THE PUBLIC FINANCE SECTOR DEBT MANAGEMENT STRATEGY in the years 2023-2026

Ministry of Finance
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I. INTRODUCTION

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

Public debt management is conducted at two levels:

- in a broader sense, debt management is a part of the fiscal policy and covers decisions on what portion of State expenditure is to be financed through debt, accordingly, what the level of public debt should be (this aspect is discussed in documents updated on an annual basis, dedicated to the government economic programme, especially in the justification to the draft Budget Act and the Convergence Programme Update);
- in a narrower sense, debt management means the way of financing the State borrowing requirements and designing the debt structure, in particular by selecting markets, instruments and dates of issuance.

The macroeconomic and fiscal assumptions adopted in the *Strategy* are compliant with the assumptions of the draft Budget Act for 2023.

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

Item	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**
1. Public debt						
GDP %	43.8%	40.5%	40.6%	41.1%	41.1%	39.9%
2. The amount specified in the article 38a (3) of the Public Finance Act*						
GDP %	40.2%	38.3%	39.0%	39.7%	39.7%	38.6%
3. General government debt						
GDP %	53.8%	51.7%	53.3%	55.0%	55.6%	55.7%
4. State Treasury debt servicing costs**						
a) PLN bn	26.0	26.0	66.0	65.7 - 66.2	68.0 - 68.5	78.3 - 78.9
b) GDP %	0.99%	0.86%	1.99%	1.84% - 1.85%	1.78% - 1.80%	1.95% - 1.96%

**) The amount of public debt recalculated using the yearly arithmetic average of foreign currency exchange rates for the year concerned and reduced by the amount of liquid funds to finance the borrowing requirements of the State budget in the following fiscal year.*
***)Forecasts of the debt servicing costs for the years 2024-2026 are presented as ranges, including a provision for exchange rate risk.*

This forecast was prepared while assuming an improvement in the structural balance from 2024 at the minimum rate implied by the current provisions of the Stability and Growth Pact, i.e. 0.5 percentage points per year. The European Commission has announced that it will present in October proposals to revise these provisions; they could come into force at the earliest in 2024.

Under the adopted assumptions, at the end of 2022 the public-debt-to-GDP ratio will fall to 40.5% at the end of 2022, and will reach 40.6% at the end of 2023. Then, in 2024-2025, the ratio will stabilize at 41.1%, to drop at the end of the *Strategy's* forecast period to 39.9%.

The ratio of the amount specified in Article 38a(3) of the Public Finance Act to GDP will stand at 38.3% in 2022 and 39.0% in 2023, i.e. below the threshold of 43% under the stabilising expenditure rule. In the years 2024-2025, the ratio will increase up to 39.7%, and then decline to reach 38.6% in 2026.

The general government-debt-to-GDP ratio (according to the EU definition) will decline to 51.7% in 2022, followed by an increase up to 53.3% in 2023 and 55.0% in 2024, and will stabilize below 56%

within the *Strategy* timeframe. This means that the 60% debt-to-GDP ratio reference value will not be exceeded. The increase in the general government debt-to-GDP ratio, despite the decrease in this ratio for public debt (domestic definition) over the *Strategy* timeframe, will result from the assumed increase in debt of funds at the BGK, primarily the Armed Forces Support Fund.

The draft Budget Act for 2023 assumes the limit of the ST debt servicing costs in the amount of PLN 66.0 billion, i.e. 1.99% of GDP. For subsequent years, the *Strategy* assumes that the debt servicing costs will remain below 2% of GDP.

This *Strategy* is a continuation of the strategy developed last year. The *Strategy* objective, i.e. minimizing the long-term debt servicing costs, subject to the adopted risk constraints, has remained unchanged. The tasks aimed at implementation of the *Strategy* objective, associated with the development of the financial market, i.e. ensuring liquidity, efficiency and transparency of the Treasury Securities (TS) market, as well as the task related to the effective management of the State budget liquidity have been maintained.

The following has been assumed for the accomplishment of the *Strategy's* objective in the years 2023-2026:

- the flexible approach towards shaping the financing structure in terms of selecting the market, currency and instruments shall be maintained, to the extent that cost minimization is achieved, subject to the assumed risk level limitations;
- the domestic market shall remain the main source of financing the State budget borrowing requirements;
- the share of foreign currency debt in total ST debt will be maintained below 25%, subject to temporary deviations due to market or budgetary developments;
- building large and liquid fixed rate issues, both in the domestic, as well as the euro market, shall be a priority of the issuance policy;
- the average maturity of the domestic ST debt shall be maintained around 4.5 years, and that of the total ST debt – around 5 years, subject to possible temporary deviations resulting from market or budgetary conditions.

The *Strategy* contains four annexes, including the glossary of selected abbreviations.

II. VOLUME OF PUBLIC DEBT AND COSTS OF ITS SERVICING

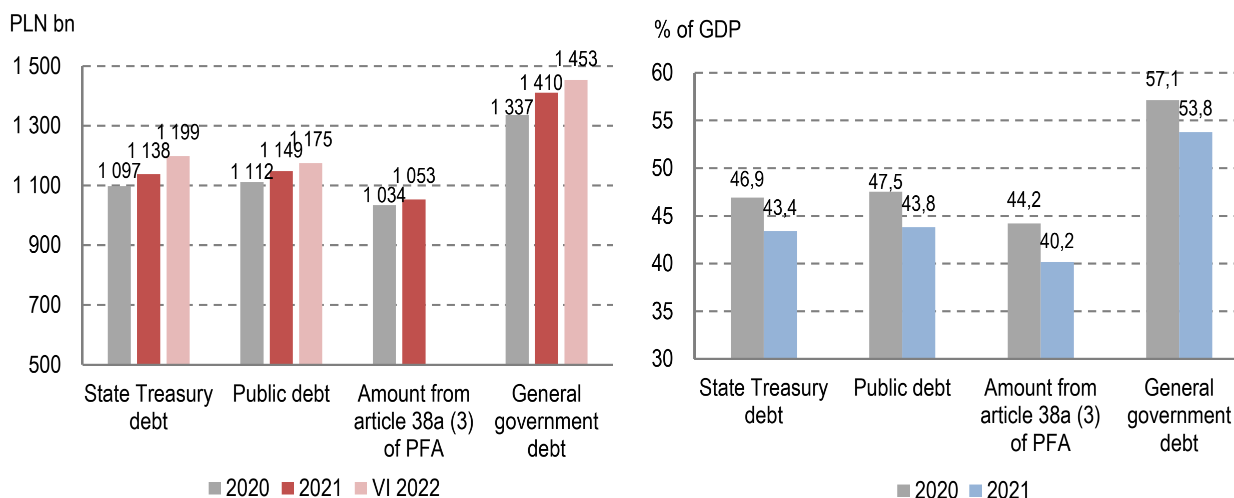
In 2021, the public debt (i.e. public debt according to the domestic definition) amounted to PLN 1,148.6 billion, which represented an increase by PLN 36.8 billion compared to the end of 2020. General government debt (EDP debt, i.e. public debt according to the EU definition) amounted to PLN 1,410.5 billion and was higher by PLN 73.9 billion compared to the end of 2020.

In 2021 the debt-to-GDP ratio decreased:

- the public debt-to-GDP ratio amounted to 43.8% compared to 47.5% at the end of 2020 (a decrease by 3.7 pp);
- the ratio of the amount specified in Article 38a(3) of the Public Finance Act (the public debt recalculated using arithmetic average of foreign currency exchange rates for the year concerned and reduced by the amount of liquid funds to finance the borrowing requirements of the State budget in the following fiscal year) stood at 40.2% of GDP at the end of 2021, i.e. below the threshold of 43% of GDP defined in the stabilising expenditure rule, as compared to 44.2% of GDP at the end of 2020;
- the general government debt-to-GDP ratio amounted to 53.8% compared to 57.1% at the end of 2020 (a decrease by 3.4 pp), and was considerably lower than the ratio for the entire European Union (88.1% of GDP) and for the euro area (95.6% of GDP), also, the reduction in the debt-to-GDP ratio was greater than in the EU as a whole (1.9 pp) and in the euro area (1.6 pp)[1].

The budgetary policy pursued in the pre-pandemic years, which resulted in a consistent reduction of the public debt-to-GDP ratio, has created a significant security buffer to be used in crisis situation with no concerns about debt reaching excessive levels. Following the crisis year of 2020, it became possible to reduce the debt-to-GDP ratio again.

Chart 1. Volume of public debt



The differences between public debt and general government debt are due to the following factors:

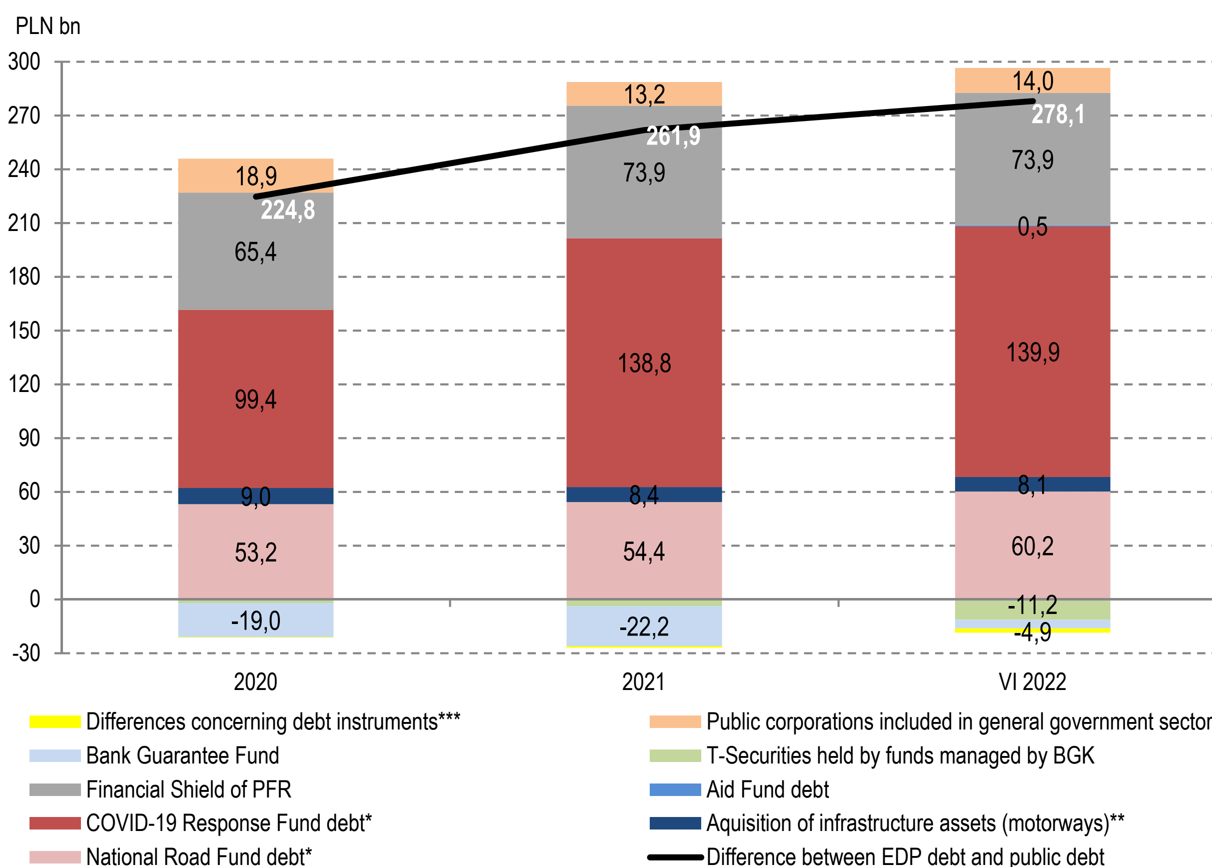
- the different scope of units included in the public finance sector, i.e. recognising the National Road Fund (KFD) and the COVID-19 Response Fund (FPC) in the sector according to the EU definition, whose debt increases the debt of the sector;
- rerouting transactions to the general government sector, including the Financial Shield of the Polish Development Fund (PFR) - the bonds issued to finance the Shield increase the EDP debt;

[1]) Net lending/net borrowing and the general government debt for EU Member States are presented in Annex 4.

- differences related to liabilities, mainly matured payables, treated as public debt according to the domestic definition and not included therein in the EU definition.

With the amendment to the Public Finance Act, the Bank Guarantee Fund (BGF) was incorporated into the public finance sector as of 1 January 2022, thus the scope of the sector according to the domestic definition has become closer to the scope of the general government sector. The outcome of this inclusion is a reduction in public debt due to the consolidation of TS held by the BGF. The assets of the funds for protecting the guaranteed funds created by the entities subject to the guarantee system were left outside of the public finance sector but in the general government sector.

Chart 2. Differences between general government debt (EDP debt) and public debt



**) Debt consolidated within general government sector, i.e.: decreased by the face value of bonds issued by KFD and FPC held by other general government units.*
***) In compliance with Eurostat guidelines on sector classification, general government debt includes the governmental liabilities related to the construction of certain motorway sections.*
****) Matured payables, debt assumption – activation of guarantee, CIRS transactions, restructured/refinanced trade credits, sale-lease-back operations.*

The detailed description of differences between the public debt according to the domestic and the EU definition is included in Annex 3.

Changes in the volume of public debt are mainly due to changes in the ST debt that accounts for ca. 92% of public debt, while those in the general government debt are additionally due to the issuance of bonds for the COVID-19 Response Fund and bonds of the Polish Development Fund as part of the Financial Shield.

The increase in ST debt in 2021 of PLN 40.6 billion was mainly a result of:

- negative net borrowing requirements (PLN -8.0 billion), including the State budget deficit of PLN 26.4 billion, and items reducing the borrowing requirements: the EU funds management (PLN -10.1 billion), and the liquidity management of the public finance sector (PLN -23.3 billion);
- increase in the balance of budget accounts (PLN +21.0 billion);

- transfer of bonds on the basis of acts other than the Public Finance Act (PLN +16.3 billion) - the total face value of the transferred TSs amounted to PLN 22.3 billion, of which PLN 6.0 billion were transferred to the Reprivatisation Fund (FR) and were neutral to the State Treasury debt until their disposal by the Fund;
- FX rates movements (PLN +2.2 billion);
- changes in the other ST debt (PLN +8.6 billion), including: the increase in the deposits of the units of the public finance sector (PLN +15.9 billion) under the liquidity management and the cancellation of the loan granted to the Solidarity Fund by the Demographic Reserve Fund (PLN -8.7 billion) (within the public finance sector, with no impact on the public debt).

During the 1st half of 2022, the increase in ST debt of PLN 60.7 billion was mainly due to:

- negative borrowing requirements (PLN -36.1 billion), including the State budget surplus of PLN 27.7 billion, the EU funds management (PLN -3.8 billion), and the liquidity management of the public finance sector (PLN -4.1 billion);
- increase in the balance of budget accounts (PLN +46.5 billion);
- transfer of bonds (PLN +17.6 billion), the total nominal value of the transferred TSs amounted to PLN 15.0 billion, of which PLN 4.9 billion were transferred to the Reprivatisation Fund with the sale or transfer by the Reprivatisation Fund of securities worth PLN 7.5 billion;
- FX rates movements (PLN +6.3 billion);
- increase in the other ST debt (PLN +18.4 billion), resulting from the increase in deposits under the liquidity management.

The gross borrowing requirements for 2022 assumed in the Budget Act for 2022 had been fully financed by the end of August 2022.

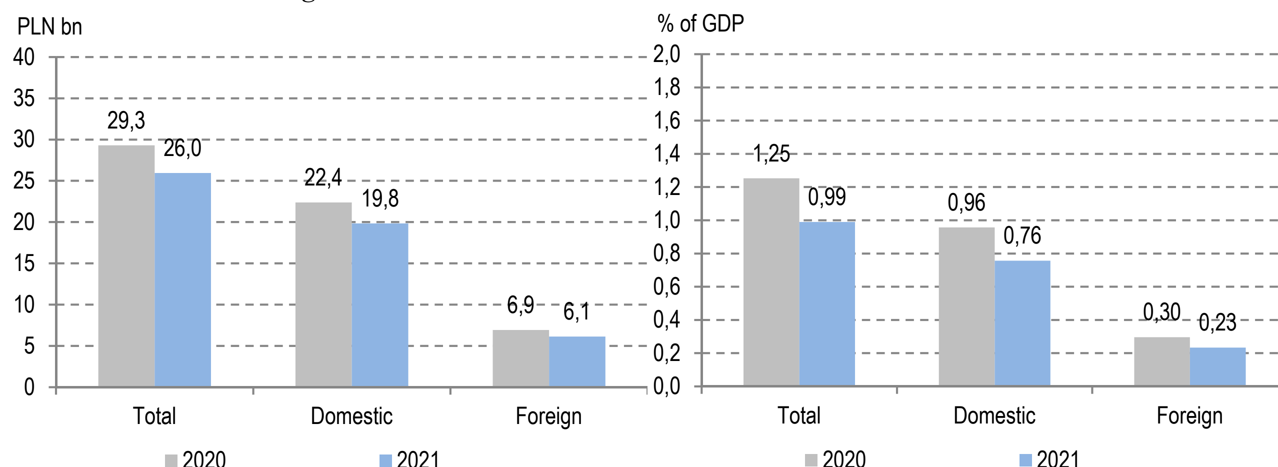
Table 2. Factors affecting change in ST debt in 2021 and the first half of 2022 (PLN billion)

Item	2021	I-VI 2022
Change in ST debt	**40.6**	**60.7**
1. State budget borrowing requirements:	**-8.0**	**-36.1**
1.1. State budget deficit	26.4	-27.7
1.2. EU funds budget deficit	-0.7	0.0
1.3. Liquidity management consolidation	-23.3	-4.1
1.4. European funds management	-10.1	-3.8
1.5. Granted loans	-0.1	-0.1
1.6. Other borrowing requirements [1)]	-0.2	-0.4
2. Other changes:	**48.6**	**96.9**
2.1. FX rates movements	2.2	6.3
2.2. Changes in budget accounts balance	21.0	46.5
2.3. Transfer of TS	16.3	17.6
2.4. TS discount, TS indexation	0.5	8.1
2.5. Change in the other State Treasury debt	8.6	18.4
• Deposits of PFS entities [2)]	15.9	10.1
• Deposits of GG entities [3)]	0.4	6.7
• Other deposits [4)]	1.1	1.6
• Other ST debt	-8.7	0.0

1) Pre-financing balance of tasks co-financed with EU funds, shares in international financial institutions (IFIs) and other domestic and foreign settlements.
2) Deposits from PFS entities with legal personality, including court and prosecutors' offices deposits - with no impact on public debt their value does not affect the level of public debt.
3) Deposits from non-PFS general government entities, with no impact on EDP debt (EU definition).
4) Court and prosecutors' offices deposits from entities outside the PFS and collateral deposits connected with CSA agreements.

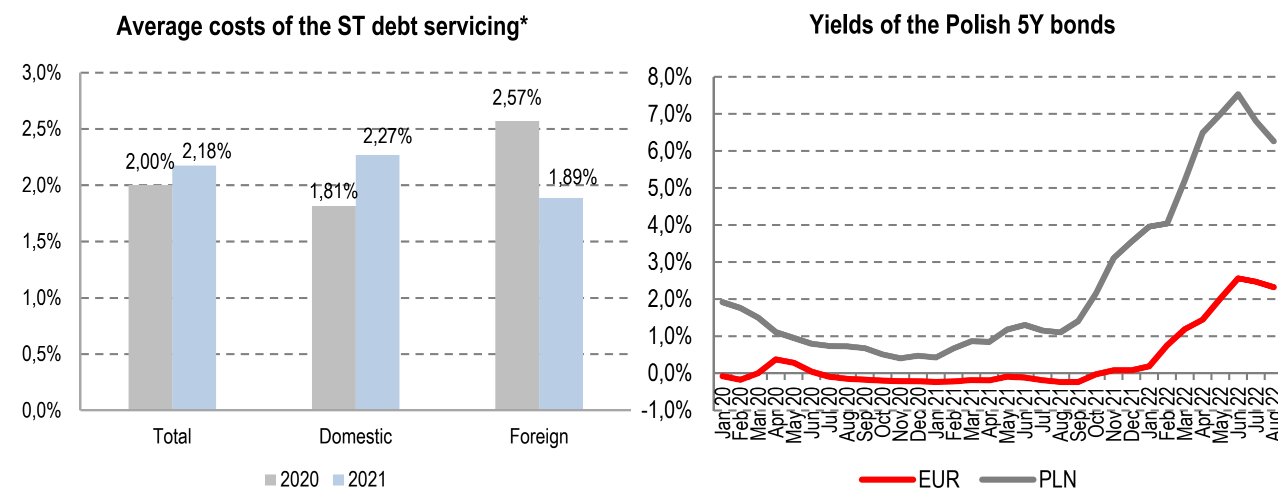
In 2021, the ST debt servicing costs decreased in nominal terms from PLN 29.3 billion in 2020 to PLN 26.0 billion, with a simultaneous decline in revenue from TS issuance (premium and interest) from PLN 8.0 billion in 2020 to PLN 1.5 billion in 2021. The debt servicing costs-to-GDP ratio also decreased from 1.25% in 2020 to 0.99% in 2021. The foreign debt servicing costs were lower than those of domestic debt, which was mainly due to a smaller share of foreign debt in the ST debt and the lower nominal interest rate.

Chart 3. ST debt servicing costs



The average debt servicing costs (including revenue) increased from 2.00% in 2020 to 2.18% in 2021, with a decrease in foreign debt servicing costs (from 2.57% to 1.89%). This was caused by the increased cost of the current market financing and the level of debt service costs incurred in the past.

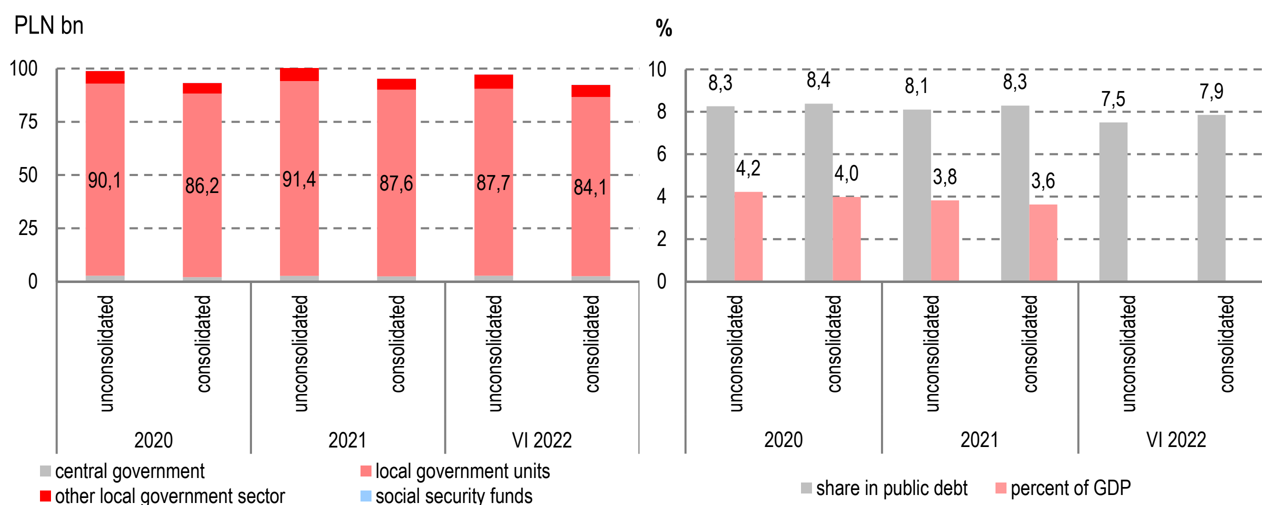
Chart 4. Market interest rates and average ST debt servicing costs



**) Average debt servicing costs were calculated as a ratio of the difference between debt servicing expenditure and revenue in a particular year to the arithmetic mean of the ST debt volume at the end of 13 consecutive months.*

At the end of 2021, the debt of entities other than State Treasury, accounted for 8.1% of the public finance sector debt prior to consolidation (8.3% after consolidation), compared to 8.3% prior to consolidation (8.4% after consolidation) at the end of 2020. At the end of the second quarter of 2022, these figures were 7.5% and 7.9%, respectively.

Chart 5. Volume and structure of debt of public finance sector entities other than the ST



The largest share of this part of the debt was the debt of the local government sector, in particular the debt of the local government units (LGUs) and their associations. In 2021, the unconsolidated debt of LGUs and their associations increased by PLN 1.3 billion and reached PLN 91.4 billion. While the debt of these units consolidated within the public finance sector increased by PLN 1.4 billion up to PLN 87.6 billion. In the first half of 2022, the debt of LGUs and their associations decreased by PLN 3.7 billion prior to consolidation and PLN 3.5 billion after consolidation, respectively.

III. EVALUATION OF IMPLEMENTATION OF THE STRATEGY OBJECTIVE IN 2021 AND IN THE FIRST HALF OF 2022

In 2021 and in the first half of 2022, debt management was conducted in accordance with *The Public Finance Sector Debt Management Strategy in the years 2021-2024*, adopted by the Council of Ministers in September 2020 and *The Public Finance Sector Debt Management Strategy in the years 2022-2025*, adopted by the Council of Ministers in September 2021.

Both documents defined the same debt management objective, i.e. long-term minimization of debt servicing costs, with the adopted constraints related to risk levels. Minimization of debt servicing costs was understood in terms of two aspects: selection of instruments and ensuring the effectiveness of the TS market.

III.1. Minimization of debt servicing costs - selection of instruments

In accordance with the assumptions of the *Strategy*, the domestic market remained the main source of financing borrowing requirements. In 2021, TSs with a face value of PLN 153.2 billion were issued in the domestic market. Liabilities with a face value of PLN 35.2 billion were incurred in foreign markets, of which PLN 32.9 billion were received from the EU to deal with the effects of the COVID-19 pandemic (a loan from the European temporary support facility to mitigate unemployment risks – SURE). Bonds with an equivalent value of PLN 1.8 billion were issued in foreign markets, and loans of PLN 0.5 billion were drawn from international financial institutions.

During the first half of 2022, TSs with a face value of PLN 84.8 billion were issued in the domestic market, while the liabilities incurred in foreign markets reached PLN 17.2 billion (including mainly foreign bonds and SURE loans).

Table 3. TS sale in the domestic and foreign markets and foreign loans at face value

Instruments	2020		2021		January - June 2022	
	PLN billion	%	PLN billion	%	PLN billion	%
Domestic TS	200.4	89.9	153.2	81.3	84.8	83.1
Foreign TS	16.2	7.3	1.8	1.0	9.2	9.1
IFIs loans	1.8	0.8	0.5	0.2	0.9	0.8
UE loans	4.6	2.1	32.9	17.5	7.1	7.0

Among the instruments issued in the domestic market, marketable securities for institutional investors prevailed, although the share of savings bonds increased significantly (from 14.2% in 2020 to 28.3% at the end of 2021 and 36.4% in mid-2022).

Medium and long-term securities (with maturities of over 4 years) prevailed in the sale structure of marketable TS offered on the primary market in 2021 and in the first half of 2022. The share of these securities grew up from 71.5% in 2020 to 92.9% in mid-2022. As for the savings bonds, the largest share in the sale had short- and medium-term securities (with maturities up to 4 years), although the share of bonds with maturities of over 4 years increased significantly during the first half of 2022.

Table 4. Sales of TSs on the domestic market by maturity

Instruments	2020	2021	January - June 2022
Marketable Treasury securities	**100%**	**100%**	**100%**
T-bills	10.3%	0.0%	0.0%
T-bonds with maturity up to 4 years	18.2%	12.6%	7.1%
T-bonds with maturity over 4 up to 6 years (incl.)	40.4%	46.1%	59.2%
T-bonds with maturity over 6 years	31.1%	41.3%	33.7%
Savings bonds	**100%**	**100%**	**100%**
Bonds with maturity up to 2 years	51.2%	59.1%	51.3%

Bonds with maturity over 2 up to 4 years	40.1%	33.2%	37.9%
Bonds with maturity over 4 years	8.7%	7.7%	10.8%

The largest share in the sale structure of domestic marketable TSs was maintained by fixed-rate securities, with a relatively high share of floating-rate instruments (marking an increase from 17.7% in 2020 to 33.0% in the first half of 2022) and decreasing share of zero-coupon bonds (from 7.7% in 2020 to 4.0% in mid-2022). As for the savings bonds, the first half of 2022 brought an explicit shift in the preferences of the investors, which reflected in a fairly steep increase in the share of floating-rate bonds in the sales structure (to 71.4% from 40.9% in 2021).

Table 5. Sale of TSs on the domestic market by type of interest rate

Instruments	2020	2021	January – June 2022
Marketable Treasury securities	**100%**	**100%**	**100%**
Fixed-rate bonds	64.2%	60.3%	63.0%
Zero-coupon bonds	7.7%	5.0%	4.0%
Floating-rate bonds	17.7%	34.6%	33.0%
Inflation-linked bonds	0.0%	0.0%	0.0%
T-bills	10.3%	0.0%	0.0%
Savings bonds	**100%**	**100%**	**100%**
Fixed-rate bonds	51.2%	59.1%	28.6%
Inflation linked floating-rate bonds	48.2%	40.5%	46.9%
Other floating-rate bonds	0.6%	0.4%	24.5%

As for the foreign markets, in the analysed period there was one issuance with a total value of EUR 2.0 billion in the Euro market and one issuance in the Chinese market. In 2021, a 3-year bond denominated in Chinese yuan was issued, the so-called Panda bond with a face value of CNY 3 billion and a yield of 3.20%; the yield after swapping against Euro was negative at -0.104%. In the first half of 2022, for the first time since 2019, 10-year Euro-denominated benchmark bonds were issued. The high demand (over PLN 4 billion) allowed placing the issue at a face value of EUR 2 billion. The bond was valued at 110 bps above the average swap rate, which implied a yield of 2.85% with an annual coupon of 2.75%.

Table 6. Issues of bonds on foreign markets in 2021 and in the first half of 2022

Period	Maturity (years)	Currency	Face value (million)	Yield
2021	3	CNY	3,000	3.20% (-0.104% upon swap)
January to June 2022	10	EUR	2,000	2.85%

In 2021 and during the first half of 2022, a total of EUR 0.289 billion was drawn as loan from the IFIs.

In 2020, the European Union launched low-interest loans from the SURE Facility, designed to support the Member States during the COVID-19 pandemic. The program has a total budget of EUR 100 billion, of which EUR 11.2 billion is planned for Poland. During 2021 and the first half of 2022, Poland benefited from loans worth EUR 8.7 billion, and starting from the launch of the programme EUR 9.7 billion in total.

The main factors that influenced the course and structure of financing borrowing requirements in 2021 and in the first half of 2022 included:

1) local factors, in particular:

- monetary policy of the Monetary Policy Council (MPC) and the situation in the financial market, including:

- tightening of the monetary policy with an aim to curb inflation down to the target of the National Bank of Poland in mid-term: during the analysed period, the Monetary Policy Council increased interest rates 9 times, including the repo rate by a total of 590 bps to 6.0%, the Lombard rate by 600 bps to 6.5% and the deposit rate by 550 bps to 5.5%; increased the required reserve ratio from 0.5% to 3.5%; abandoned to offer bill discount credit aimed at refinancing new loans granted to businesses by banks, and suspended the programme of repurchasing T-bonds and the bonds guaranteed by the State Treasury in the secondary market in December 2021: on a total of 13 auctions held in 2021, the National Bank of Poland purchased bonds with a face value of PLN 36.9 billion (including T-bonds with a value of PLN 28.6 billion, bonds of BGK with a value of PLN 7.4 billion and bonds of the Polish Development Fund with a value of PLN 0.9 billion);
- maintaining Poland's credit rating by the main rating agencies (A- by S&P and Fitch and A2 by Moody's) with a stable rating outlook;
- flows of foreign capital in the domestic TS market (the outflow of PLN 9.2 billion in 2021 and the inflow of PLN 22.1 billion in the first half of 2022), as a result of inter alia the increased demand for safe assets in the core debt markets in the increased volatility in the financial market and the strong increase in yields of domestic TSs starting from October 2021 as a consequence of the shift of the monetary policy conducted by MPC;
- significant depreciation of the Polish zloty against the euro in 2021 and in the first half of 2022, accompanied by a high volatility of the foreign exchange rate (the volatility of the EUR/PLN foreign exchange rate was 5.3% and 7.4% respectively, against 7.5% in 2020, the average annual market rate was 4.5606 and 4.6308 against 4.4405 on average in 2020); and the slight appreciation of the Polish zloty against the US dollar in 2021 and its strong depreciation during the first half of 2022 accompanied by the high volatility of the foreign exchange rate (the volatility of the USD/PLN foreign exchange rate was 8.5% and 11.4% compared to 11.8% in 2020, and the average annual foreign exchange rate was 3.8590 and 4.2407 compared to an average of 3.8935 in 2020);
- high volatility in the domestic T-bond market throughout the entire analysed period, accompanied by a strong increase in TS yields starting from October 2021; the average yield of 2-, 5- and 10-year bonds amounted to 0.8% (0.5% in 2020), 1.5% (1.0%) and 2.0% (1.5%) respectively in 2021, while during the first half of 2022: 5.45%, 5.72% and 5.47%; in June, the yield of bonds reached the highest levels in 20 years (8.32%, 8.44% and 8.04% respectively);

- actions of the Polish government aimed at countering adverse effects of the pandemic, including:
  - extension of the rescue programme for the most threatened sectors by PLN 4.5 billion in March 2021 and the amendments to the Financial Shield of the Polish Development Fund for large companies (e.g. extending the deadlines for submitting financing applications and grace periods in the repayment of capital and interest, lowering the interest rate for the liquidity loan);
  - subsequent issues of bonds by BGK, guaranteed by the State Treasury, to supply the COVID-19 Response Fund (FPC). In 2021, BGK issued a total of PLN 33.1 billion in bonds with maturities from 4 to 20 years and bonds with a face value of EUR 500 million and USD 400 million in foreign markets, and PLN 1.3 billion in bonds with maturities from 6 to 19 years in the first half of 2022;
  - subsequent issues of bonds by the Polish Development Fund, guaranteed by the State Treasury under the Financial Shield. In 2021, the Polish Development Fund issued PLN 8.5 billion in bonds with maturities from 7 to 9 years;
  - launch of the so-called counter-inflation shield, including the decrease in excise duty on fuels to the minimum level admissible by the EU. The shield also includes the decision to decrease

the VAT rate for selected basic goods: basic foods products, electricity and heat and natural gas. The introduction of a shielding benefit for households;

- adoption by the Sejm of an amendment to the Budget Act for 2021 (in October 2021), which reduced the allowable deficit to PLN 40.4 billion compared to PLN 82.3 billion under the original act. The amendment envisaged budget revenues in the amount of PLN 483.0 billion (compared to the original amount of PLN 404.5 billion), and the expenditures in the amount of PLN 523.4 billion (PLN 486.8 billion originally);
- adoption by the Sejm of a Budget Act for 2022, allowing for the State budget deficit in the amount of PLN 29.9 billion, the deficit of the general government sector at the level of ca. 2.9% of GDP, and the general government debt at the level of 56.6% of GDP.

2) external factors, in particular:

- the monetary policy pursued by the main central banks, including:
  - **in the USA:** maintaining the interest rate unchanged until February 2022 and continuing the loan programmes for businesses, individuals, State and local authorities; limiting the monthly purchases in the framework of the assets purchase programme starting from December 2021 and completing the programme in March 2022; tightening the monetary policy as a response to the increased inflation continuously exceeding the long-term inflation target: three increases in the interest rates by a total of 150 bps (in March, May and June 2022), which made the federal funds rate range between 1.50% and 1.75%; Fed's announcement to reduce the total balance sheet starting from June of the current year (by USD 47 billion monthly during the first three months, and by USD 95 billion monthly afterwards);
  - **in the euro area:** keeping interest rates unchanged (the repo rate at 0.00%, the deposit rate at -0.50%), extending the ultra-cheap bank loan programme (worth EUR 109 billion) until June 2022 (the programme was foreseen until June 2021), continuing the asset purchase programme (PEPP) of EUR 1.85 trillion and ending it in March 2022, limiting the purchase of net assets under the APP programme to EUR 20 billion in June and ending the programme on 1 July of the current year; announcing an increase in the interest rates by 25 bps at the July meeting (in June 2022) and declaring that the capital repayments from the due securities purchased under the APP programme will be reinvested in total as long as this is necessary to maintain adequate liquidity conditions;
  - **in China:** two cuts in the one-year interest rate on corporate credits by a total of 15 bps to 3.70% (in December 2021 and January 2022) and 5-year mortgage lending rate by 20 bps to 4.45% (in May 2022); in January 2022 the central bank surprisingly cut the 7-day reverse repo interest rate by 10 bps to 2.10% and the interest rate on one-year MLF credits (cost of medium-term funding for financial institutions) down to 2.85% (the record lowest level), and confirmed that the monetary policy will continuously be loosened in the light of the economic slowdown;
  - **in Japan:** maintaining the key interest rate at the level of -0.1% and exercising control of the yield curve (through the purchase of government bonds to pursue the yield of the 10-year benchmark bonds at the level of around 0.0%), and the continued programme to repurchase government bonds in a volume of JPY 80 trillion a year, the extension of the purchase programme for commercial securities and corporate bonds until March 2022;
- tightening of monetary policy in the regional and European markets;
- global geopolitical situation affecting the risk appetite in global financial markets, including:
  - presentation by the US President Joe Biden (in January 2021) a new stimulus package equipped with a budget of USD 1.9 trillion for the US economy for the duration of the pandemic, and the package was adopted (in March 2021). The package envisaged, inter alia,

further cash tranches for citizens, the extension of financial support for the unemployed, the financing of the vaccination campaigns and of the treatment in relation to the coronavirus pandemic;
  - increased geopolitical tensions over the Russian invasion of Ukraine on 24 February 2022, the sanctions placed onto Russia, in particular by the EU and the USA, for violating the international law and the sovereignty of Ukraine. The Russian invasion of Ukraine has triggered an abrupt reaction in the financial market and intensified risk aversion (a decrease in the yields of government bonds in the core markets and an increase in the emerging markets, the appreciation of the USD and the CHF, the depreciation of the currencies of the developing countries, an increase in the oil prices);
- concerns of global economic growth, in relation to the intensifying inflation pressure, the impacts of the geopolitical situation on inflation, the situation in the raw materials markets , the effects of tightening the monetary policy and subsequent waves of the COVID-19 pandemic, in particular new variants of the virus.

III.2. Minimization of debt servicing costs – ensuring the effectiveness of the TS market

The main measures aimed at minimization of debt servicing costs in terms of ensuring the effectiveness of the Treasury securities market include:

- issuance policy assuming building liquid benchmark bonds series. In mid-2022, the value of 16 issues exceeded PLN 25 billion, compared to 18 issues at the end of 2021 (15 issues at the end of 2020). The issues exceeding PLN 25 billion accounted for 83% of the face value of fixed-rate medium- and long-term bonds compared to 92.6% at the end of 2021 (69.9% at the end of 2020). The adequately high value of issues has a significant positive effect on liquidity in the secondary market;
- the issue of 10-year Treasury bonds dedicated for the Bank Guarantee Fund (BGF) under the private placement system, with its interest floating rate based on 6-month WIBOR (PP0931) and the face value of PLN 3 billion. The bond contains put option. The cost of the issue was comparable to the standard issues under auction system, while an additional advantage was to raise funds for financing the borrowing requirements without increasing the public debt according to the EU definition, as well as the public debt according to the domestic definition starting from 1 January 2022 (the BGF was classified to the public finance sector);
- issues of bonds in the Euro market with a value ensuring liquidity of a given series (there was one issue with a value exceeding EUR 1 billion in the first half of 2022);
- aligning the sale volume and structure of TSs with the current market situation, and influencing the market developments through an information policy;
- *sell-buy-back* (SBB) transactions between the TS Primary Dealers and Primary Dealers candidates (under the TSD system) and BGK under special terms (the mechanism was implemented in February 2014 in order to support clearing in the circumstances of temporary and significantly limited availability of bonds of a given series in the secondary market). In 2021 and during the first half of 2022, the face value of concluded transactions reached PLN 18.1 billion, which accounted for 0.2% of all the SBB transactions concluded in the TS market;
- extension of the offer of savings bonds:
  - third issue of premium bonds (POS) in March 2022. The fixed-rate securities give a possibility to win a premium by drawing;
  - in June 2022, the regular offer was extended by adding one-year (ROR) and two-year (DOR) floating-rate bonds based on the reference rate of the National Bank of Poland. The construction provides monthly interests payments. Since August 2022, three- year fixed rate bonds (TOS) have been added to the offer of saving bonds, replacing previously issued three-year floating-

rate-bonds (TOZ). The savings bonds distributed through the retail network are aimed at building a stable base of investors, while contributing to the *Strategy* objective, and are simultaneously issued as part of the activities promoting the culture of saving and the protection of savings of the Polish citizens against high inflation;

- introduction of an additional obligation to meet a minimum share of trading in the cash segment of the electronic market for TS Primary Dealers and Primary Dealers candidates under the regulations of the TSD system. This amendment aims to increase the liquidity and efficiency of the electronic secondary TS market.

III.3. Constraints on the risk level

Table 7. Assessment of implementation of the Strategy objective constraints related to the level of risk

Constraint	Implementation level*	Implementation method	Measure	Value 2020	Value 2021	Value June 2022
Constraints of the *Strategy* objective						
Refinancing risk	Moderate	• Increasing the share of medium- and long-term bonds in total sales of marketable bonds in the domestic market in 2021 and in the first half of 2022 (87.4% and 92.9% of TS market sales respectively); • Important role of the switching auctions: - 35.4% of the initial debt in bonds maturing between January 2021 and June 2022 was bought back; - bonds with a face value of PLN 67.4 billion were bought back between 2021 and mid-2022, while bonds with a face value of PLN 83.3 billion were bought back between 2020 and mid-2021; • Transferring bonds with a face value of PLN 37.3 billion onto authorized entities under separate laws; by the end of 2021, there were transferred 2-year zero-coupon bonds; starting from 2022 the set of transferred bonds corresponds to the structure of bonds sold at auctions; • Decreasing the average maturity of domestic debt below the level set in the *Strategy* (4.5 years) in 2021 and in the first half of 2022, due to changes in market conditions (the start of a cycle of interest rate increases by the Monetary Policy Council), including the demand structure, a large scale of the transferred bonds with maturity between 2 and 3 years (PLN 24.3 billion), and the ageing of the debt, followed by an increase in the average maturity for the total ST debt, although still under the target level of 5 years. The *Strategy* adopted in September 2021 allows for temporary deviations of the average maturity from the target levels, depending on the market and budgetary conditions related to the effects of the COVID-19 pandemic.	ATM** (in years) - domestic - foreign - total	 4.23 5.72 4.63	 4.16 6.43 4.75	 4.07 6.91 4.78
			Share in domestic TSs: - TSs up to 1 year - T-bills	 12.1% 1.4%	 14.0% 0.0%	 15.4% 0.0%
Foreign exchange risk	High	• Maintaining the share of debt in foreign currencies in the ST debt below 25%, i.e. as assumed in the *Strategy*; • Maintaining an effective share of Euro denominated debt in foreign debt (i.e. taking into account transactions in derivative instruments) significantly above the minimum level set in the *Strategy* (70%).	Share of foreign debt in ST debt	24.2%	23.3%	22.0%
			Share of EUR-denominated debt in foreign debt	82.7%	85.8%	90.6%
Interest rate risk	Satisfactory	• Maintaining the ATR of domestic debt within the range set in the Strategy, i.e. 2.8-3.6 years, subject to a decreasing trend of this indicator, which result from the developments in the ATM and the share of floating-rate securities; • Following the provisions of the *Strategy*, the dominant share of fixed-rate instruments was maintained in the debt denominated in foreign currencies.	ATR** (in years) - domestic - foreign - total	 3.16 4.72 3.57	 3.00 5.55 3.66	 2.94 6.02 3.71
			Duration** (in years) - domestic - foreign - total	 3.09 4.76 3.55	 2.87 5.31 3.55	 2.56 5.18 3.30

Constraints of the *Strategy* objective		
Constraint	Implementation level*	Implementation method
Liquidity risk	High	The main instruments used in liquidity risk management included: • interest-bearing PLN-denominated deposits at the National Bank of Poland - in 2021, the total value of the concluded deposits amounted to PLN 241.7 billion, and to PLN 124.9 billion during the first half of 2022; • PLN-denominated deposits made through BGK - in 2021, transactions with a total value of PLN 4,555.4 billion were concluded, whereas those concluded in the first half of 2022 amounted to PLN 1,640.9 billion; • PLN-denominated buy-sell-back (BSB) market deposits hedged with Treasury securities - in 2021, transactions with a total value of PLN 323.1 billion were concluded, whereas those concluded in the first half of 2022 amounted to PLN 352.2 billion; • foreign currency deposits - in 2021, the total value of the concluded deposits amounted to EUR 0.65 billion, whereas those concluded in the first half of 2022 amounted to EUR 0.13 billion; • IRS transactions to distribute the debt servicing costs over time - in 2021, with a face value of PLN 92.0 billion (comp. Distribution of debt servicing costs over time); • sale of consolidated foreign currencies at the National Bank of Poland and in the market; in 2021, the equivalent of EUR 15.7 billion in foreign currencies were sold through the National Bank of Poland, and EUR 3.59 billion in the market; in the first half of 2022, EUR 1.71 billion were exchanged at the National Bank of Poland and the equivalent of EUR 3.18 billion in the market. Under the liquidity management consolidation, the deposits on the accounts of the Minister of Finance in BGK amounted to PLN 125.2 billion at the end of 2021 and PLN 129.2 billion at the end of June 2022. The level of State budget liquid assets in 2021 and during the first half of 2022 ensured the smooth execution of budgetary flows.
Credit risk	High	• PLN-denominated BSB market deposits hedged with Treasury securities, did not generate any credit risk; • For unsecured deposits in BGK, a system of credit limits is in place; • Risk connected with transactions involving derivative instruments is limited by selection of counterparties with high credit rating; • A system of collateral on derivative transactions through blocking TSs and mutual collateral in the form of cash deposit is in place. Collateralized transactions do not generate credit risk; • Credit risk generated by uncollateralized derivative transactions is diversified through limits imposed on the total value of transactions made with particular partner. The creditworthiness of potential partners is monitored on an ongoing basis.
Operational Risk	Satisfactory	• Adequate technical infrastructure for concluding market transactions, security of data and information related to debt management and the integrated database of ST debt help maintain operational risk at a safe level; • Adequate technical infrastructure enabling remote working; • Risk related with retaining and employing qualified staff was generated by the situation on the labour market and the effects of the COVID-19 pandemic.
Distribution of debt servicing costs over time	High	• Coupons of new issuances were set at a level slightly below their forecasted yields. The level of debt servicing costs was affected by swap transactions concluded in 2020 and 2021, to distribute this expenditure over time by using current savings. As a result of those operations, costs incurred in 2020 increased by PLN 1.3 billion in 2021, and will decrease by PLN 3.4 billion in 2022.

**) In accordance with the scale: high, satisfactory, moderate and low.*

***) ATM and ATR parameters for domestic debt are calculated for the market ST debt, while the parameters for the ST debt are calculated for domestic and foreign market debt and loans by the IFIs and EU loans. Duration does not additionally consider inflation-linked bonds*

IV. ASSUMPTIONS OF THE STRATEGY

The following subchapters present the main macroeconomic assumptions of the *Strategy* and the market conditions that affect debt management. The issues discussed include possible developments in the major international markets, the role of both domestic and foreign investors in the domestic TS market, as well as the assumptions of the reform of benchmark indices.

IV.1. Macroeconomic assumptions of the *Strategy*

The assessment of the macroeconomic situation and directions of the fiscal policy was presented in the rationale for the draft Budget Act for 2023. Table 8 contains the key macroeconomic assumptions of the *Strategy*, consistent with the assumption of the draft Budget Act.

Table 8. Macroeconomic assumptions adopted in the Strategy

Item	2021	2022	2023	2024	2025	2026
Real GDP growth (%)	5,9	4,6	1,7	3,1	3,1	2,9
GDP at current prices (PLN billion)	2 622,2	3 017,8	3 317,7	3 577,7	3 811,5	4 025,2
Average CPI (%)	5,1	13,5	9,8	4,8	3,1	2,5
USD/PLN - end of period	4,60	4,65	4,65	4,65	4,65	4,65
EUR/PLN - end of period	4,06	4,43	4,43	4,43	4,43	4,43

The macroeconomic assumptions consider the current monetary policy of the MPC and the expectations concerning its further development. During the period from July 2022 until the completion date of this *Strategy*, the Monetary Policy Council increased the interest rates two times - by a total of 75 bps; as a result the reference rate increased to 6.75% and the lombard rate reached 7.25%.

IV.2. International conditions

The most important international conditions in terms of ST debt management include:

- economic situation of the EU countries - according to the European Commission's July forecast, GDP in the EU will increase by 2.7% in 2022 (following a decrease by 5.4% in the previous year), and its growth rate will decrease to 1.5% in 2023. The Commission lowered its growth forecast for 2023 (its May forecast envisaged 2.3% this year) due to the materialisation of the risks related to energy price increases, the increased scale of the tightening of the monetary policy and the deterioration of the economic forecasts for the USA and China;
- extension of the general EU escape clause for 2023. The decision of the European Commission to prolong the clause considered the necessity to ensure a flexible budgetary policy, being capable to react in view of the economic consequences of the Russian aggression of Ukraine (including the disturbances in energy supplies). As a rule, the growth rate of current expenditure should be in line with the neutral fiscal stance in 2023, and therefore not translate into either consolidation or fiscal expansion;
- situation in the interest rate markets for the currencies in which liabilities will be incurred, in particular in the Euro market, and the actions of the main central banks affecting the yields levels in the domestic debt market:
  - start by the ECB of normalizing monetary policy by raising interest rates more than expected at its July meeting (by 50 bps against the expected 25 bps, including the repo rate to 0.50% and the deposit rate to 0.0%) and by 75 bps at its next September meeting; the ECB evaluates that further normalization measures are appropriate to curb inflation down to 2% in the medium term, while future decisions on the interest rates will be made on the basis of incoming macroeconomic data on an ongoing basis. The Bank also approved a new transmission protection instrument (TPI) that supports the effective transmission of the monetary policy. This instrument will involve the repurchase of securities on the secondary market of those

Member States of the Euro area where non-fundamental financing conditions will deteriorate, subject to certain criteria. The scale of the repurchases under this instrument is not defined ex ante, and depends on seriousness of the threats to the transmission of the monetary policy. The Bank intends to continue to reinvest the capital repayments from the maturing securities acquired under APP programme as long as necessary, and at least until the end of 2024 for the PEPP programme;
  - continued tightening of the Fed monetary policy - at its meetings in July and September this year, the central bank raised interest rates by a total of 150 bps, leaving the federal funds rate in the target range between 3.00% and 3.25%, and announced that ongoing increases in the target range will be appropriate. Fed is strongly committed to returning inflation to its 2% objective in the long term, even at the expense of economic growth. Fed simultaneously announced the withdrawal from its *forward guidance*, and signalled that it would make its future decisions strictly dependent on the incoming data, and increased its forecasted interest rates. According to the interest rate forecast published in September, Fed expects the main interest rate to amount to approx. 4.4% by the end of 2022, 4.6% by the end of 2023, 3.9% by the end of 2024, and 2.9% by the end of 2025;
  - continuation by the Bank of Japan of its ultra-soft monetary policy including the control of the yield curve and maintaining the benchmark negative interest rate as long as necessary to achieve and maintain the inflation target at a stable level of 2%;
  - shift in the monetary policy of the Swiss National Bank; at its meeting on 16 June of the current year, the central bank unexpectedly raised interest rates by 50 bps (for the first time in 15 years) to prevent further inflation rises (inflation was 2.9% y/y in May). After the increase, the reference and deposit rates were still negative at minus 0.25%. At its September meeting, the central bank decided to raise the rates again, this time by 75 bps, which raised the repo and deposit rate to 0.50%. The Bank did not exclude the possibility to further increase the interest rates and to intervene in the currency market to stabilise inflation;
  - continuation by the People's Bank of China of its accommodating monetary policy; the Bank announced a cautious monetary policy during the period of economic slowdown and to protect the economy against major shocks; in August, it unexpectedly cut the interest rate on the 1-year MLF credits by 10 bps to 2.75% and the 7-day reverse repo rate from 2.1% to 2.0%;
- perception of Poland's credit risk and liquidity preferences of Polish bonds' buyers operating in global markets, affecting the amount of the premium relative to core markets;
- concerns about economic growth mainly in view of the geopolitical situation, price increases in the markets for raw materials, inflation forecasts, and the impacts of the tightening the monetary policy by the central banks and the prevailing COVID-19 pandemic.

IV.3. Domestic TS market

The level of development of the domestic financial market, including the domestic investor base, as well as the involvement of foreign investors in this market, is significant determinant of debt management. In the circumstances of free capital flow, a well-developed and deep domestic market allows for absorption of external shocks and outflows of foreign capital.

Entities investing in the domestic TS market can be divided into three main groups: the domestic banking sector, domestic non-banking sector and foreign investors. From the end of 2020 until the first half of 2022, the following changes in the holders' structure of domestic TS debt were observed:

- maintaining the dominant share of the banking sector's debt in the debt holders structure (52.5% at the end of June 2022), the nominal exposure increased by PLN 21.9 billion, including for commercial banks by PLN 0.6 billion and the National Bank of Poland by PLN 21.2 billion;
- significant increase in the involvement of domestic non-banking investors by a total of PLN 45.7 billion, with its share in the debt holders' structure increasing to 30.5% (by 2.7 pp);

- increase in the exposure of foreign investors in domestic TSs by a total of PLN 12.9 billion, which reduced their share to 17.0%, i.e. by 0.1 pp.

*Chart 6. Structure of domestic TS portfolios held by main groups of investors**

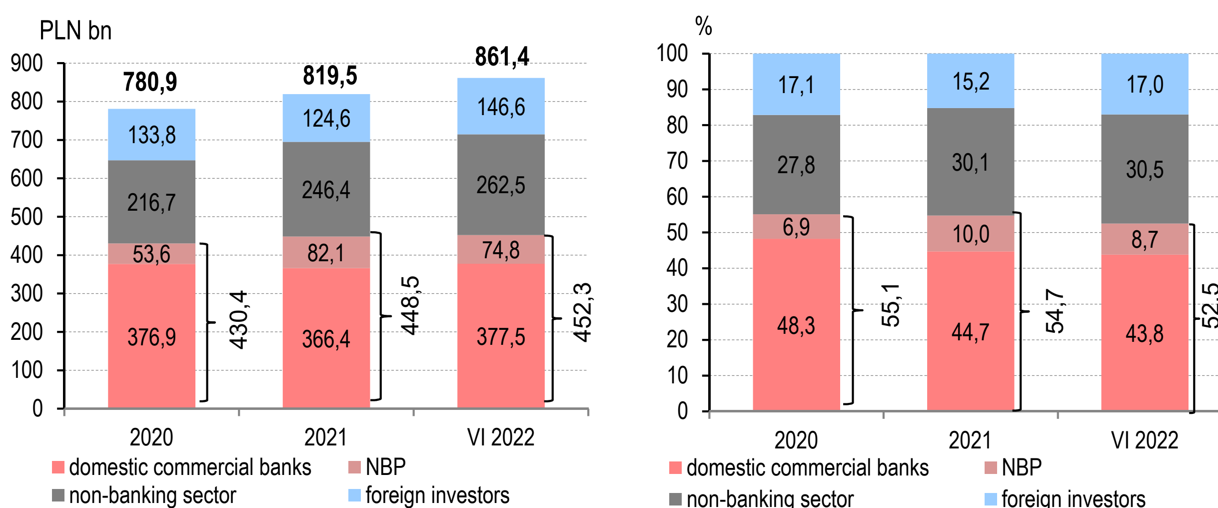
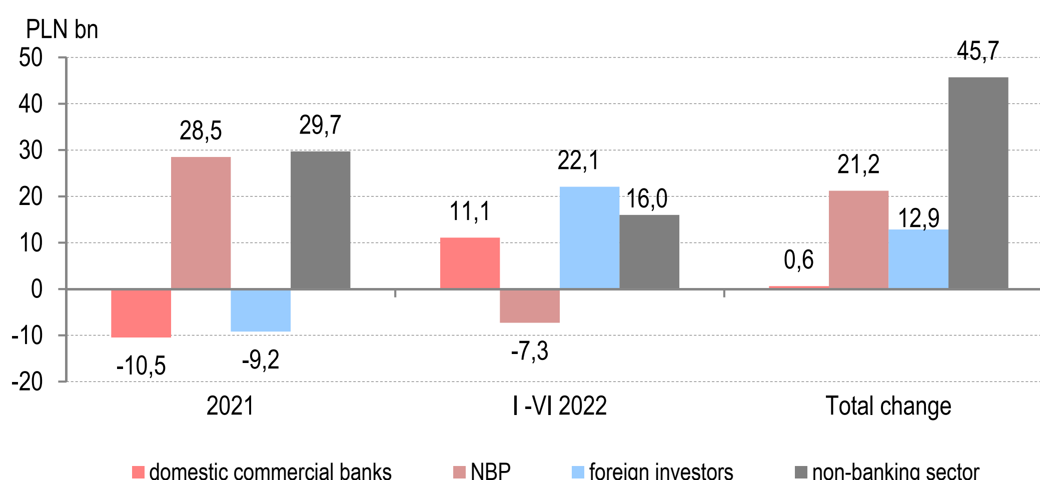


*Chart 7. Changes in domestic TS portfolios held by main groups of investors**



**) At face value, the data on the TSs include conditional transactions.*

As at the end of June 2022, domestic investors held 83.0% of domestic TS debt, which represents an increase by 0.1 pp compared to the end of 2020. From the end of 2020, their exposure increased by PLN 67.6 billion (i.e. by 10.4%).

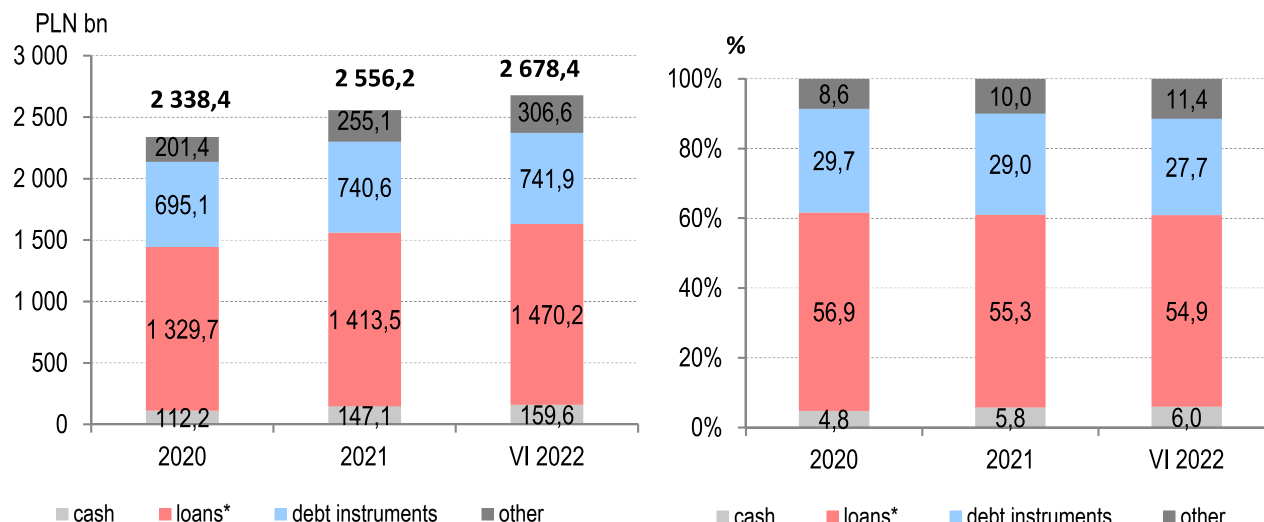
IV.3.1. Domestic banks

At the end of June 2022, assets of domestic commercial banks amounted to PLN 2.7 trillion (an increase by 14.5% compared to the end of 2020), with the dominant share of loans and other receivables from domestic entities (ca. 54.9%). Debt instruments were the second largest component of assets – as at the end of June 2022, their share was 27.7%. The prevailing share in the structure of debt instruments had Treasury securities (55.2%) and NBP monetary bills (ca. 24.9%).

Following the increase in the banks' exposure in domestic TS during the crisis year 2020, when the banks absorbed the increased supply of TS, the demand was limited in 2021 and in the first half of 2022. During the period from April 2020 until October 2021, the National Bank of Poland carried out unconditional repurchase transactions in TS and debt securities guaranteed by the State Treasury in the secondary market (as part of structural open market operations). In the first half of 2022, the

exposure of the National Bank of Poland in domestic TS declined, which was caused by the redemption of maturing bonds in the portfolio of the National Bank of Poland and by the lack of reinvestments and new repurchase transactions.

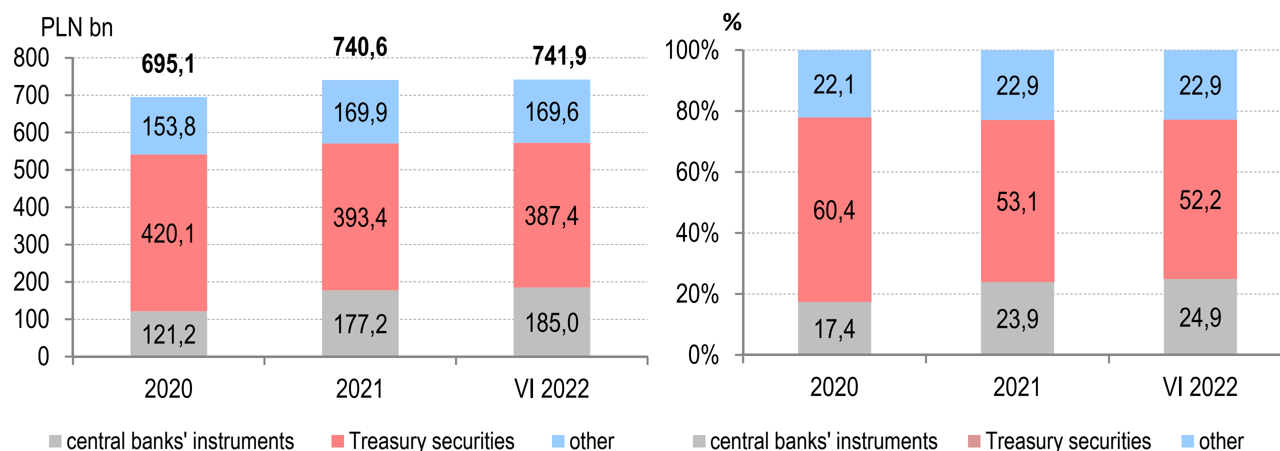
Chart 8. Structure of assets held by domestic commercial banks



** loans and other receivables from domestic entities*

Source: National Bank of Poland, in accordance with the applicable measurement methods.

Chart 9. Debt instruments in assets of domestic commercial banks



Source: National Bank of Poland, in accordance with the applicable measurement methods.

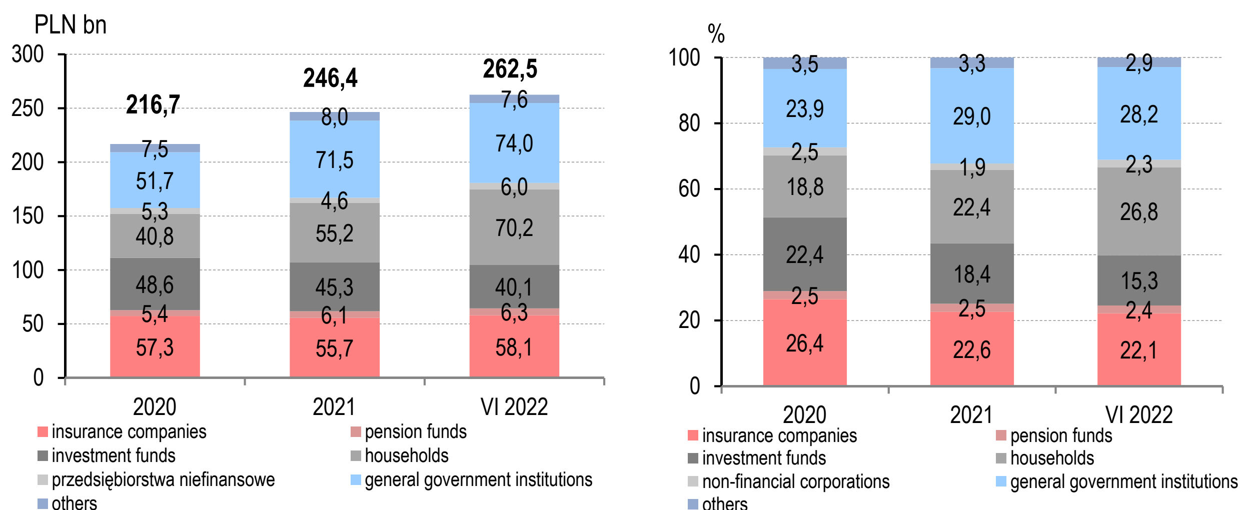
The most significant factors to affect banks' demand for domestic TS in the *Strategy* timeframe include:

- development of the economic situation, affecting the size and structure of assets held by banks;
- policy of the central bank, including with regard to the level of interest rates;
- level of over liquidity of the banking sector;
- formal and legal conditions, including the transition of the WIBOR rates to the new benchmark rate.

IV.3.2. Domestic non-banking investors

Domestic non-banking investors include institutional entities that operate in the financial market, in particular insurance companies and investment funds, and other domestic non-banking investors, mainly households and general government institutions.

*Chart 10. Portfolio structure of domestic TSs held by the non-banking sector**



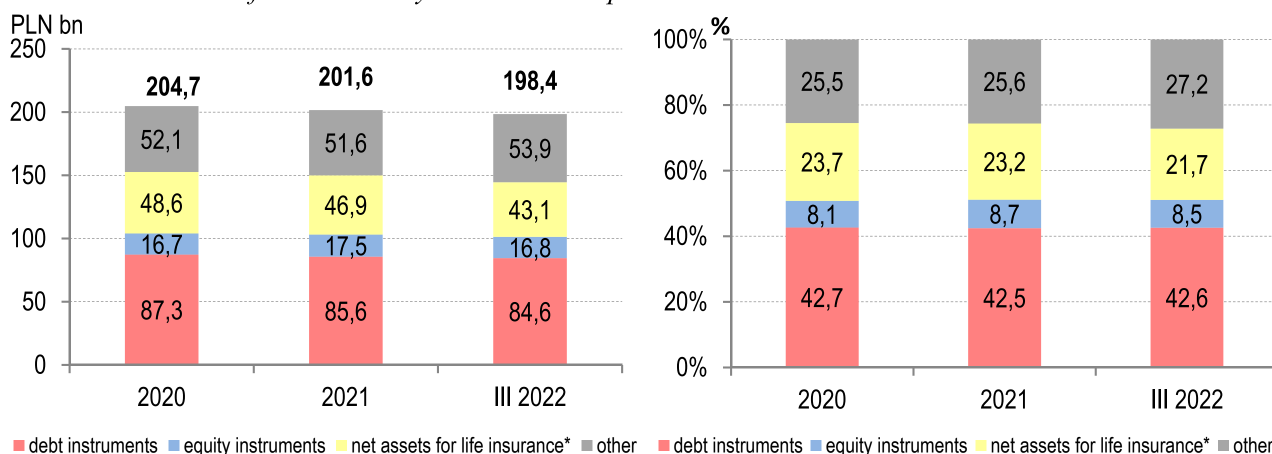
** At face value. The data on the TSs include conditional transactions.*

Among domestic non-banking investors, institutional investors play an important role, but in recent years the value of the TS portfolios held by households has seen the highest growth dynamics. Since the end of 2020 their involvement has increased by PLN 29.4 billion (i.e. by 72.0%) to PLN 70.2 billion, mainly due to an increase in households' interest in the offer of savings bonds.

As at the end of June 2022, insurance companies held 6.7% of domestic TS (decrease in the holding by 0.6 pp compared to the end of 2020), investment funds held 4.7% (decrease by 1.6 pp), and other domestic non-banking investors 19.1% (increase by 4.9 pp). The main factors affecting the value of the TS portfolio held by the insurance companies and investment funds include the assets value and the investment policy of those entities.

Assets held by insurance companies as at the end of March 2022 amounted to PLN 198.4 billion, which represents an increase by PLN 6.3 billion compared to the end of 2020, i.e. by 3.1%.

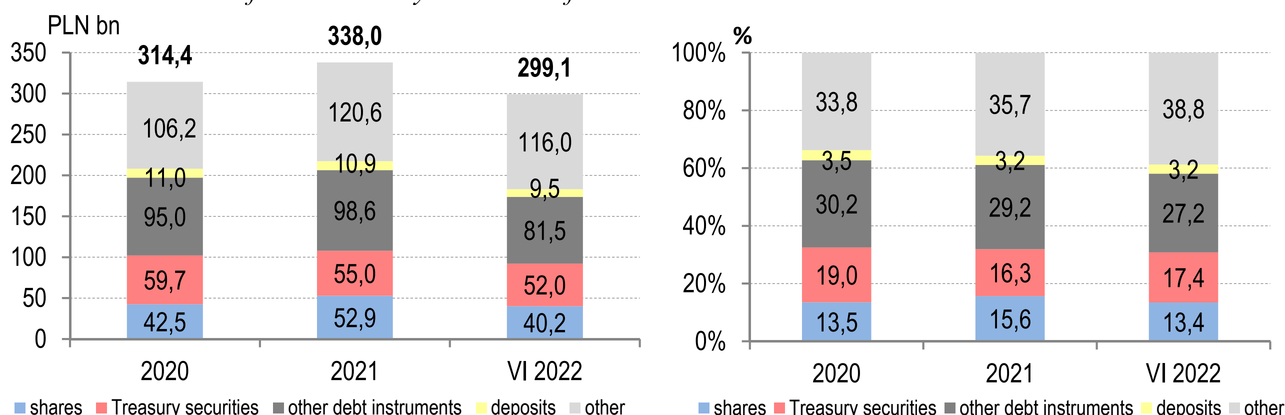
Chart 11. Structure of assets held by insurance companies



** net assets for life insurance - life insurance net assets where the investment risk is borne by the policyholder.*
Source: Polish Financial Supervision Authority, in accordance with the applicable measurement methods.

As at the end of June 2022, assets held by the investment funds decreased to PLN 299.1 billion, i.e. by PLN 15.3 billion (by 4.9%) compared to the end of 2020. The value of T-bonds (issued in the domestic and foreign markets) held by the investment funds decreased by PLN 8.5 billion during the equivalent period, while their share in assets declined by 1.6 pp.

Chart 12. Structure of assets held by investment funds



Source: National Bank of Poland, in accordance with the applicable measurement methods.

The main factors to determine the value of the TS portfolio in assets managed by non-banking financial institutions in the forthcoming years include:

- further development of the insurance and investment funds markets, particularly in the context of developments in equity markets and the levels of yields on Treasury securities, as reflected in the structure of their assets;
- the increasing interest rates and record-high inflation, also indirectly affecting the investment behaviour of households and non-financial enterprises, encouraging them to seek alternative investments to protect the capital;
- changes in the pension system aimed at increasing the scale of households' long-term savings to be paid after the end of professional activity. Changes in the pension system include the establishment of the Employee Equity Schemes (PPK) (since July 2019) and the transformation of the Open Pension Fund (OFE) into investment funds maintaining individual retirement accounts (IKE) (the work on these changes has been suspended).

IV.3.3. Foreign investors

As at the end of June 2022, the share of foreign investors in domestic TS debt was 17.0%, and it decreased by 0.1 pp compared to the end of 2020. In 2021 and in the first half of 2022, foreign investors reduced their holdings of domestic TS by a total of PLN 12.9 billion, which was a result of the decreased exposure of non-residents by PLN 9.2 billion in 2021 and of the increase by PLN 22.1 billion in the first half of 2022. The share of the non-residents was affected, among other things, by the monetary policy of the main central banks and changes in the interest rate disparity.

The foreign investors' demand depends, to a large extent, on the international situation and, thus, is highly volatile. The risk of negative impact of outflow of foreign capital from Poland on the TS market is, however, limited due to the dominant role of domestic investors and the diversification of the group of non-residents both in institutions and geographic terms. The structure of debt held by the non-residents is dominated by the institutional investors: central banks and public institutions, investment funds, pension funds and insurance companies. The geographical structure of the domestic TS holders is also diversified - as at the end of June 2022, they were held in the portfolios of investors from 61 countries.

The most important factors to affect non-residents' demand for Polish TS in the *Strategy* timeframe include:

- actions undertaken by central banks;
- economic developments and the stability of financial markets in the world, which will be significantly affected by the further course of the war in Ukraine and by the effects of the COVID-19 pandemic worldwide;
- Poland‘s economic foundations and the assessment of Poland’s credit risk;
- functioning of large liquid financial market in Poland (in particular the TS market) and its adequate infrastructure (the implementation of the Capital Market Development Strategy is to support the development of the Polish capital market), the transition of the WIBOR rates to the new benchmark indicator will play an important role (comp. Chapter IV.4).

Due to the free flow of foreign capital, the non-residents’ investment in domestic TS, as well as raising funds in international markets, may be a source of exchange rate risk for the ST debt. Therefore, this factor determines a flexible approach to shaping the financing structure in terms of selection of the market and currency.

IV.4. Concept and the planned process of the reference indices reform

Following the decision on the introduction of a new risk free rate (RFR), which is planned to ultimately replace the WIBOR index, a complex reform of the benchmark indices was launched in May 2022. This process requires interaction and close coordination between all relevant financial market participants and the public side. The current experiences from the developed markets indicate that the transition period takes 2 to 5 years depending on the development of the market and detailed solutions that are used therein.

The new RFR index is an interest rate index determined under the assumption that the incorporated risk is minimised (including the credit risk or liquidity risk, etc.), which means that it is determined only on the basis of the rate of actual O/N (overnight) transactions concluded in a strictly defined market in a specific period. Contrary to the WIBOR index, the RFR expresses only the current short-term interest rate, without taking into account expectations of future level of interest rates. Each country or currency area appoints a local administrator to define the methodology for calculating the RFR independently.

In mid-2022, the Steering Committee of the National Working Group was established, and after analyses and public consultations with financial and non-financial market participants, it decided on 1 September 2022, to select the WIRD index as an alternative interest rate benchmark.

The input data for the selected index include representative data on O/N transactions with financial institutions and large enterprises. In the meaning of the BMR[2], the WIRD administrator is the GPW Benchmark, entered in the Register of the European Securities and Markets Authority (ESMA). Ultimately, the WIRD index is expected to become the key interest rate benchmark for banking, leasing and factoring products and financial instruments (debt securities, derivatives).

The introduction of the new benchmark will directly impact the instruments issued by the State Treasury, as WIBOR-indexed bonds represent more than 27% of domestic debt in TSs. The indirect impact, but even more significant as it will affect the entire TS market, will be determined by the need to build an effective derivatives market for the benchmark interest rate adopted by the supervisory institutions. Derivatives are the main benchmark for the pricing financial instruments on the interest rate, in particular bonds and interest-rate swap contracts.

The debt securities market is closely related to the interest-rate derivative market, in particular those based on the floating rate on which the floating bonds are based. The effective functioning of each of

[2] Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014.

these markets requires that the other function equally efficiently. The T-bonds market, without possibility to enter into interest-rate derivative transactions, would face a number of perturbations, e.g. valuation uncertainty, falling demand, early terminations of IRS transactions and consequently sell-off of TSs and falling of their prices.

The transition of the WIBOR rates to the new index implies:

- a fundamental reconstruction of the current operational practices, settlement and reporting processes, valuations and risk management;
- the need to carry out a broad and complex process of systemic adjustments by all financial market participants. Such adjustments will be economic (covering changes and adjustments to financial models, valuation, risk models, etc.) and infrastructural and technical (adjusting the IT systems in all the financial institutions, adjustment in the trading and servicing of instruments);
- the need to establish and develop a market for new modified financial instruments based on the new index.

The next step of the Steering Committee of the National Working Group will be adoption of a Road Map specifying a timetable for measures replacing the WIBOR benchmark with a new benchmark index. According to preliminary assumptions, after the technical issues planned for 2023, issuance of government bonds based on the new index will begin in 2024.

Detailed information on the benchmark rates transition is available on the Internet website of the GPW Benchmark: https://gpwbenchmark.pl/.

V. OBJECTIVE OF THE STRATEGY

The objective of the *Strategy* will remain the **minimization of debt servicing costs in the long term horizon, subject to the constraints at the level of**:

1) refinancing risk;
2) exchange rate risk;
3) interest rate risk;
4) State budget liquidity risk;
5) other risks, in particular credit and operational risks;
6) the distribution of debt servicing costs over time.

This objective, determining the debt management, is understood in terms of two aspects as:

- **selection of instruments**, aimed at cost minimization within the timeframe defined by maturity dates of the longest maturity instruments and a significant share in debt, through the adequate selection of markets, debt management instruments, structure for financing borrowing requirements and issuance dates;
- **ensuring the efficiency of the TS market**, contributing to the lowering of TS yields. This means striving to eliminate or limit any unfavourable factors in market organization and infrastructure.

The approach to implementing the objective of minimizing debt servicing costs has not changed compared to the Strategy developed in the preceding year. This means the possibility of a flexible financing structure in terms of selection of the market, issuance method, currency and type of instruments, also with the use of derivative instruments. The selection of this structure should result from an assessment of market conditions (the level of demand, interest rates and the shape of the yield curve in particular markets) and the financing cost in the long term, while taking into considerations constraints resulting from the acceptable risk levels.

Experiences in debt management indicate a significant role of flexibility and diversification of sources of financing borrowing requirements, subject to the market situation. This contributes both to ensuring the security of financing the borrowing requirements of the State and to reducing the cost of the capital raised, which is particularly important in the period of disruptions in financial markets.

The domestic market will remain the main source of financing the State budget borrowing requirements. The supply of instruments in this market will be developed in a flexible way, adapted to the current market situation, i.e. the reported demand level, so that the TS supply impact on the yields can be minimized. Financing in international markets will supplement domestic financing and its level should:

- take into account the borrowing requirements of the budget in foreign currencies as well as the inflow of EU funds;
- ensure diversification of funding sources through Poland’s access to the investor base in major financial markets;
- maintain Poland's position in the euro market;
- stabilize the domestic market through adjusting the structure of financing the State budget borrowing requirements to the market conditions;
- including the financial instruments offered by the EU, including the repayable part of the Recovery and Resilience Facility;
- take advantage of attractive financing in international financial institutions;

- allow for selling currencies at the NBP and in the foreign exchange market as an instrument for foreign currency and state budget liquidity management, while taking into account the developments shaped by the monetary, economic and budgetary policies.

The minimization of long-term debt servicing costs will be subject to constraints related to the ST debt structure. Therefore, the following assumptions have been made with respect to:

1) refinancing risk

- maintaining of the dominant role of medium- and long-term instruments in financing the State budget borrowing requirements in the domestic market, subject to the market situation;
- aiming at maintaining the average maturity of the domestic debt* at the level close to 4.5 years, subject to possible temporary deviations resulting from market or budgetary conditions;
- aiming at maintaining the average maturity of ST debt* at the level close to 5 years, subject to possible temporary deviations resulting from market or budgetary conditions;
- aiming at an even distribution of redemptions over time;

2) exchange rate risk

- maintaining the share of foreign currency debt in ST debt below 25%, subject to possible temporary deviations due to market or budgetary conditions;
- possibility to use derivative instruments to develop an adequate debt currency structure;
- maintaining an effective (i.e. taking into account derivative transactions) share of the euro in foreign currency debt of at least 70% in the *Strategy* timeframe;

3) interest rate risk

- maintain the average time to re-fixing (ATR) of domestic debt* in the range of 2.6-3.6 years;
- separating interest rate risk management from refinancing risk management by using floating-rate bonds and the possibility to use derivatives and inflation-linked bonds;
- maintaining the dominant share of fixed-rate instruments in ST debt denominated in foreign currencies;

4) State budget liquidity risk

- maintaining the safe level of State budget liquidity while managing liquid assets in an effective way through deposits in Polish zloty and foreign currencies and transactions in foreign currencies (including sales of FX funds, derivatives). The level of liquidity will be determined by ongoing budgetary and market situation, including budget seasonality and smoothing of TS supply over the year. The adequate level of liquid assets results in State budget's resilience to market volatility and improves TS valuation on the primary market;

5) other risks, in particular credit and operational risk

- concluding derivative transactions with entities with high creditworthiness;
- mitigation of credit risk (through collateral agreements) and its diversification while concluding derivative transactions. In the *Strategy* timeframe, it is possible to conclude further collateral agreements that are in line with the current best practices in the market and enable concluding transactions without bearing credit risk on more favourable terms;
- diversification of credit risk generated by uncollateralized transactions;
- assuring technical infrastructure allowing for running debt management processes remotely, if needed;

6) distribution of debt servicing costs over time

- aiming at an even distribution of debt servicing costs in particular years, including the use of derivative instruments;
- setting bond coupons at a level slightly below their forecasted yield in the issuance period.

**) ATM and ATR parameters for domestic debt are calculated for the domestic marketable debt of the State Treasury, while the parameters for ST debt are calculated for domestic and foreign marketable debt and IFIs and EU loans.*

VI. TASKS OF THE STRATEGY

The following tasks have been recognized as essential for implementing the objective of the *Strategy*:

1) ensuring liquidity of the TS market;
2) ensuring efficiency of the TS market;
3) ensuring transparency of the TS market;
4) effective State budget liquidity management.

The tasks provided for in the *Strategy* with respect to TS market development are long-term and cover measures implemented on a continuous basis. These tasks are to a large extent interdependent, i.e. particular measures may contribute to the implementation of more than one task at a time. Accordingly, undertaken measures should be mainly aimed at maintaining the proper functioning of the market or its further improvement, in order to contribute to the better implementation of the *Strategy* objective.

The measures aimed at effective management of the State budget liquidity have been distinguished as an independent task.

VI.1. Ensuring liquidity of the TS market

This task relates to liquidity of both the entire TS market and particular issues, and is associated with striving to eliminate the premium for insufficient liquidity and to increase the investors' demand interested only in liquid issues. Both these factors contribute to decreasing TS yields and, accordingly, to the minimization of ST debt servicing costs. In the *Strategy* timeframe, it is planned to continue the existing policy providing for:

- building large issues of bonds (benchmarks) in the domestic market – in the case of medium- and long-term bonds with a fixed interest rate their value should be at least PLN 25 billion, taking into account the aim for an even distribution of redemptions over time;
- large liquid bond issues in the Euro market;
- adapting the issuance policy, including sale, switching and buy-back auctions to market conditions.

In relation to the ongoing reform of the reference rates, it is planned to develop a liquid market for floating-rate bonds based on a new reference index, taking into account the primary objective of minimizing long-term debt servicing costs and at a pace depending on market conditions, including the infrastructural ones from market participants.

VI.2. Ensuring efficiency of the TS market

This task is aimed at minimizing debt servicing costs in the second out of the two aspects of implementation of this objective, discussed in Chapter V, and covers the following measures both in the primary and secondary market:

- adjusting the issuance schedule in the domestic and foreign market to the market and budgetary conditions;
- strengthening the role of the TSD system in the development of the TS market and in debt management operations - in the areas where participants of the TSD system are at least as competitive as other financial market participants, conclusion of transactions and selection of partners will be carried out taking into account preferences resulting from their participation in the system;
- sustaining relations with domestic and foreign investors, including through:
  - regular meetings with banks participating in the TSD system (within the TS Market Participants' Board),

- contacts with non-banking sector entities,
- contacts with foreign investors and foreign banks,
- ongoing communication with investors;

- broadening the investor base, including regular contacts, also remotely, with foreign investors, in order to TS issued on both domestic and foreign markets;
- active participation in cconferences and seminars with investors.

VI.3. Ensuring transparency of the TS market

This task is aimed at limiting the uncertainty connected with TS market operation and enables its participants to receive reliable information on current market prices and to formulate expectations concerning developments regarding the TS market. Both predictability of the issuance policy and transparent operation of the secondary market contribute to the transparency of the market. In this respect, the following activities will be continued:

- maintaining transparent communication on the issuance plans during the current year, quarter and month;
- promoting the electronic market by:
  - adequate regulations in TSD system that ensure competitiveness and transparency, in particular with regard to PD duties related to TS quotations, sustaining adequate spread levels and the share in TS fixing,
  - adjusting rules of the TSDD system to current requirements stemming from the regulations.

VI.4. Effective State budget liquidity management

This task includes, on the one hand, acquiring and maintaining funds at a level ensuring timely execution of the State's tasks as well as budget resilience to the changing market situation and, on the other hand, investing these funds, so that the net cost of their maintaining is as low as possible. These measures are performed taking into consideration the budgetary and market conditions and constraints related to risk, including credit and operational risk.

Maintaining an adequate level of liquidity causes direct cost resulting from higher yields of TS sold at auctions in relation to income earned on short-term deposits. However, maintaining the adequate level of liquid funds allows for indirect savings arising from the fact that the issuer has a possibility to adjust the TS sale to the market condition without increasing liquidity risk and debt servicing costs.

The following instruments will support the implementation of the task:

- PLN and FX deposits in the NBP and in the financial market via BGK (the State development bank);
- *buy-sell-back* transactions concluded directly in the financial market, as an instrument of depositing budgetary funds without bearing credit risk;
- FX funds sale in the NBP and in the FX market;
- FX swap transactions allowing for shaping the currency structure of liquid funds;
- short-term loans in the interbank market.

Additionally, within the liquidity management of the public finance sector, liquid funds of general government units and court and prosecutor offices deposits are allocated on the Minister of Finance account, in order to reduce the net borrowing requirements of the State budget.

The pending amendment to the Public Finance Act (details in Chapter VII.3) extends the obligatory liquidity management consolidation for all the funds managed by BGK.

VII. IMPACT ON THE PUBLIC FINANCE SECTOR DEBT

Pursuant to Article 74 of the Public Finance Act of August 27, 2009, the Minister of Finance maintains control over the public finance sector as regards the rule that the public debt must not exceed 60% of the annual GDP.

In the case of public finance sector debt, including the debt of units other than the State Treasury, which are autonomous in incurring liabilities, the influence on their debt level is indirect and is derived from the provisions of the Public Finance Act. It contains, first of all, restrictions imposed on the way of incurring liabilities by the LGUs as well as prudential and remedial procedures applicable to public finance sector entities, when the ratios to GDP of both the public debt and the amount referred to in Article 38a(3) of the Act exceeds 55%.

Moreover, the stabilising expenditure rule included in the Public Finance Act sets the thresholds for the ratio of the amount specified in article 38a(3) of the Public Finance Act to GDP at 43% and 48%. Exceeding the thresholds and fulfilment of additional conditions defined in the Act triggers an automatic correction mechanism limiting the growth rate of expenditure for a particular budgetary year (subject to the escape clause).

Annex 3 presents constraints related to incurring public debt, provided in the Public Finance Act (arising from prudential and remedial procedures and rules of incurring liabilities by the LGUs), as well as the correction mechanism of the expenditure rule.

VII.1. Changes in the regulations relating to local government units

During the timeframe of the *Strategy*, transitional regulations on the fiscal rules applicable to the local government units, introduced in connection with the COVID-19 pandemic and the armed conflict in Ukraine, will apply.

With regard to the rule of balancing the current part of the budget of the local government units (Article 242 of the Public Finance Act) for the period 2022-2025, the approach to settling for this rule has been changed from one-year to medium-term[3]. This means that the current deficit for a particular year will have to be covered by current revenues and certain incomes in another financial year.

For the years 2023-2025, it was made possible to balance the current part of the budget of the local government units with the free funds within the meaning of Article 217(2)(6) of the Public Finance Act, i.e. the surplus of funds on the current account of the local government unit, from issuance of securities and loans granted in the preceding years[4].

With regard to the limits determining the ability to repay debt of LGUs, within the *Strategy* timeframe, in accordance with current regulations, the individual debt ratio will be based on the arithmetical mean calculated for the last three or seven years of current revenue (depending on the decision made by the executive body of the local government unit by 31 December 2021)[5] increased by income from the sale of assets and reduced by current expenditure, to current revenue in the LGU budget.

Considering the aid measures provided by the LGUs to the Ukrainian citizens after the outbreak of the armed conflict in their country, the fiscal rules applicable to the local government units were loosened for the financial management of the units specified in Article 242 and Article 243 of the Public Finance Act. When determining the ratio for balancing the current part of the local government

[3] Article 9(2) of the Act of 14 October 2021 on amending the Act on the revenue of the local government units and certain other acts (Journal of Laws of 2021, item 1927, as amended).
[4] Article 6 of the Act of 15 September 2022 on amending the Act on the revenue of the local government units and certain other acts (Journal of Laws item 1964).
[5] Article 9(1) of the Act of 14 December 2018 on amending the Public Finance Act and certain other acts (Journal of Laws of 2018, item 2500, as amended).

budget and the ratio limiting the repayment amount of debt, the local government unit reduces its current expenditure by deducting the expenditure incurred to support the Ukrainian citizens.

In addition, to facilitate the investments co-financed from the Government Fund ‘The Polish Deal’: Strategic Investments Programme, a solution was introduced to allow the LGUs to incur loans and issue securities for pre-financing the activities that are financed from the Government Fund ‘The Polish Deal’: Strategic Investments Programme[6]. It also covers solutions that temporarily loosens the repayment limit applicable to the LGUs by excluding the redemption of securities, loan instalments with due interest and discount and instalments of other debt liabilities, as specified in Article 72(1)(2) of the Public Finance Act, with the current expenditure for servicing such liabilities, issued or incurred to implement an investment task co-financed from the aforementioned Fund[7].

Moreover, according to the Act of 5 August 2022 on the coal allowance, the potential repayments from the guarantees and sureties granted by the local government units are not taken into account in determining the ratio referred to in Article 243(1) of the Public Finance Act for years 2023-2025.

Considering the reports from the local government units regarding the impact of inflation on their financial condition and as a result of the ongoing monitoring by the Ministry of Finance of the compliance by the local government with the ratio referred to in Article 243(1), the possibility was introduced that in the years 2023-2025 the local government units are allowed not to meet the ratio limiting the debt repayment, provided that the total debt of the local government unit, calculated at the end of the year, does not exceed 100% of the unit’s total revenue reduced by the amount of realised grants and similar funds and increased by the revenue referred to in Article 217(2)(4)-(8) of the Public Finance Act, not allocated for covering the budget deficit[8].

VII.2. Stabilising expenditure rule

In the face of the Russian invasion of Ukraine, unprecedented increases in energy prices and supply chain disruptions, the EC has found it necessary to maintain the general escape clause until the end of 2023 in order to help the EU and the euro area economies return back to normal. An important objective of prolonging the validity period of the clause was to deliver a flexible fiscal policy being capable of responding to the changing economic situation, in particular in terms of the availability of energy raw materials.

Accordingly, in order to provide a fiscal space to respond to the challenges arising from the dynamically changing economic situation, changes have been made to the stabilising expenditure rule[9]. Due to unprecedented global shocks and the persistent high price dynamics, significant differences have arisen between the consumer price index (CPI) and the inflation target of the Monetary Policy Council, which may not be of a short-term nature despite the projected fall in inflation. As a result, the amount of expenditure resulting from the application of the existing formula of the stabilising expenditure rule would contribute to an excessive spending restraint. Therefore, the MPC's inflation target was replaced by the CPI, along with a mechanism for correcting forecasting errors.

In addition, the amendment introduced an investment clause for 2023 providing for the exclusion of investment expenditures (capital expenditures) incurred by the units subject to the stabilising expenditure rule from the maximum limit of expenditures. The treatment of investment expenditures

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[6] Established on the basis of the provisions of Article 65(28) of the Act of 31 March 2020 on amending the Act on specific measures for the prevention, counteracting and combating the COVID-19 virus, other infectious diseases and the related emergencies and certain other acts (Journal of Laws item 568, as amended).

[7] Article 35 of the Act of 9 September 2022 on amending the Act on the personal income tax and certain other acts (Journal of Laws, item 1265).

[8] Article 7 of the Act of 15 September 2022 on amending the Act on the revenue of the local government units and certain other acts (Journal of Laws, item 1964).

[9] The Act of 23 May 2022 on amending the Public Finance Act and the Act - the Environmental Protection Law (Journal of Laws, item 1747).

provided for in the Act will make it possible to finance investment expenditures within the specified limits, without reducing the remaining expenditure covered by the stabilising expenditure rule.

The aforementioned changes make it possible to continue the necessary measures aimed at mitigating the economic effects of the Russian invasion of Ukraine.

VII.3. The Public Finance Act

As of January 1, 2022, amendments to the Public Finance Law came into effect that:

- extended the catalogue of entities that are classified in the public finance sector by adding the Bank Guarantee Fund, which made it possible to align the scope of the public finance sector according to the domestic definition closer to the general government sector; this change caused a drop in the volume of public debt due to the consolidation of the TSs held by the Bank Guarantee Fund[10],
- implemented changes to the deposit amounts of the common organizational units of the prosecutor's office, which are currently held on the deposit accounts of the Minister of Finance at BGK, on the same terms as court deposits, which reduced the State budget borrowing requirements[11].

The analytical work carried out by the Ministry of Finance concerning the current provisions of the Public Finance Act has identified regulations that should be amended, including in the area of public debt, in particular the State Treasury debt management[12]:

- the proposed provisions introduce a change in the calculation of the value of financial liabilities hedged by cross currency swaps, bringing this measure in line with economic sense and the EU methodology: if a liability denominated in a foreign currency is exchanged into other foreign currencies on a contractual basis, it will be recalculated into other foreign currencies at a contractual foreign exchange rate and into the domestic currency according to the general rule; the same rule will apply to the debt denominated in the domestic currency and exchanged into a foreign currency;
- for the implementation of public tasks, funds are created in BGK - they are not units of the public finance sector and their activities are financed from public funds in the form of a grant or transferred TSs or in the form of a share in public levies; it is reasonable to include such funds, which are included in the general government sector, in the consolidation of liquidity management;
- a change in the interest rate on the deposits and funds accepted for management; the interest rate on the deposits with the Minister of Finance depends on the interest rate in the inter-bank market and the deposit rate of the National Bank of Poland; in case the Monetary Policy Council agrees on introducing a negative NBP deposit rate and there are negative market rates, it is necessary to allow for negative interest rates on the deposits and funds managed by the Minister of Finance.

The anticipated effective date of the proposed legislation is set for 2023.

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[10] The Act of 11 August 2021 on amending the Public Finance Act and certain other acts (Journal of Laws of 2021, item 1535).

[11] The Act of 20 May 2021 on amending the Act - the Law of the Public Prosecutor's Office, the Public Finance Act and certain other acts (Journal of Laws of 2021, item 1236).

[12] List of legislative and programme work of the Council of Ministers UD 327.

VIII. EXPECTED EFFECTS OF IMPLEMENTING THE STRATEGY

The expected effects of the *Strategy* implementation include forecasts of:

- the volume of public debt and the costs of its servicing,
- changes in risk related to public debt,
- the level of debt of public finance sector entities other than ST.

These are the expected results of the implementation of the *Strategy* objectives under the adopted macroeconomic, budgetary and market assumptions. Moreover, the most important threats to the implementation of the *Strategy* objectives are specified in subchapter VIII.4.

VIII.1. Debt volume and its servicing costs

Table 9. Forecasts of the level of debt and debt servicing costs

Item	2021	2022	2023	2024	2025	2026
1. State Treasury debt*						
a) PLN bn	1,138.0	1,236.2	1,353.6	1,482.6	1,581.2	1,622.3
- domestic	872.7	962.5	1,067.4	1,185.6	1,267.9	1,302.5
- foreign	265.4	273.7	286.2	297.0	313.3	319.8
b) GDP%	43.4%	41.0%	40.8%	41.4%	41.5%	40.3%
2. Public debt						
a) PLN bn	1,148.6	1,222.8	1,345.6	1,470.7	1,565.0	1,604.8
b) GDP%	43.8%	40.5%	40.6%	41.1%	41.1%	39.9%
3. The amount specified in the article 38a (3) of the Public Finance Act**						
a) PLN bn	1,053.1	1,156.3	1,295.2	1,420.3	1,514.5	1,554.2
b) GDP%	40.2%	38.3%	39.0%	39.7%	39.7%	38.6%
4. General government debt						
a) PLN bn	1,410.5	1,560.2	1,767.5	1,968.1	2,120.1	2,243.1
b) GDP%	53.8%	51.7%	53.3%	55.0%	55.6%	55.7%
5. State Treasury debt servicing costs (cash basis)***						
a) PLN bn	26.0	26.0	66.0	65.7 - 66.2	68.0 - 68.5	78.3 - 78.9
- domestic	19.8	20.8	60.2	59.0	60.6	70.1
- foreign	6.1	5.2	5.8	6.7 - 7.2	7.4 - 7.9	8.2 - 8.7
b) GDP%	0.99%	0.86%	1.99%	1.84% - 1.85%	1.78% - 1.80%	1.95% - 1.96%

**) The State Treasury debt includes, in accordance with the financial plan of the Solidarity Fund, the liabilities of the Fund which do not affect the public debt due to the elimination of mutual liabilities of entities belonging to the sector.*
***) The amount of public debt recalculated using the yearly arithmetic average of foreign currency exchange rates for the year concerned and reduced by the amount of liquid funds to finance the borrowing requirements of the State budget in the following fiscal year.*
****)Forecasts of the debt servicing costs for the years 2024-2026 are presented as ranges, including a provision for exchange rate risk.*

This forecast was prepared while assuming an improvement in the structural balance from 2024 at the minimum rate implied by the current provisions of the Stability and Growth Pact, i.e. 0.5 percentage points per year. The European Commission, meanwhile, has announced that it will present in October proposals to revise these provisions; they could come into force at the earliest in 2024.

Under the adopted assumptions, at the end of 2022 the public-debt-to-GDP ratio will fall to 40.5% at the end of 2022, and will reach 40.6% at the end of 2023. Then, in 2024-2025, the ratio will stabilize at 41.1%, to drop at the end of the *Strategy's* forecast period to 39.9%.

The ratio of the amount specified in Article 38a(3) of the Public Finance Act to GDP will stand at 38.3% in 2022 and 39.0% in 2023, i.e. below the threshold of 43% under the stabilising expenditure rule. In the years 2024-2025, the ratio will increase up to 39.7%, and then decline to reach 38.6% in 2026.

The general government-debt-to-GDP ratio (according to the EU definition) will decline to 51.7% in 2022, followed by an increase up to 53.3% in 2023 and 55.0% in 2024, and will stabilize below 56%

within the *Strategy* timeframe. This means that the 60% debt-to-GDP ratio reference value of 60% will not be exceeded. The increase in the general government debt-to-GDP ratio, despite the decrease in this ratio for public debt (domestic definition) over the *Strategy* timeframe, will be due to the assumed increase in debt of funds at the BGK, primarily the Armed Forces Support Fund.

Chart 13. Debt-to-GDP ratio

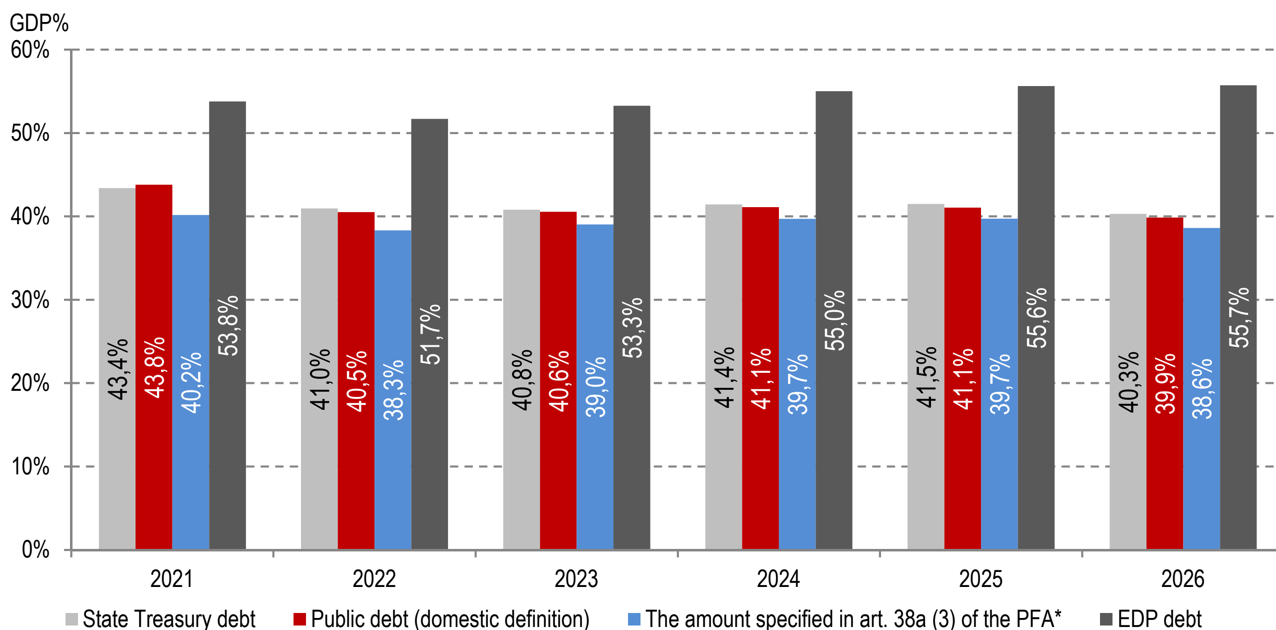
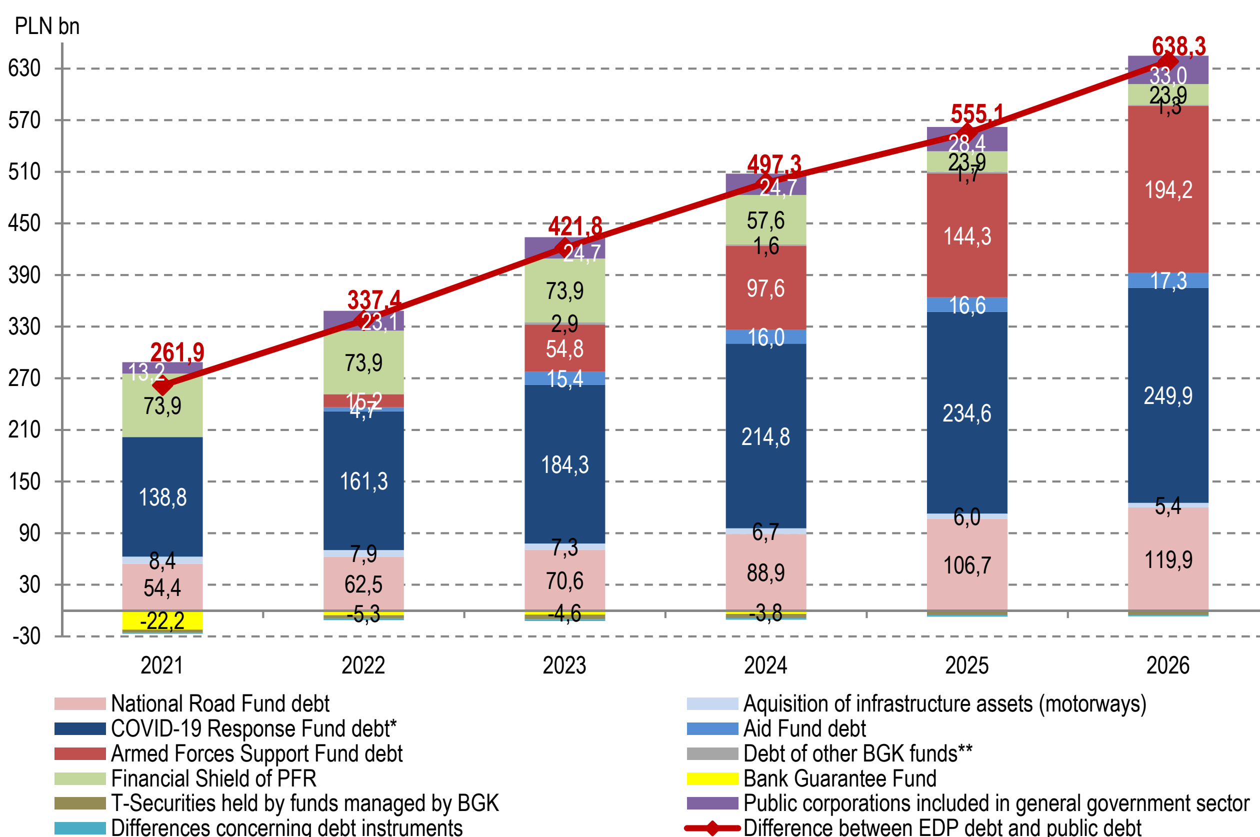


Chart 14. Differences between EDP debt and public debt



*) *FPC includes the payments for co-financing the investments under the Government Fund 'The Polish Deal': Strategic Investments Programme.*
**) *National Guarantee Fund, Liquidity Guarantee Fund, Emergency Guarantee Fund, Railway Fund.*

The draft Budget Act for 2023 assumes the limit of the ST debt servicing costs in the amount of PLN 66.0 billion, i.e. 1.99% of GDP. For subsequent years, the *Strategy* assumes that the debt servicing costs will remain below 2% of GDP.

Chart 15. ST debt servicing costs-to-GDP ratio

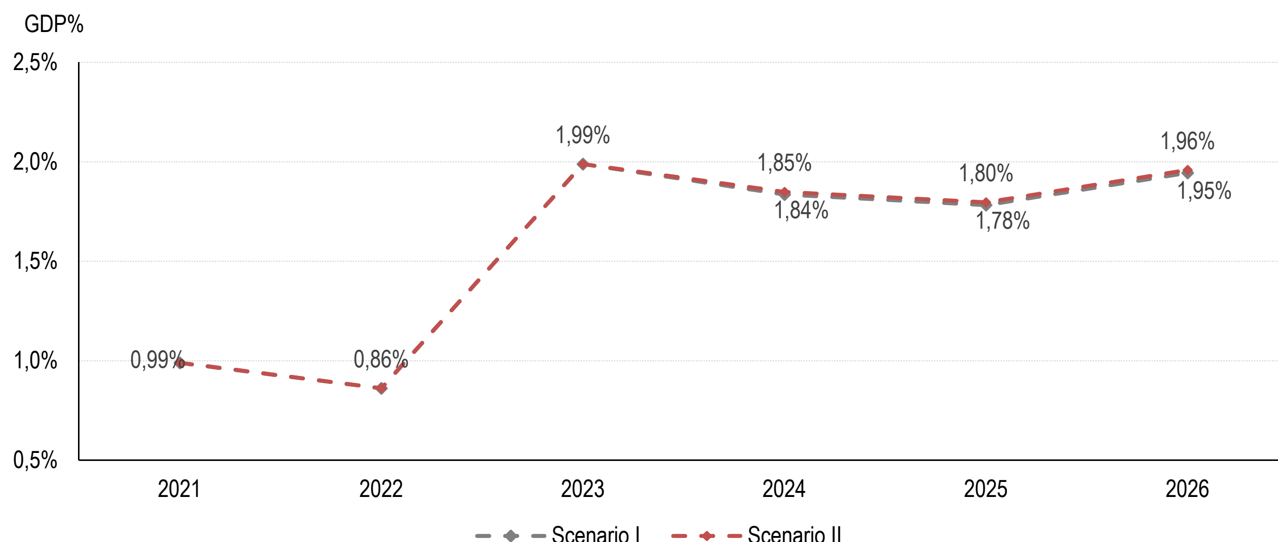
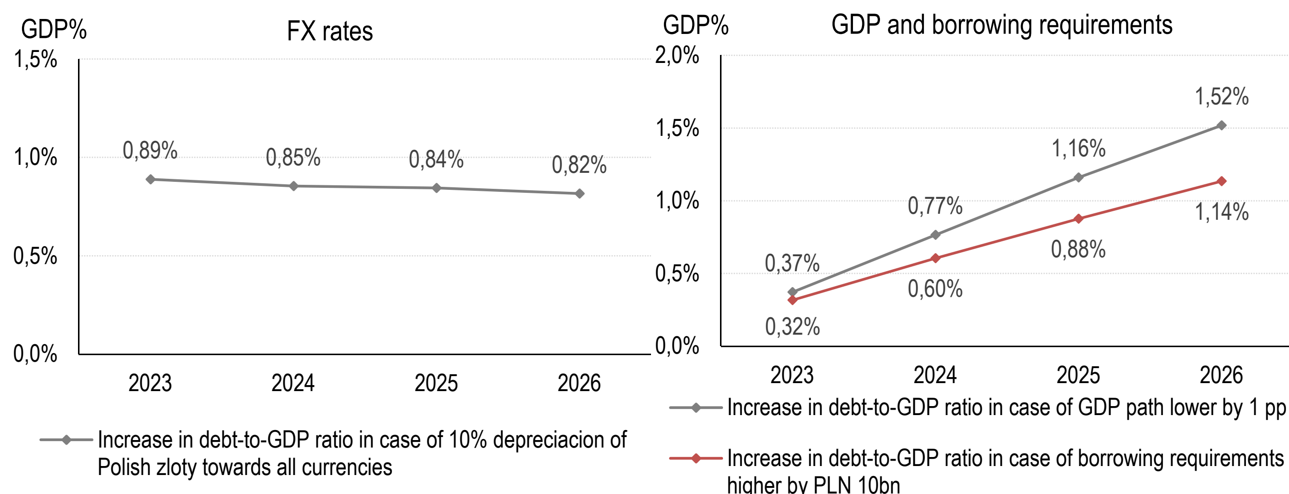
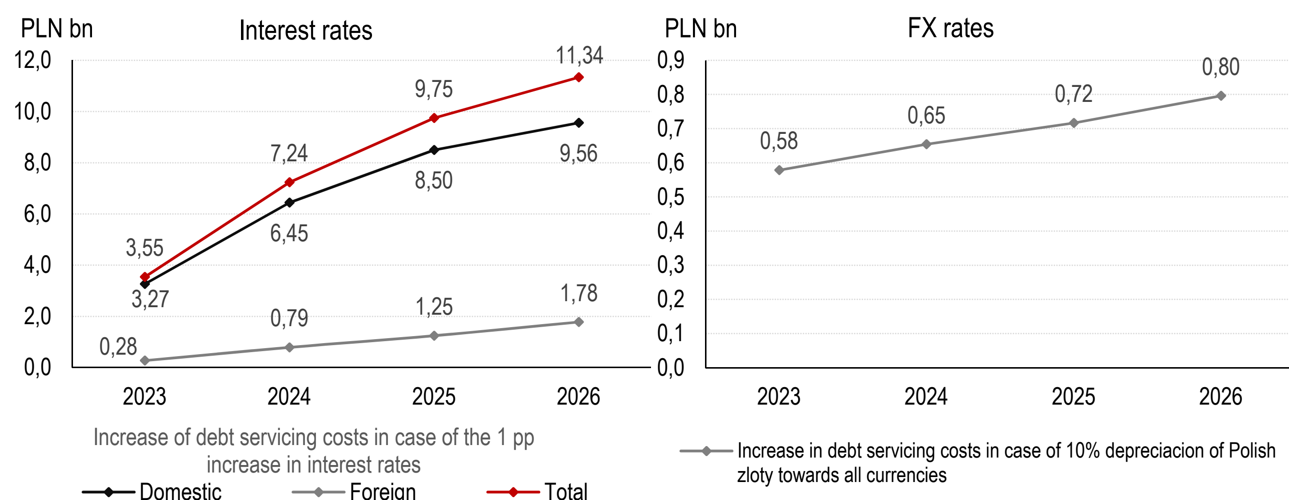


*Chart 16. Sensitivity of public debt-to-GDP ratio to changes in assumptions**



**) Assuming the change of paths since 2023, partial sensitivities without changes in other assumptions.*

Chart 17. Sensitivity of ST debt servicing costs-to-GDP ratio to changes in assumptions



VIII.2. Structure of the State Treasury debt

It is expected that in the timeframe of the *Strategy*:

- regarding the refinancing risk - the direction of changes in the average time to maturity of domestic TSs will be depend on market conditions, so that the average maturity in 2026 may reach a value in the range of 4.2-4.7 years, and for the total ST debt - 4.9-5.5 compared to, respectively, ca. 4.2 and ca. 4.8 years at the end of 2022;
- the interest rate risk will remain within the range set in the *Strategy*, depending on the adopted financing structure, the ATR of the domestic marketable debt will remain within the range of ca. 2.9-3.4 years compared to ca. 3.0 at the end of 2022, and for the total debt - ca. 3.8-4.3 years compared to ca. 3.7 years at the end of 2022, whereas the *duration* of the domestic marketable debt will be in the rage of ca. 2.4-3.3 years compared to ca. 2.7 years at the end of 2022, and that of the total debt – in the range of ca. 3.2-3.8 years compared to ca. 3.3 years at the end of 2022;
- the share of FX debt will be reduced, and it will fall in the *Strategy* timeframe to ca. 19.7% in 2026.

Chart 18. ATM of the ST debt

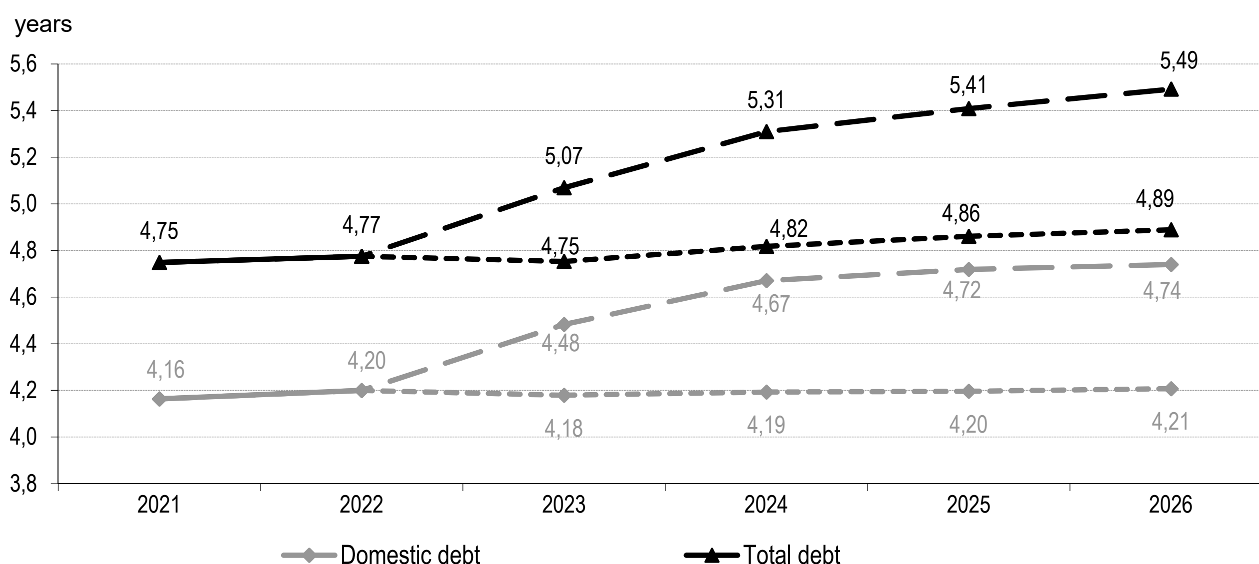


Chart 19. ATR of the ST debt

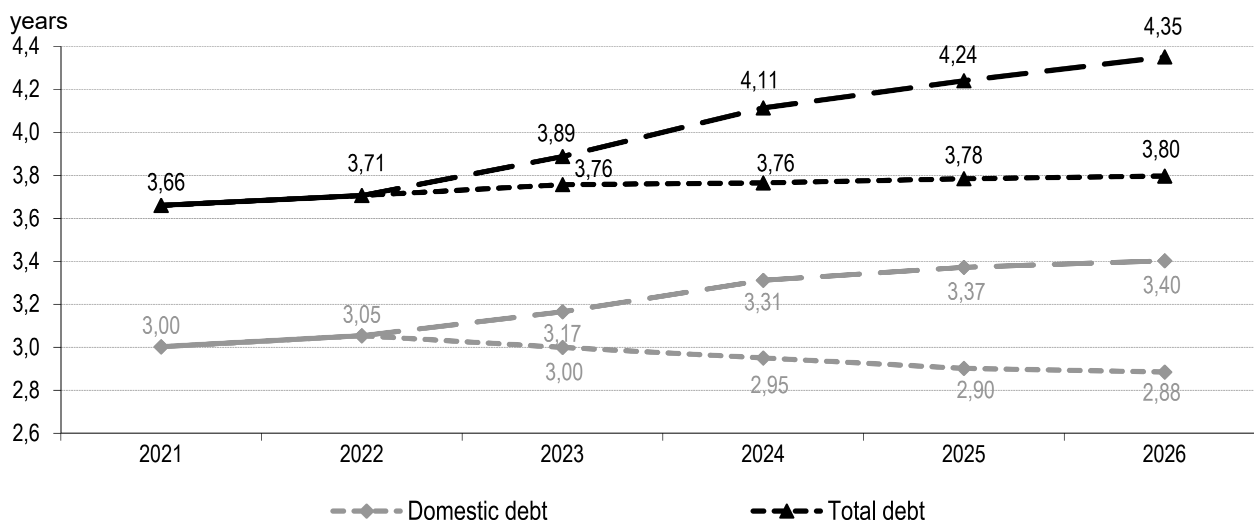


Chart 20. Duration of the ST debt

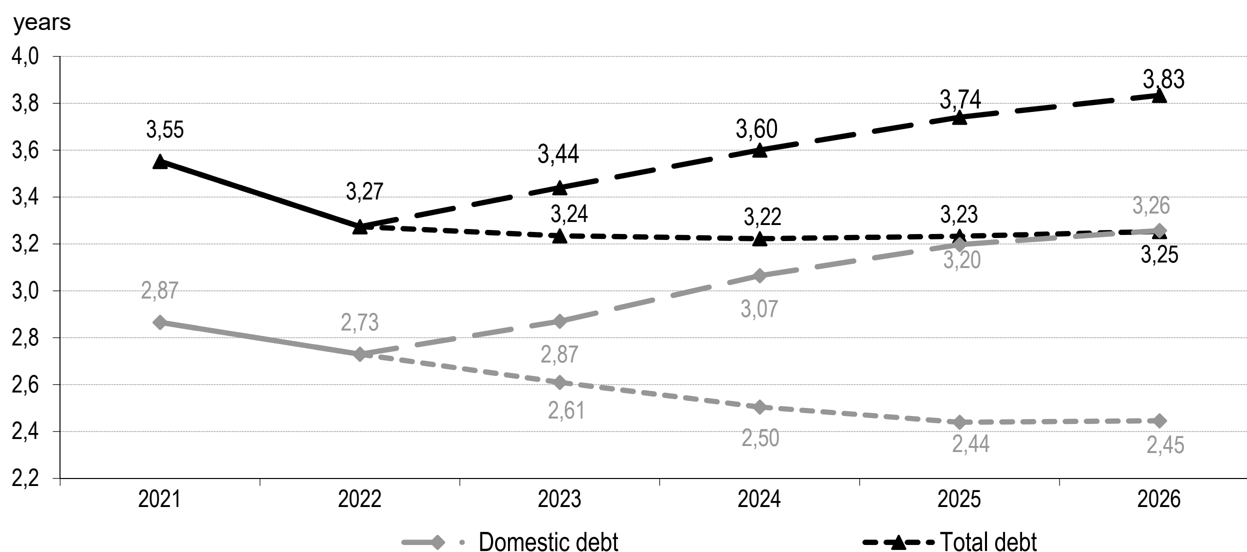
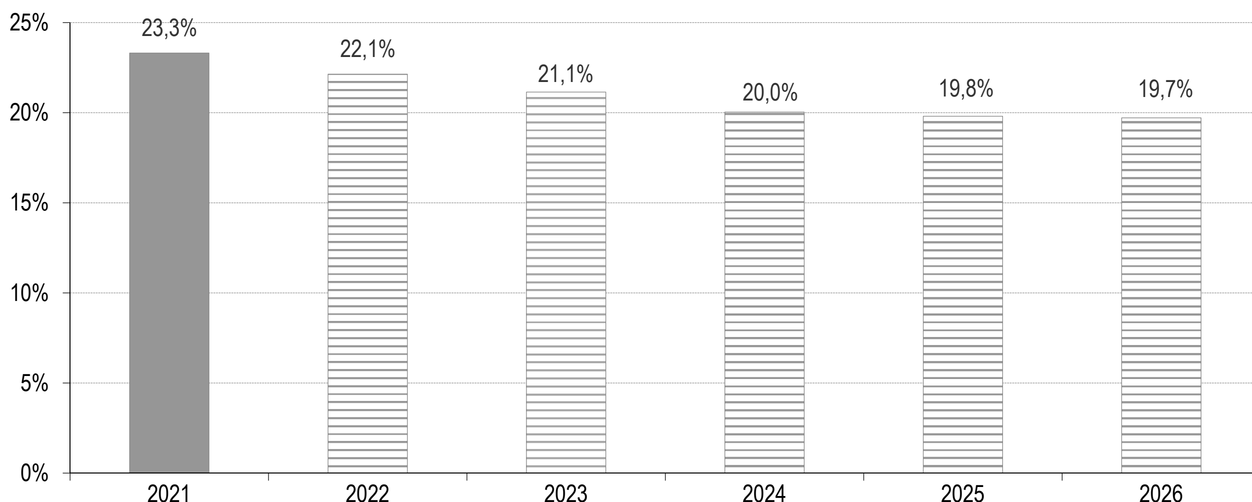


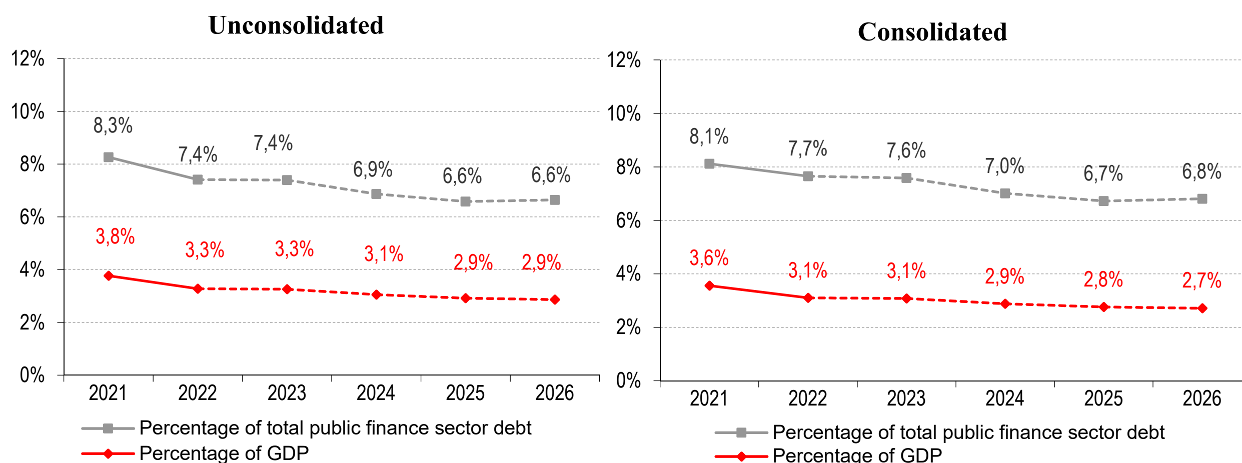
Chart 21. Share of foreign currency debt in the total ST debt



VIII.3. Debt of public finance sector entities other than the State Treasury

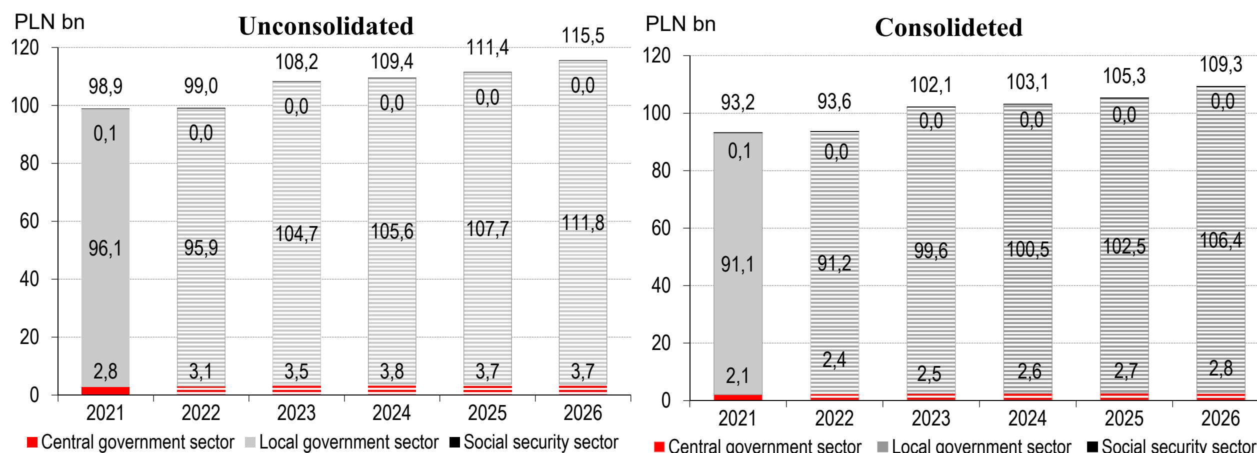
Under the adopted assumptions, in the timeframe of the *Strategy*, the unconsolidated debt-to-GDP ratio of the remaining PFS units will decrease from 3.3% to 2.9% , whereas the consolidated debt will fall from 3.1% to 2.7%. The share of this group of entities in the consolidated public finance sector debt will fall from 7.7% in 2021 to 6.8% in 2026.

Chart 22. Unconsolidated and consolidated debt of public finance sector entities other than the State Treasury – in relation to GDP and as a share of the total public finance sector debt



The nominal unconsolidated debt of public finance sector entities other than ST will increase from PLN 99.0 billion in 2022 to PLN 115.5 billion in 2026. This trend will be derived mainly from the debt of local government units and their associations. The debt of local government units will be affected by the rules for incurring liabilities by those entities, including the individual debt ratio.

Chart 23. Debt of public finance sector entities other than the State Treasury before and after consolidation by sector



VIII.4. Threats to the Strategy implementation

The main threats to the implementation of the presented *Strategy* are primarily associated with:

- different than assumed macroeconomic and budgetary scenario in Poland, in particular due to inflation development, a further possible increase in interest rates and volatility in foreign exchange rates, etc.;
- international determinants, including:
  - slower than expected growth rate in the global economy, resulting from the geopolitical situation, in particular the war in Ukraine, availability and prices of energy raw materials, and potential future course of the COVID-19 pandemic;
  - monetary policy of major central banks, including the ECB and the Fed;
  - capital outflow towards core or other markets as a result of, inter alia, possible turmoil in financial markets, etc.;
- the risk of excessive growth of the public debt-to-GDP ratio, in connection with:
  - higher State budget borrowing requirements depending, among others, on the future condition of the Polish economy;
  - higher than planned increase in debt of units from general government sector, other than ST, in particular the funds managed by BGK;
  - depreciation of the Polish zloty compared to the level assumed in the *Strategy*;
  - issuance of TSs and their transfer on the basis of acts other than the Public Finance Act;
  - obligation to execute sureties or guarantees by public finance sector entities.

IX. GUARANTEES AND SURETIES GRANTED BY PUBLIC FINANCE SECTOR ENTITIES

IX.1. Assumptions of the strategy of granting guarantees and sureties

In order to limit the risk associated with granting ST guarantees and sureties while preserving the advantages of using them as an instrument of the State economic policy, the following principles should be maintained:

- granting guarantees and sureties mainly to support development-oriented projects, in particular in the areas of infrastructure, environmental protection, job creation and regional development, implemented, inter alia, with the use of the EU funds, as well as to support other investment tasks arising from any new support programmes stipulating granting guarantees and sureties; and
- possible continuation, to the extent necessary, of the use of guarantees and sureties to counter the effects of the COVID-19 pandemic and the Russian invasion of Ukraine.

The geopolitical and economic conditions have changed recently. This has resulted in an increase in fuel prices, the inflow of war refugees, and has made it necessary to intensify the development of the armed forces. In the light of new challenges, it is planned in particular that new guarantees will be granted for financing: the Armed Forces Support Fund, the Aid Fund (in relation to the inflow of refugees), or the subsidies for fuel, including gas, supplies. In parallel to continuing infrastructural investments (financing the National Road Fund and railway investments), the aforementioned new factors make it necessary to forecast a significant increase in potential liabilities from the guarantees and sureties granted by the State Treasury in the upcoming years.

Moreover, as in previous years, the annual budget ceiling provides for the possibility of providing guarantees relating to possible actions that may be taken in case the operating conditions of the Polish financial system deteriorate. It has not yet been necessary to provide these guarantees to a significant extent.

IX.2. Analysis and forecasts of the level of guarantees and sureties

Contingent (undue) liabilities arising from the guarantees and sureties granted by public finance sector entities are estimated to amount to PLN 380.8 billion by the end of the first half of 2022, if compared with PLN 360.5 billion by the end of 2021 (13.7% of GDP) and PLN 306.8 billion (13.1% of GDP) by the end of 2020.

The liabilities from the sureties and guarantees granted by the ST had a dominant share in the structure of potential liabilities. By the end of the first half of 2022, they amounted to PLN 364.4 billion, and PLN 356.3 billion (13.6% of GDP) by the end of 2021, if compared with PLN 302.9 in 2020. (12.9% of GDP). The significant increase in these potential commitments results from new guarantees granted for counteracting the effects of the COVID-19 pandemic. These guarantees amount to PLN 242.3 billion by the end of the first half of 2022.

The current portfolio does not pose significant threats to the sureties and guarantees of the State Treasury. By the end of 2021 and the end of the 1st half of 2022, ca. 95% of unmatured liabilities of ST guarantees were classified as low risk. At the same time, the system for financing the guarantees related to the COVID-19 pandemic minimizes the risk that payments may be made from such guarantees. As for the newly forecasted guarantees, the admissible manner for supplying the Funds and the forecasted condition of the entities do not case a significant increase in the forecasted payments from the guarantees and sureties as of the date of this document.

The biggest amounts of ST contingent liabilities (as at 30 June 2022) were due to:

- guarantees granted for BGK to support the COVID-19 Response Fund PLN 164.1bn
- guarantees granted to BGK PLN 90.6bn

of which for support of the National Road Fund PLN 90.1bn

- guarantees granted for Polski Fundusz Rozwoju S.A. for the implementation of government programs under the PFR Financial Shield to counteract the effects of COVID-19 PLN 78.3bn
- guarantees granted for PKP Polskie Linie Kolejowe S.A. PLN 16.3bn
- guarantees of payments from the KFD for Gdańsk Transport Company S.A PLN 6.5bn
- guarantees of payments from the KFD for Autostrady Wielkopolskiej S.A. II PLN 5.6bn
- guarantees granted for PKP Intercity S.A. PLN 2.0bn

Table 10. Contingent liabilities under guaranties and sureties granted by the ST and the public finance sector units

	2020	2021	2022	2023	2024	2025	2026
Contingent liabilities under guarantees and sureties granted by:							
a) Public finance sector							
- PLN bn	306.8	360.5	486.3	655.2	702.9	740.6	828.2
- in relation to GDP	13.1%	13.7%	16.1%	19.7%	19.6%	19.4%	20.6%
b) State Treasury							
- PLN bn	302.9	356.3	469.9	638.8	686.5	724.2	811.8
- in relation to GDP	12.9%	13.6%	15.6%	19.3%	19.2%	19.0%	20.2%
including for general government sector entities	*301.0*	*354.3*	*409.3*	*549.5*	*626.6*	*685.0*	*772.8*
in relation to GDP	*12.9%*	*13.6%*	*13.6%*	*16.6%*	*17.5%*	*18.0%*	*19.2%*

Annex 1. Abbreviations and glossary

A. Abbreviations used in the Strategy

ATM – average time to maturity
ATR – average time to refixing
BGF – the Bank Guarantee Fund
BGK – Bank Gospodarstwa Krajowego
CIRS – *currency interest rate swap*
ECB – European Central Bank
Fed – the Federal Reserve System in the USA
FPC - the COVID-19 Response Fund
IFIs – international financial institutions
KFD – National Road Fund
LGUs – local government units
MPC – Monetary Policy Council
NBP – National Bank of Poland
TSD – Treasury Securities Dealers
PFR – Polish Development Fund
PPK - the Employee Equity Schemes
ST – State Treasury
TS – Treasury securities

B. Glossary

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

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

where:
t – maturity date,
T – set of all maturity dates,
N_t – face value paid at time t,
I_0 – current indexation coefficient of inflation-linked instruments' face value (for non-indexed TS I_0 =1).

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

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

where:
r – payment date of the nearest fixed coupon for floating rate instruments,
t – maturity date for fixed rate instruments,
j – maturity date for inflation-linked instruments,

R – set of all payment dates of the nearest fixed coupons for floating rate instruments,
T – set of all maturity dates for fixed rate instruments,
J – set of all maturity dates for inflation-linked instruments,
NZ_r – face value of floating rate instruments,
NS_t – face value of fixed rate instruments,
NI_j – (non-indexed) face value of inflation-linked instruments,
I_0 – current indexation coefficient of inflation-linked instruments' face value.

Benchmark

1. (*issue*) the large amount of TS issue with a liquid secondary market. Yield of benchmark bond is the reference point for yields in a given maturity segment. Benchmark issues subject to trading on the electronic market Treasury BondSpot Poland are TS issues defined by the Minister of Finance, in particular fixed rate bonds, with maturity of at least one year and total face value of at least PLN 10 billion or on-the-run issues with total face value of at least PLN 2 billion. When setting benchmarks on the Polish yield curve in Refinitiv and Bloomberg the criterion of time to maturity is applied.
2. *(portfolio)* target characteristics of the public debt portfolio, which constitutes *a reference portfolio* for the existing portfolio and determines the direction of public debt management. The characteristics of *the reference portfolio* may include the share of particular currencies, interest rates and types of instruments, as well as the values of synthetic indicators which most often constitute the risk measures, e.g. the average maturity or duration.

Buy-sell-back – transaction which consists of two agreements: spot purchase and forward sale of securities at a price set upfront at the day of the transaction.

Credit risk – associated with the risk that the other party of the transaction will fail to meet its obligations in whole or in part. The risk occurs as a result of transactions with receivables. For the debt management unit such a situation occurs with financial transactions on derivatives. Credit risk also occurs in management of liquid assets, e.g. through making deposits with banks and purchase of securities. Credit risk is managed mainly by choosing partners with high creditworthiness (measured by their ratings) and by setting limits for total size of transaction for partners, which depend on their credibility and type of transaction.

Duration – the measure of vulnerability of debt servicing costs to changes of interest rates and thus the measure of interest rate risk related to public debt. Duration is interpreted as the average period (expressed in years) of debt servicing costs adjustment to the change of interest rate levels. The higher the level of interest rates and the larger the share of short-term and floating rate instruments, the higher the interest rate risk and the lower duration. Duration of ST debt in a given currency is calculated according to the following formula:

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

where:
s – payment date (of interest or face value),
S – set of all payment dates (of interest or face value),
r – payment date of the nearest fixed coupon for floating rate instruments,
R – set of all payment dates of the nearest fixed coupons for floating rate instruments,
S_r- set of all payment dates for these floating rate securities which the nearest fixed maturity is r,
CFZ_s - payment (of interest or face value) for floating rate instruments,

CFS_s – payment (of interest or face value) for fixed rate instruments,
i_s – zero-coupon interest rate for term s.

Duration of total debt of ST is a weighted average of appropriate duration coefficients for each currency, where weights are market value of debt in particular currencies.

Exchange rate risk – arises from the vulnerability of the foreign currency denominated debt level and its servicing costs to exchange rate fluctuations. The Polish zloty appreciation or depreciation against a given foreign currency results in a proportional increase or decrease (in the Polish zloty terms) of debt volume and debt servicing costs denominated in this currency.

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

Operational risk – risk arising from the threat that the costs related to the debt management or to the level of other types of risk will increase due to infrastructure, organization and supervision of the debt management, that is inadequate to the scope of tasks. Operational risk is the most difficult risk to be measured. Limiting the operational risk can be achieved by integrating public debt management in one organizational entity, having its structure, infrastructure and procedures adjusted to efficient operations in the environments of government administration and financial markets.

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

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

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

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

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

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

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

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

Swap – a contract through which two parties exchange cash flows based on a notional principal amount with rules of calculating their value specified in advance. Swap is a financial instrument classified as derivatives.

Annex 2. Cyclical publications of the Ministry of Finance regarding public debt and TS market

- Annual report
- State Treasury debt, monthly bulletin
- Public debt, quarterly bulletin
- Monthly information on TS supply and its background
- Monthly information on investors structure on domestic TS market
- Monthly information on transaction on secondary TS market

Publications available on the Ministry of Finance website:
https://www.gov.pl/web/finance/public-debt

Annex 3. Legal regulations applied to public debt in Poland and the EU

Table 1. Public debt – basic legal regulations

Polish regulations	EU regulations
1. Constitution of the Republic of Poland • ban on incurring loans and granting guarantees and sureties resulting in the public debt exceeding 3/5 of GDP (Article 216(5));	1. Treaty on the functioning of the European Union • level of general government debt and restrictions applied to general government deficit constitute the criterion on the basis of which the Commission examines the compliance with budgetary discipline in Member States (Article 126) – specifies the Excessive Deficit Procedure (EDP);
2. Public Finance Act • regulations on public debt: definitions, basic principles of issuing public debt and debt management, prudential and remedial procedures applied to public debt levels; • definition of the scope of the public finance sector.	2. Protocol on the excessive deficit procedure annexed to the Treaty establishing the European Community and the Treaty on the functioning of the European Union • definition of general government debt and reference value of debt to GDP ratio at 60%;
	3. Council Regulation (EC) No 479/2009 of 25 May 2009 on the application of the Protocol on the Excessive Deficit Procedure annexed to the Treaty establishing the European Community • definition of general government debt with specification of categories of liabilities which constitute it;
	4. Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013 on the European system of national and regional accounts in the European Union (ESA 2010) • definition of categories of financial liabilities; • definition of general government sector.

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

Public Finance Act

I. Legal procedures regarding limits on public debt to GDP ratio

1) the ratio in year *x* is greater than 55% and lower than 60%:

a) it is assumed the lack of deficit or the difference between state budget revenues and expenditures in draft budget act adopted by the Council of Ministers for the year x+2 must ensure the decrease in State Treasury debt to GDP ratio as compared to the ratio announced for the year x;

b) budget deficit of local government unit diminished by cumulated budgetary surplus from previous years and liquid funds in budget resolution for the year x+2 can only derive from expenditures for current tasks co-financed from EU funds or non-returnable financial aid provided by EFTA member countries;

c) in draft budget act adopted by the Council of Ministers for the year x+2:
- no increase in salaries of public sector employees is assumed,
- revaluation of pensions must not exceed the CPI level in the budgetary year x+1,
- ban on granting new loans and credits from the State budget is introduced,
- the increase in expenditures of the Sejm (lower house of Polish Parliament), the Senate (upper house of Polish Parliament), Presidential Chamber of the Republic of Poland, Constitutional Tribunal, Supreme Audit Office (NIK), Supreme Court, Primary Administration Court, The National Council Of The Judiciary, common courts of law and provincial administration courts, Spokesman of Citizen Rights, Spokesman of Child Rights, National Board of Radio and Television, President of the Personal Data Protection Office, The Institute of National Remembrance – Commission for the Prosecution of Crimes against the Polish Nation, National Electoral Office, National Labour Inspection must not be higher than expenditures in the government administration;

d) the Council of Ministers make a review of:
- State budget expenditures financed by foreign credits,
- long-term programs;

e) the Council of Ministers presents a remedial program ensuring the fall in public debt to GDP ratio;

f) the Council of the Ministers make a review of regulations in force to propose possible legal solutions which influence state budget revenues, including VAT rates,

g) State Fund for the Rehabilitation of Disabled Persons receives earmarked subsidies from the state budget for co-financing of disabled workers salaries at the level of 30% of planned funds for that year,

Public Finance Act

h) new liabilities can be incurred by government administration if the investments are co-financed from EU funds or non-returnable financial aid provided by EFTA member countries at the maximum level, set in the rules or procedures for particular type of investment, not lower than 50% of the total costs, however these restrictions do not apply to state road rebuilding or repairs required for road traffic hazard removal, anti-flood infrastructure investments, electronic toll service and compensations for properties taken over for public roads investments;

2) the ratio in year x is equal to or greater than 60%:

a) procedures provided in point 1, letters a, c, d, f, g and h in case of the ratio greater than 55%, and lower than 60% are in force;

b) budgets of local government units for the year x+2 must at least be balanced;

c) a ban on granting new sureties and guarantees by public finance sector entities is introduced;

d) the Council of Ministers presents to the Parliament a remedial programme with the main objective to prepare and implement actions aimed at reducing the public debt-to-GDP ratio below 60%;

Procedures provided in point 1 are not applicable if amount of public debt recalculated using the yearly average of foreign currency exchange rates for the year concerned and reduced by the value of State budget liquid funds raised to finance the borrowing requirements for the following budget year does not exceed the threshold of 55%.

II. Principles and limits on incurring liabilities by local government units

a) planned and executed current expenditures must not exceed planned and executed current revenues increased by the revenue arising from:
- repayment of loans granted in previous years;
- the LGUs' budget surplus from previous years, less the funds indicated below;
- unused cash in the current account of the budget, resulting from the settlement of revenue and expenditure financed by linked to specific budget execution rules laid down in separate acts and resulting from the settlement of funds from the EU budget and non-returnable funds from aid granted by the EFTA member States and grants for the implementation of a programme, project or task financed with these funds;

b) executed current expenditures can be higher than executed current revenues increased by budgetary surpluses from previous years only by amounts linked to the current tasks co-financed from EU funds or non-returnable financial aid provided by EFTA member countries if these funds were not forwarded in specified year;

c) Local government units can incur loans and issue securities for:
- repayment of previously incurred liabilities resulting from securities and loans;
- covering transitional budget deficit of local government within the fiscal year;
- financing of planned budget deficits;
- financing in advance of the tasks co-financed from EU funds;

d) Loans incurred and securities issued for covering temporary budget deficit of local government have to be paid off or redeemed in the same year as they were incurred or issued;

e) Local government can only incur liabilities of which servicing costs are borne at least once a year, while:
- discount of securities issued by local government cannot exceed 5% of their face value,
- capitalization of interest is forbidden;

f) For a local government unit, the total ratio of:
- instalments of loans and interest payable in a given fiscal year;
- redemption of securities and interest (including discount) payable on them;
- repayment of instalments of liabilities that have economic effects similar to those of a loan and interest payable in a given year;
- potential payments resulting from sureties and guarantees granted

to planned current revenues cannot exceed in the budgetary year and any other year following the budgetary year the arithmetical average for last seven years of current revenues minus current expenditures to total revenues ratio;

The above rule will apply in its entirety from 2026. Changes to the current rule and transitional provisions are described in Chapter VII.1.

g) Limitations on debt repayments of local government do not apply to:
- instalments and interest payable on loans drawn in connection with a programme, project or task co-financed with the EU funds;
- redemption and interest (including discount) payable on securities issued in connection with a programme, project or task co-financed with the EU funds;
- guarantees and sureties granted to self-government legal persons performing tasks of self-government units within the framework of programmes financed with the participation of funds coming from the EU budget and not subject to reimbursement from the aid granted by the EFTA States.

– but no later than 90 days after the end of the programme, project or task and receiving a refund; this cut-off date does not apply to liabilities incurred for national contribution;

Public Finance Act
• instalments of loans and redemption of securities, and interest (including discount) payable on them, incurred or issued to finance national contribution of a programme, project or task with the EU co-financing level exceeding 50%.
h) the restrictions on the repayment of the debt of territorial self-government units shall not apply either to early repayment of liabilities occurring after the financial year for which the budget was adopted and occurring exclusively in the financial year for which the budget was adopted: • resources from a new commitment if this reduces the total cost of servicing the debt over the entire repayment period, • resulting from the possession of free funds as surplus cash on the current account of the local government budget, resulting from the settlement of issued securities, loans and borrowings from previous years, and funds on this account, • funds from other than those mentioned above, in particular from revenues from privatisation of territorial self-government units' assets and repayment of loans granted in previous years, if the entity does not incur liabilities to finance the planned budget deficit.

Table 3. Correction mechanism of the stabilising expenditure rule.

Public Finance Act
The correction amounts of the stabilising expenditure rule pursuant to Article 112aa(4):
1) – 2 percentage points: a) the general government deficit in year x-2 exceeds GDP 3% or b) the amount specified in article 38a point 3 of the Public Finance Act (the amount of public debt recalculated using the yearly average of foreign currency exchange rates for the year concerned and reduced by the value of State budget liquid funds raised to finance the borrowing requirements for the following budget year) exceeds in year x-2 GDP 48%.
2) – 1.5 percentage points: a) - the general government deficit in year x-2 does not exceed GDP 3% and - the amount specified in article 38a point 3 of the Public Finance Act exceeds in year x-2 GDP 43% but is not higher than GDP 48% and - the forecasted dynamics of the real GDP* for year x (assumed in the justification for draft budget act for the year x) is not lower than the medium term average by over 2 percentage points;
b) - the general government deficit in year x-2 does not exceed GDP 3% and - the amount specified in article 38a point 3 of the Public Finance Act in year x-2 is lower or equal to GDP 43% and - the sum of the differences between the general government nominal balance and the medium-term budgetary objective (MTO) exceeds in year x-2 GDP 6% and - the forecasted dynamics of the real GDP* for year x (assumed in the justification for draft budget act for the year x) is not lower than the medium term average by over 2 percentage points;
3) + 1.5 percentage points: a) - the general government deficit in year x-2 does not exceed GDP 3% and - the amount specified in article 38a point 3 of the Public Finance Act in year x-2 is not higher than GDP 43% and - the sum of the differences between the general government nominal balance and the MTO exceeds in year x-2 GDP 6% and - the forecasted dynamics of the real GDP* for year x (assumed in the justification for draft budget act for the year x) is not higher than the medium term average by over 2 percentage points
4) in other cases there is no correction element
The escape clause
The provisions of the stabilising expenditure rule do not apply in the case of: • the introduction of martial law; • the introduction of a state of emergency on the entire territory of the Republic of Poland; • introducing a state of natural disaster on the entire territory of the Republic of Poland; • to announce the state of the epidemic on the entire territory of the Republic of Poland - if the annual growth rate of the gross domestic product at constant prices, as projected in the justification for the draft budget act or in the justification for the draft budget act for the year for which the amount of expenditure is calculated, is more than two percentage points lower than the medium-term growth rate of GDP at constant prices specified in the justification for draft budget act for the last year submitted to the Sejm, in which the conditions specified above were not met.
* the medium-term real GDP is an eight-year geometric mean of real annual GDP growth rates. For the year for which the amount of expenditure is calculated and the year preceding that year the values of budget forecasts are assumed. For the remaining years the amount is derived from the announcement of the President of the statistics Poland. If the horizon of the years covered by this indicator includes the year in which the application of the stabilizing expenditure rule was suspended or the year under the return clause after temporary suspension of the stabilizing expenditure rule, calculating this indicator, the annual dynamics of the real GDP in constant prices in the year of suspension of the stabilizing expenditure rule and in the years of the return clause to the standard formula of the expenditure rule, shall be replaced with the indicator of medium-term dynamics of the real GDP in constant prices, as specified in the draft budgetary bill for the last year in which the conditions for suspending of the stabilizing expenditure rule were not fulfilled and submitted to the Sejm.

Table 4. Differences between public debt (Polish definition) and general government debt (EU definition).

<table>
<tr><th>Polish regulations</th><th>EU regulations</th></tr>
<tr><th>public debt</th><th>general government debt</th></tr>
<tr><td colspan="2">1) scope of the public finance sector</td></tr>
<tr><td>• Public Finance Act defines limited catalogue of units included in the public finance sector, i.e.:
– bodies of public authority, including bodies of government administration, bodies of state control and legal protection, courts and tribunals;
– local government units and their associations;
– metropolitan associations;
– budgetary units;
– local government budgetary entities;
– executive agencies;
– institutions of budgetary management;
– state special-purpose funds;
– Social Security Institution and funds under its management;
– Agricultural Social Insurance Fund (KRUS) and funds under management of the President of KRUS;
– National Health Fund;
– independent public health care units;
– public universities;
– Polish Academy of Sciences and organizational units founded by it;
– state and local government cultural institutions;
– other state or local government legal persons founded under separated acts in order to execute public tasks, excluding enterprises. research institutes, banks and commercial companies;
– Bank Guarantee Fund.</td><td>• scope of general government[1)] sector is defined in ESA 2010[2)]; no limited catalogue of units is defined;</td></tr>
<tr><td colspan="2">differences in the scope of sector depending on regulations</td></tr>
<tr><td colspan="2">a) funds formed within Bank Gospodarstwa Krajowego (BGK), f. ex. : the National Road Fund (KFD), the COVID-19 Response Fund (FPC), the Railway Fund (FK)</td></tr>
<tr><td>• are excluded from the public finance sector;</td><td>• are included in the general government sector [3)];</td></tr>
<tr><td colspan="2">b) public corporations that are deemed non-marketable (f. ex. PKP PLK S.A., Centralny Port Komunikacyjny sp. z o. o., Port Lotniczy Łódź, health care institutions)</td></tr>
<tr><td>• are excluded from the public finance sector;</td><td>• are included in the general government sector;</td></tr>
<tr><td colspan="2">c) rerouting of transactions to the general government sector - transactions carried out by entities not belonging to the general government sector may be treated as a separate, commissioned activity carried out on behalf of the government, which results in the disclosure of these transactions in the accounts of the general government sector, e.g. Financial Shield of the Polish Development Fund</td></tr>
<tr><td>• are excluded from the public finance;</td><td>• are included in the general government;</td></tr>
<tr><td colspan="2"></td></tr>
<tr><td colspan="2">2) liabilities which constitute public debt</td></tr>
<tr><td>• securities (excluding shares);
• loans (including securities whose disposal is limited);
• deposits;
• matured payables (i.e. liabilities due but not settled, which have not been lagged nor cancelled);</td><td>• securities;
• loans;
• cash and deposits;</td></tr>
<tr><td colspan="2">differences in liabilities depending on regulations</td></tr>
<tr><td>• matured payables;</td><td>• [4)]
• restructured or refinanced trade credits (including those with original maturity of one year or less) are included in loan category[5)]</td></tr>
<tr><td colspan="2">3) valuation of liabilities denominated in foreign currencies</td></tr>
</table>

Polish regulations	EU regulations
public debt	**general government debt**
• liabilities denominated in a foreign currency shall be converted into the national currency on the basis of the middle exchange rate applicable on the last working day of each period.	• liabilities denominated in a foreign currency, or exchanged from one foreign currency through contractual agreements to one or more other foreign currencies shall be converted into the other foreign currencies at the rate agreed on in those contracts and shall be converted into the national currency on the basis of the representative market exchange rate prevailing on the last working day of each year.
4) contingent liabilities	
differences in treatment of contingent liabilities in debt-to-GDP ratio	
• is not included;	• EU limitations do not take directly into account contingent liabilities generated by issued sureties and guarantees; • when specific criteria are met contingent liabilities should be treated as debt assumed by the entity which issued surety or guarantee;

1) Polish Central Statistical Office (GUS) is responsible for the scope of general government sector (in line with EU regulations). The list of general government sector entities is available on the internet website of GUS: https://stat.gov.pl/download/gfx/portalinformacyjny/pl/defaultaktualnosci/5483/6/8/1/lista_jednostek_sektora_instytucji_rzadowych_i_samorzadowych_s.13.xlsx
2) ESA2010 (Regulation (EU) No 549/2013 of the European Parliament and of the Council of May 21, 2013 on the European system of national and regional accounts in the European Union) states that an entity is classified to the general government sector if it is not a separate institutional unit from government or is a separate institutional unit controlled by general government and it is non-market. The ability to undertake market activity is checked notably through the usual quantitative criterion, i.e. if the ratio of sales revenues to production costs is above 50% , the unit is in principle deemed market. However, in order to decide whether a producer that operates under the control of government is a market unit some qualitative criteria must also be taken into account.
3) In compliance with Eurostat guidelines on sector classification of some infrastructure projects, general government debt figures may, under specified conditions, include capital expenditures of the projects in question (imputed loan)
4) Matured payables are expenditure on accrual basis and thus are included in net borrowing/net lending calculated (balance of general government) in accordance with EU methodology.
5) Pursuant to decision of Eurostat of 31 July 2012 on *The statistical recording of some operations related to trade credits incurred by government units* .

Annex 4. Selected statistical data concerning public finance and credit rating in Poland and EU

Table 5. General government deficit, debt[1] and yields on 10-year bonds[2] in the EU countries in 2020-2021

	2020			2021		
	GG balance	GG debt	10Y interest rate	GG balance	GG debt	10Y interest rate
	% PKB	% PKB	%	% PKB	% PKB	%
Greece	-10,2	206,3	1,27	-7,4	193,3	0,88
Italy	-9,6	155,3	1,17	-7,2	150,8	0,81
Portugal	-5,8	135,2	0,41	-2,8	127,4	0,30
Spain	-10,3	120,0	0,38	-6,9	118,4	0,35
France	-8,9	114,6	-0,15	-6,5	112,9	0,01
Belgium	-9,0	112,8	-0,15	-5,5	108,2	-0,01
Cyprus	-5,8	115,0	0,88	-1,7	103,6	0,37
Euro area	**-7,1**	**97,2**	**0,06**	**-5,1**	**95,6**	**0,07**
European Union	**-6,8**	**90,0**	**0,32**	**-4,7**	**88,1**	**0,39**
Austria	-8,0	83,3	-0,22	-5,9	82,8	-0,09
Croatia	-7,3	87,3	0,83	-2,9	79,8	0,45
Hungary	-7,8	79,6	2,22	-6,8	76,8	3,06
Slovenia	-7,8	79,8	0,08	-5,2	74,7	0,07
Germany	-4,3	68,7	-0,51	-3,7	69,3	-0,37
Finland	-5,5	69,0	-0,22	-2,6	65,8	-0,09
Slovakia	-5,5	59,7	-0,04	-6,2	63,1	-0,08
Malta	-9,5	53,4	0,48	-8,0	57,0	0,50
Ireland	-5,1	58,4	-0,06	-1,9	56,0	0,06
Poland	**-6,9**	**57,1**	**1,50**	**-1,9**	**53,8**	**1,95**
Netherlands	-3,7	54,3	-0,38	-2,5	52,1	-0,33
Romania	-9,3	47,2	3,89	-7,1	48,8	3,62
Latvia	-4,5	43,3	-0,06	-7,3	44,8	0,00
Lithuania	-7,3	46,6	0,22	-1,0	44,3	0,16
Czechia	-5,8	37,7	1,13	-5,9	41,9	1,90
Denmark	-0,2	42,1	-0,36	2,3	36,7	-0,06
Sweden	-2,7	39,6	-0,04	-0,2	36,7	0,27
Bulgaria	-4,0	24,7	0,25	-4,1	25,1	0,19
Luxembourg	-3,4	24,8	-0,41	0,9	24,4	-0,36
Estonia	-5,6	19,0	-0,03	-2,4	18,1	0,06

[1]) Data on general government balance and debt – Eurostat.

[2]) 10-year interest rate – average of average monthly 10-year T-bond yields from last twelve months from January to December; Eurostat.

Table 6. Long-term government debt rating in foreign currency of EU Member State as of September 15. 2022

Country	Standard&Poor's	Fitch	Moody's
Austria	AA+	AA+	Aa1
Belgium	AA	AA-	Aa3
Bulgaria	BBB	BBB	Baa1
Croatia	BBB-	BBB+	Baa2
Cyprus	BBB-	BBB-	Ba1
Czechia	AA-	AA-	AA3
Denmark	AAA	AAA	Aaa
Estonia	AA-	AA-	A1
Finland	AA+	AA+	Aa1
France	AA	AA	Aa2
Greece	BB+	BB	Ba3
Spain	A	A-	Baa1
Netherlands	AAA	AAA	Aaa
Ireland	AA-	AA-	A1
Lithuania	A	A	A2
Luxembourg	AAA	AAA	Aaa
Latvia	A	A-	A3
Malta	A-	A+	A2
Germany	AAA	AAA	Aaa
Poland	**A-**	**A-**	**A2**
Portugal	BBB	BBB	Baa2
Romania	BBB-	BBB-	Baa3
Slovakia	A+	A	A2
Slovenia	AA-	A	A3
Sweden	AAA	AAA	Aaa
Hungary	BBB	BBB	Baa2
United Kingdom	AA	AA-	Aa3
Italy	BBB	BBB	Baa3

Source: Refinitiv

Table 7. Public debt in Poland in 2011 – VI 2022

Item	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	VI 2022
1. State Treasury debt												
a) PLN bn	771.1	793.9	838	779.9	834.6	928.7	928.5	954.3	973.3	1097.5	1,138.0	1,198.8
domestic *	524.7	543.0	584.3	503.1	543.3	609.2	644.5	674.4	716.5	831.5	872.7	935.3
foreign *	246.4	250.9	253.8	276.9	291.3	319.5	283.9	279.8	256.9	266.0	265.4	263.5
b) GDP %	49.3%	48.9%	50.9%	45.6%	46.3%	49.8%	46.7%	45.0%	42.4%	46.9%	43.4%	-
2. Public debt (domestic definition)												
a) PLN bn	815.3	840.5	882.3	826.8	877.3	965.2	961.8	984.3	990.9	1111.8	1,148.6	1,175.3
b) GDP %	52.1%	51.8%	53.6%	48.3%	48.7%	51.8%	48.3%	46.4%	43.2%	47.5%	43.8%	-
3. General government debt (EU definition)												
a) PLN bn	856.6	883.5	931.1	873.9	923.4	1,010.0	1,007.2	1,035.7	1,045.9	1,336.6	1,410.5	1,453.5
b) GDP %	54.7%	54.4%	56.5%	51.1%	51.3%	54.2%	50.6%	48.8%	45.6%	57.1%	53.8%	-

**) place of issue criterion*

Table 8. GDP and exchange rates in 2011 – VI 2022

Item	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	VI 2022
1. Gross Domestic Product												
PLN bn	1,565.3	1,623.4	1,646.7	1,711.2	1,801.1	1,863.5	1,989.8	2,121.6	2,293.2	2,339.0	2,622.2	-
2. Exchange rate (end of period)												
a) EUR	4.42	4.09	4.15	4.26	4.26	4.42	4.17	4.3	4.26	4.61	4.60	4.68
b) USD	3.42	3.1	3.01	3.51	3.9	4.18	3.48	3.76	3.80	3.76	4.06	4.48

Source: GUS, NBP