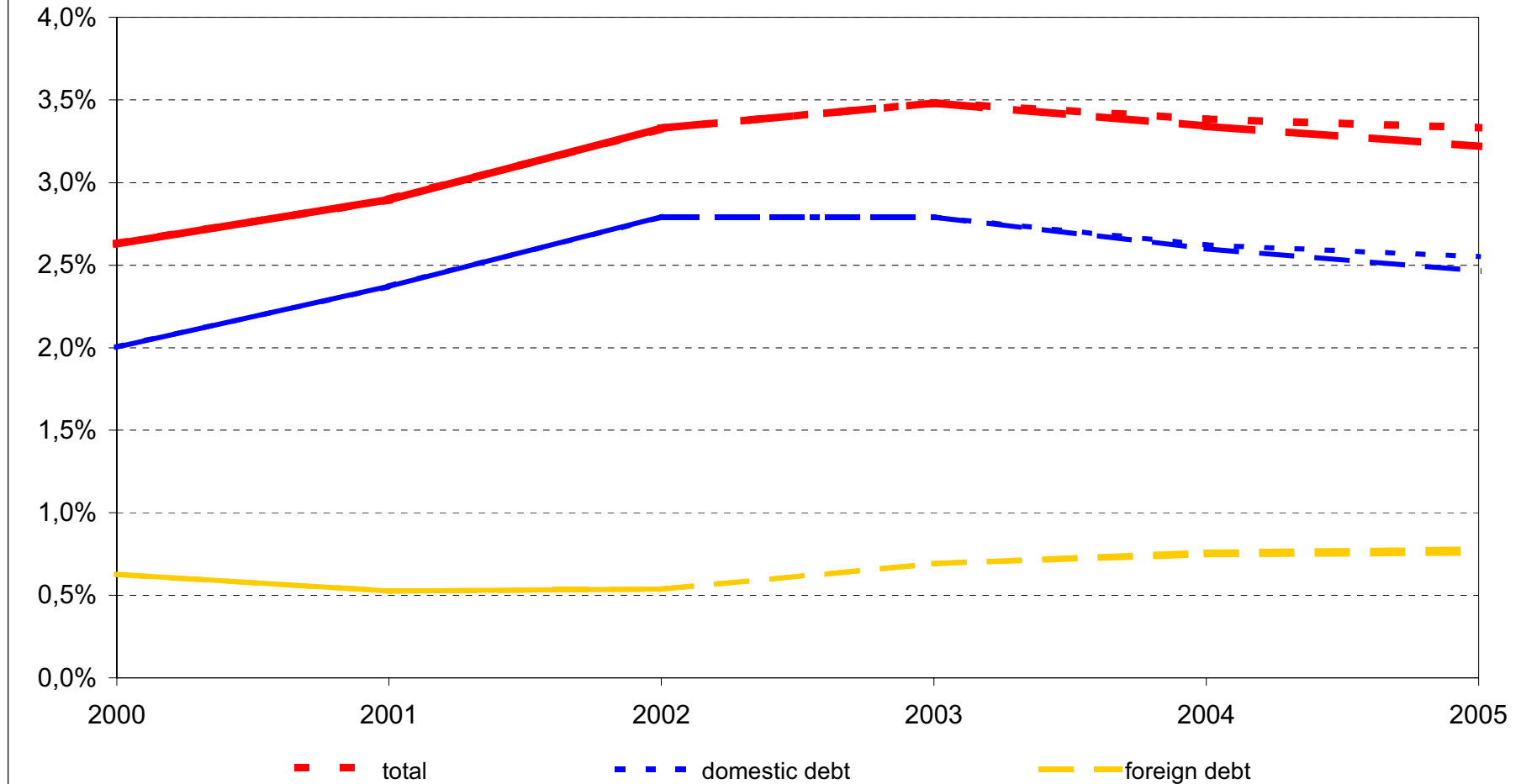
\*) State Treasury debt before consolidation within the public finance sector.

### Relation of the State Treasury debt and state public debt to GDP





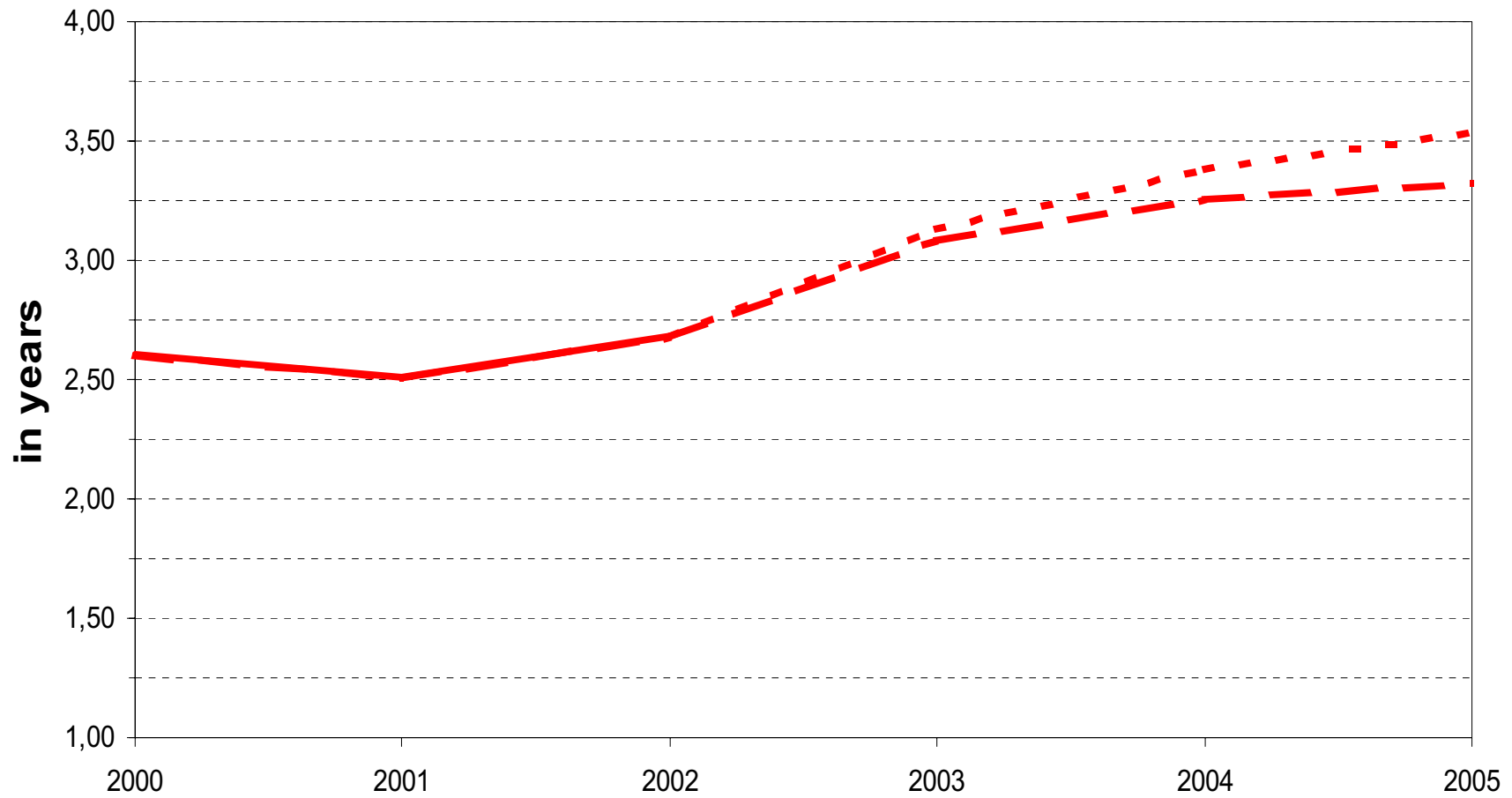
## Relation of State Treasury debt service costs to GDP



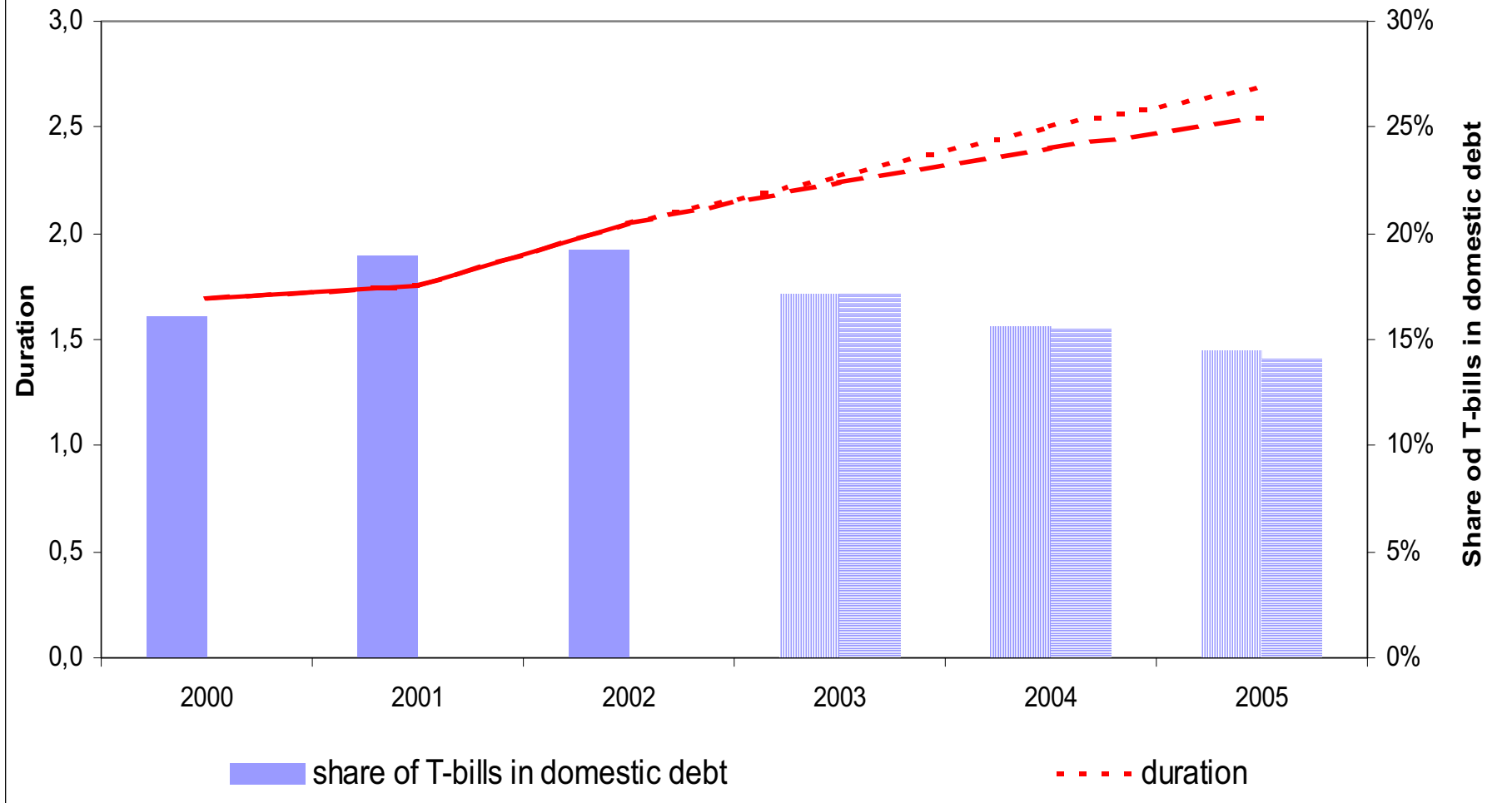
### Foreign debt share in total debt



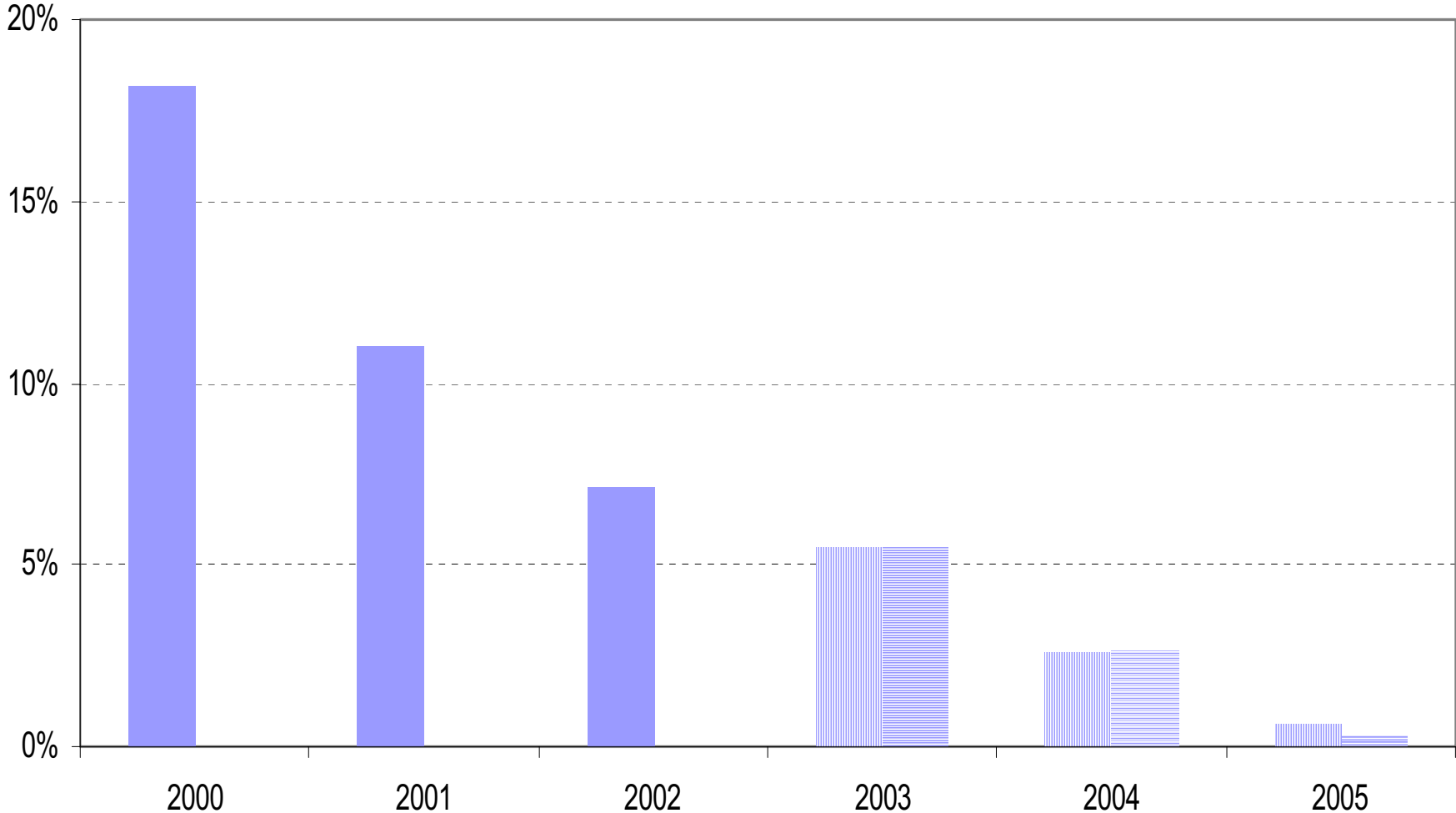
## Average maturity of marketable domestic debt



## Share of T-bills in domestic debt and average duration of marketable debt



# Share of non-marketable debt in domestic debt



## TS owed to non-banking sector as a share of domestic debt

