Ministry
of Finance

Republic
of Poland

THE PUBLIC FINANCE SECTOR DEBT MANAGEMENT STRATEGY in the years 2022-2025

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 2022.

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

Item	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
1. Public debt						
GDP %	47.8%	45.4%	43.8%	42.0%	41.0%	40.3%
2. The amount specified in the article 38a (3) of the Public Finance Act*						
GDP %	44.5%	43.6%	42.5%	40.9%	40.0%	39.4%
3. General government debt						
GDP %	57.5%	57.0%	56.6%	54.8%	53.4%	52.9%
4. State Treasury debt servicing costs**						
a) PLN bn	29.3	26.0	26.0	25.4 - 25.7	25.7 - 26.0	28.7 - 28.9
b) GDP %	1.26%	1.03%	0.95%	0.88% - 0.89%	0.84%	0.88% - 0.89%

**) 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.*
***)Forecasts of the debt servicing costs for the years 2023-2025 account for the exchange rate risk provisions.*

Under the adopted assumptions, at the end of 2021 the public-debt-to-GDP ratio will decrease to 45.4% and to 43.8% in 2022. In the subsequent years covered by the *Strategy* forecast, public debt-to-GDP ratio will also decline and reach 40.3% by the end of 2025.

The ratio of the amount specified in Article 38a(3) of the Public Finance Act to GDP will stand at 43.6% in 2021, i.e. above the threshold of 43% under the stabilising expenditure rule. In 2022, the ratio will decrease below 43% to 42.5% and will continue to decline to reach 39.4% in 2025.

The general government debt-to-GDP ratio (according to the EU definition) will decline to 57.0% in 2021 and to 56.6% in 2022, followed by a further downward trend reaching 52.9% within the *Strategy* timeframe. This means that the 60% debt-to-GDP ratio reference value, as specified in the Maastricht Treaty, will not be exceeded within the *Strategy* timeframe .

The draft Budget Act for 2022 assumes the limit of the ST debt servicing costs in the amount of PLN 26.0 billion, i.e. 0.95% of GDP. For subsequent years, the *Strategy* assumes a further decrease in debt servicing costs in relation to GDP to 0.84% in 2024, followed by an increase to 0.88-0.89% of GDP in 2025.

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 2022-2025:

- 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 ST debt will be maintained below 25%;
- 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 and budgetary conditions related to the effects of the COVID-19 epidemic.

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

II. VOLUME OF PUBLIC DEBT AND COSTS OF ITS SERVICING

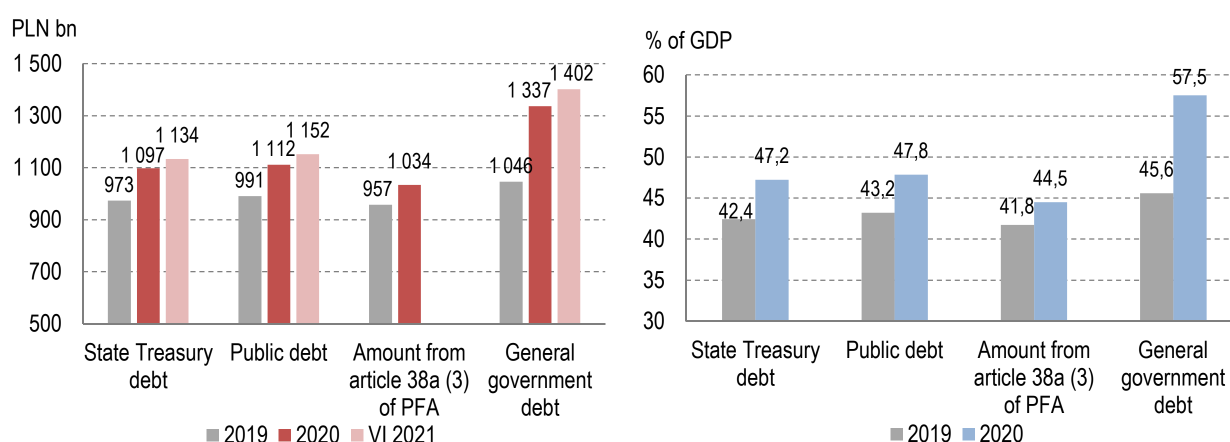
In 2020, the public debt (i.e. public debt according to the domestic definition) amounted to PLN 1,111.8 billion, which represented an increase by PLN 120.9 billion compared to the end of 2019. General government debt (EDP debt, i.e. public debt according to the EU definition) amounted to PLN 1,336.6 billion and was higher by PLN 290.7 billion compared to the end of 2019.

In 2020 the public debt-to-GDP ratio increased:

- the public debt-to-GDP ratio stood at 47.8% compared to 43.2% at the end of 2019 (an increase by 4.6 pp);
- the general government debt-to-GDP ratio amounted to 57.5% compared to 45.6% at the end of 2019 (an increase by 11.9 pp), and was considerably lower than the ratio for the entire European Union (90.7% of GDP) and for the euro area (98.0% of GDP), also the debt-to-GDP growth was lower than the ratio for the EU as a whole (13.2 pp) and the euro area (14.1 pp)[1];
- the ratio of the amount specified in Article 38a(3) of the Public Finance Act (public debt recalculated using average exchange rates, reduced by the value of funds for financing of borrowing requirements for the following budget year) at the end of 2020 stood at 44.5% of GDP, i.e. above the threshold of 43% of GDP defined in the stabilising expenditure rule, as compared to 41.8% of GDP at the end of 2019.

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.

Chart 1. Volume of public debt



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

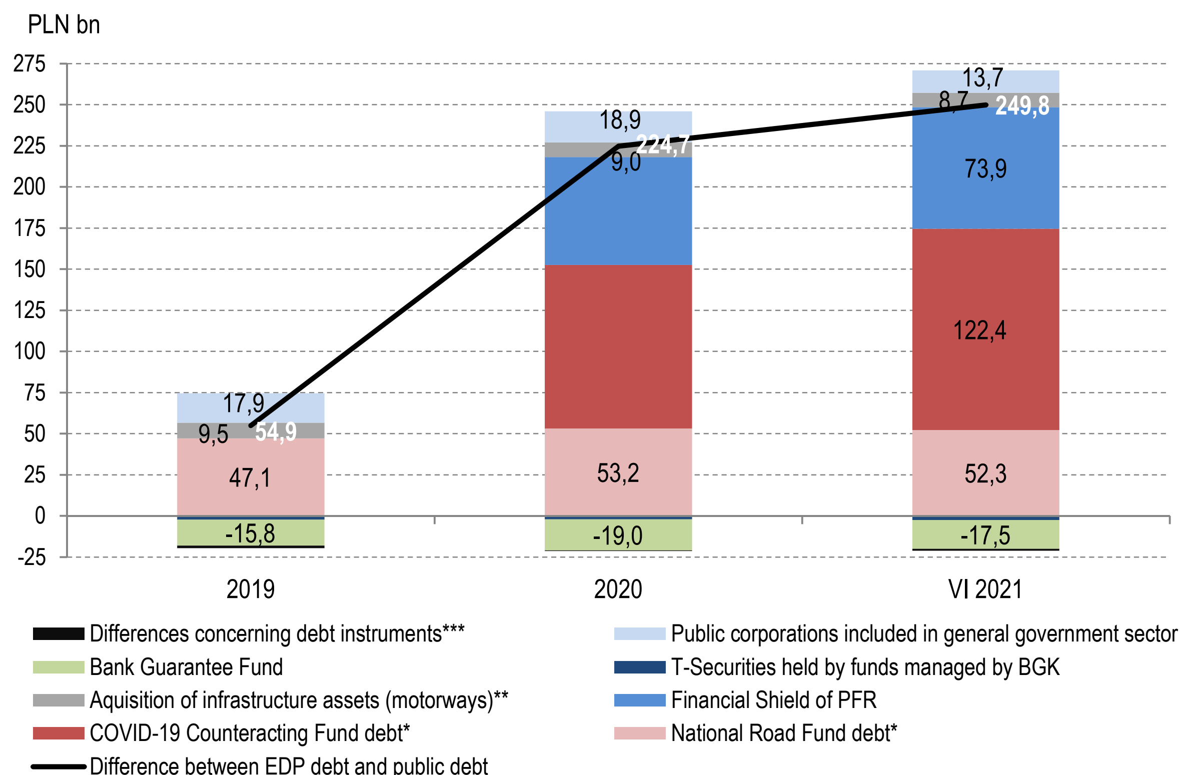
- different scope of public finance sector, i.e. recognising the National Road Fund (KFD) and the COVID-19 Counteracting Fund (FPC) in the general government sector (the indebtedness of these two funds increases the debt of the sector) and the Bank Guarantee Fund - BFG (TS held by it reduce the debt of the sector);
- rerouting of transactions to the general government sector, including the Financial Shield of the Polish Development Fund (PFR) – bonds issued to finance the Shield increase EDP debt;
- differences related to liabilities (mainly matured payables) treated as public debt according to the national definition and not included therein in the EU definition.

With the amendment to the Public Finance Act, the Bank Guarantee Fund will be incorporated into the public finance sector as of 1 January 2022, while the scope of the sector according to the domestic

[1]) Deficit and the general government debt for EU Member States are presented in Annex 4.

definition will come closer to the scope of the general government sector. This incorporation will result in a reduction in public debt due to the consolidation of the TS held by the Bank Guarantee Fund.

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 figures include capital expenditures of certain infrastructure projects.*
****) 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 issue of bonds of the Polish Development Fund as part of the Financial Shield and the COVID-19 Counteracting Fund since April 2020.

The increase in the State Treasury debt in 2020 by PLN 124.1 billion was mainly due to the financing of the State budget borrowing requirements (PLN 50.0 billion), including the State budget deficit (PLN 85.0 billion), and items reducing the borrowing requirements like the balance of deposits of public finance sector entities and of court deposits (PLN -31.7 billion), changes in budget account balance (PLN 32.0 billion), transfer of bonds under relevant law (PLN 18.3 billion), FX rate movements (PLN 17.8 billion), and the loan granted to the Solidarity Fund by the Demographic Reserve Fund (PLN 11.5 billion).

In the first half of 2021, the increase in ST debt (by PLN 36.2 billion) was mainly due to:

- negative borrowing requirements (PLN -44.4 billion), being mainly the result of the State budget surplus of PLN 28.0 billion, and the balance of EU funds management of PLN 16.2 billion reducing the borrowing requirements;

- increase in the balance of funds on the State budget account for financing borrowing requirements (PLN 75.9 billion);
- transfer of bonds (PLN 12.6 billion);
- FX rates movements (resulting in a decrease of debt by PLN 4.4 billion);
- decrease in the other ST debt by PLN 3.8 billion.

As of 22 September 2021, the level of financing of the 2021 gross borrowing requirements, as planned in the draft act amendment to the 2021 Budget Act have been fully financed.

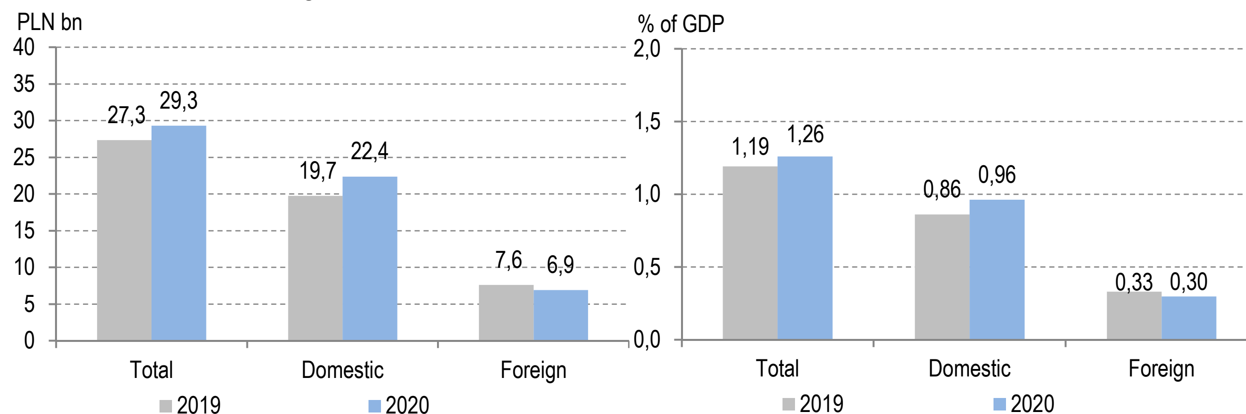
Table 2. Factors affecting change in ST debt in 2020 and the first half of 2021 (PLN billion)

Item	2020	I-VI 2021
Change in ST debt	**124.1**	**36.2**
1. State budget borrowing requirements:	**50.0**	**-44.4**
1.1. State budget deficit	85.0	-28.0
1.2. EU funds budget deficit	1.8	0.0
1.3. Balance of deposits from public finance sector entities and court deposits	-31.7	0.2
1.4. European funds management	-3.9	-16.2
1.5. Granted loans balance	0.4	-0.1
1.6. Other borrowing requirements [1)]	-1.5	-0.3
2. Pozostałe zmiany:	**66.5**	**84.4**
2.1. FX rates movements	17.8	-4.4
2.2. Changes in budget accounts balance	32.0	75.9
2.3. Transfer of TS	18.3	12.6
2.4. TS discount, TS indexation	0.1	0.2
2.5. Change in other State Treasury debt	7.6	-3.8
• Deposits from PFS entities [2)]	-4.1	4.0
• Other deposits [3)]	0.2	0.9
• Loans granted by PFS entities [4)]	11.5	-8.7
• Other ST debt	0.0	0.1

1) Pre-financing balance of tasks co-financed with EU funds, shares in international financial institutions (IFIs) and other domestic and foreign settlements.
3) Deposits accepted from PFS entities with legal personality and court deposits from PFS entities with legal personality - their value does not affect the level of public debt.
4) Deposits from general government sector entities outside the PFS, court deposits from entities outside the PFS and collateral deposits connected with CSA agreements.
5) Loan granted to the Solidarity Fund by the Demographic Reserve Fund, without any impact on public debt due to the elimination of mutual liabilities of public finance sector entities.

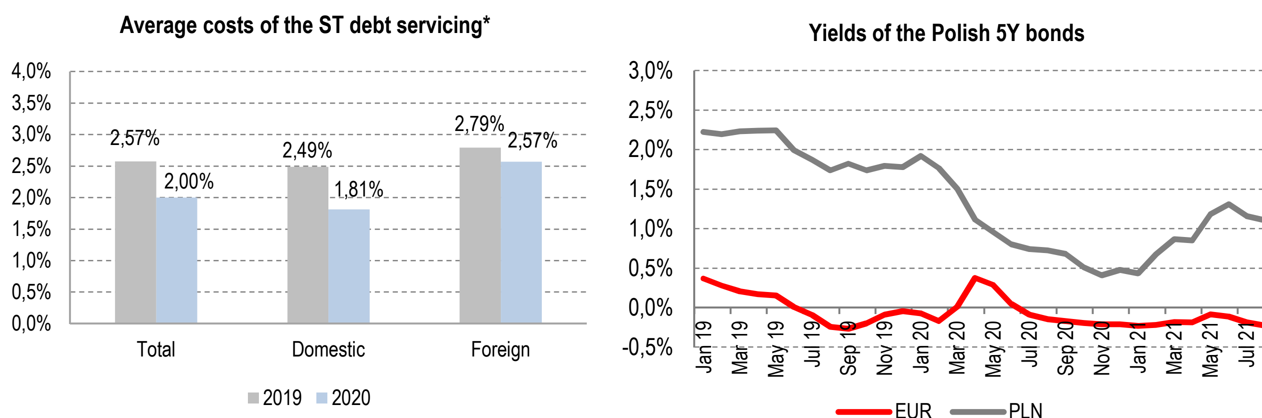
In 2020, ST debt servicing costs increased in nominal terms from PLN 27.3 billion in 2019 to PLN 29.3 billion, with a simultaneous large increase in revenue from TS issuance (premium and interest) from PLN 2.4 billion in 2019 to PLN 8.0 billion in 2020. The debt servicing costs-to-GDP ratio also rose from 1.19% in 2019 to 1.26% in 2020. 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.

Chart 3. ST debt servicing costs



The average debt servicing costs (including revenue) decreased from 2.57% in 2019 to 2.00% in 2020. This level is higher than the current cost of market financing, which results from servicing of debt incurred in the past at higher yields.

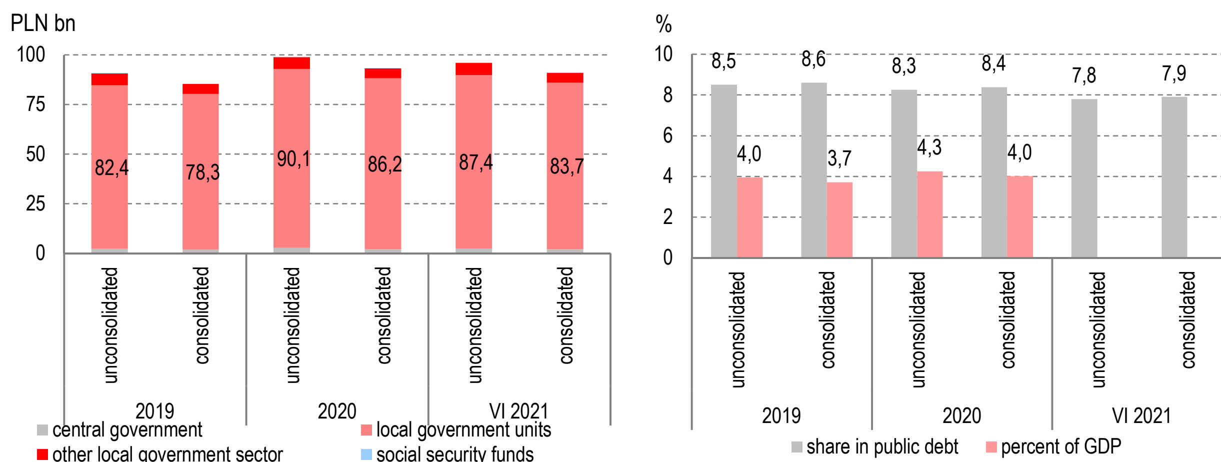
Chart 4. Market interest rates and average ST debt servicing costs



**) 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 2020 debt of entities other than ST accounted for 8.3% of public finance sector debt prior to consolidation (8.4% after consolidation), compared to 8.5% prior to consolidation (8.6% after consolidation) at the end of 2019. At the end of the second quarter of 2021 these figures were 7.8% and 7.9%, respectively. The debt of the local government sector, in particular, the debt of local government units (LGU) and their associations, accounted for the largest share in this part of the debt.

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



After 3 years of decline in unconsolidated debt, in 2018-2020 the debt of local government units and their associations increased by PLN 7.2 billion, PLN 5.9 billion and PLN 7,8 billion, respectively, to PLN 90.1 billion. The decrease in liabilities of local government units in 2015-2017 was related mainly to the end of the eligibility period for funds spent under projects co-financed with EU funds. The increase in debt in local governments is usually related to capital expenditure. Capital expenditure is directly related to the investments co-financed with EU funds. For this reason, subsequent eligibility periods for expenditure co-financed with EU funds are vital for the development of the debt of local government units.

In 2018, there was a dynamic increase in the capital expenditure of local government units, which translated into an increase in liabilities. LGUs' and their associations' capital expenditure in 2018-2020 amounted to PLN 53.1 billion, PLN 51.4 billion and PLN 49.1 billion, compared to PLN 35.5 billion in 2017.

In 2020, the debt of local government units and their associations, consolidated within the public finance sector, increased by PLN 7.8 billion and amounted to PLN 86.2 billion. In the first half of 2021, the debt of local government units and their associations before and after consolidation decreased by PLN 2.8 billion and PLN 2.5 billion, respectively.

III. EVALUATION OF IMPLEMENTATION OF THE STRATEGY OBJECTIVE IN 2020 AND IN THE FIRST HALF OF 2021

In 2020 and in the first half of 2021 debt management was conducted in accordance with *The Public Finance Sector Debt Management Strategy in the years 2020-2023*, adopted by the Council of Ministers in December 2019 and *The Public Finance Sector Debt Management Strategy in the years 2021-2024*, adopted by the Council of Ministers in September 2020.

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 2020, the TS with a face value of PLN 200.4 billion (including Treasury bills) were issued in the domestic market. Funds with a face value of PLN 22.5 billion were raised in foreign markets, of which PLN 16.2 billion originated from the issuance of Treasury bonds and PLN 1.8 billion from loans granted by international financial institutions. The aforementioned amount also included the equivalent of PLN 4.6 billion received from a loan from the EU (SURE) to combat the effects of the COVID-19 pandemic (a loan from the European temporary support facility to reduce unemployment risks).

During the first half of 2021, PLN 91.1 billion were raised in the domestic market and PLN 33.4 billion in foreign markets (virtually all from SURE loans).

Table 3. TS sales in the domestic and foreign markets and loans from IFIs at face value

Instruments	2019		2020		January - June 2021	
	PLN billion	%	PLN billion	%	PLN billion	%
Domestic TS	134.8	93.2	200.4	89.9	91.1	73.2
Foreign TS	8.6	3.1	16.2	7.3	0.0	0.0
IFIs loans	3.1	3.7	1.8	0.8	0.5	0.4
UE loans	-	-	4.6	2.1	32.9	26.4

Among the instruments issued in the domestic market, securities offered to institutional investors prevailed, although the share of savings bonds increased significantly. 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 2020 and in the first half of 2021. In April 2020, T-bills (with maturities of 9-52 weeks) became available again after a three-year break. They were sold at the beginning of the COVID-19 pandemic and used both for the ongoing management of the State budget liquidity, and partially for financing borrowing requirements of State budget.

Table 4. Sales of marketable TS on the domestic market by maturity

Instrumenty	2019	2020	January - June 2021
T-bills	0.0%	10.3%	0.0%
T-bonds with maturity up to 4 years (incl.)	11.1%	18.2%	16.4%
T-bonds with maturity over 4 years up to 6 years (incl.)	51.9%	40.4%	38.3%
T-bonds with maturity over 6 years	37.0%	31.1%	45.3%

The largest share in the sale structure of domestic TS in the wholesale market was maintained by fixed-rate securities, with a decreasing share of floating-rate instruments (marking a decrease from 37.7% in 2019 to 24.0% in the first half of 2021) and zero-coupon bonds (from 11.1% in 2019 to 4.5% in mid-2021).

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

Instruments	2019	2020	January - June 2021
Fixed rate bonds	51.2%	64.2%	71.5%
Zero-coupon bonds	11.1%	7.7%	4.5%
Floating rate bonds	37.7%	17.7%	24.0%
Inflation-linked bonds	0.0%	0.0%	0.0%
T-bills	0.0%	10.3%	0.0%

In the analysed period , three issues with a total value of EUR 3.7 billion were carried out in the Euro market. During 2020, the issues covered 3- and 5-year benchmark bonds and a 1-year bond under the private placement scheme. All three issues achieved a negative yield, with a coupon of 0%. During the first half of 2021, there were no bonds issued in foreign markets.

Table 6. Issues of bonds on foreign markets in 2020 and in the first half of 2021

Period	Maturity (years)	Currency	Face value (in millions)	Yield
2020	1	EUR	200	-0.310%
	5	EUR	1 500	-0.102%
	3	EUR	2 000	-0.110%

In 2020 and during the first half of 2021, a total of EUR 0.5 billion was drawn as loan from the IFI, including EUR 0.3 billion from the European Investment Bank (EIB).

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 the analysed period, Poland benefited from loans worth in total EUR 8.2 billion.

The main factors that influenced the course and structure of financing borrowing requirements in 2020 and in the first half of 2021included:

1) external factors, in particular:

- monetary policy carried out by the main central banks in the world, including:
  - **in the USA:** two interest rate cuts totalling 150 bps (in March 2020), resulting in the federal funds rate ranging between 0.00% and 0.25%, launch of unlimited bond purchases to keep loan financing costs low, introduction of numerous loan programs for companies, individuals, State authorities and local authorities;
  - **in the euro area:** keeping the main repo rate at 0.00% and the deposit rate at -0.50%, expanding the current asset purchase program (APP) by EUR 120 billion (until the end of 2020), the launch of a new ultra-cheap bank loan program (worth EUR 109 billion) and extending it until June 2022 (from June 2021) and a new EUR 750 billion asset purchase program (in March 2020) to counteract the negative impact of the coronavirus pandemic on the European economy (the so-called PEPP) planned until the end of 2020 and covering different asset classes of the public and private sector; in June 2020, the ECB expanded the value of the PEPP program by EUR 600 billion to EUR 1.35 trillion and extended its duration until the end of June 2021, and in December 2020, it expanded the program to EUR 1.85 trillion and extended its duration until March 2022;
  - **in China:** two cuts in the one-year and 5-year lending rates, by 30 bps to 3.85% and by 15 bps to 4.65% in total (in February and April 2020) and in the interest rate on annual loans for financial institutions by 10 bps to 3.15% (in February 2020); two cuts in the MLF rates (cost of medium-term funding for financial institutions) by 30 bps in total to 2.95% (the record lowest level); in December 2020, the central bank injected the record high medium-term

liquidity provision into the banking system (in the amount of CNY 950 billion) in the form of annual medium-term loans to financial institutions;
  - **in Japan:** keeping the key interest rate at the level of -0.1% and exercising the yield curve control (through the purchase of government bonds to pursue the yield on the 10-year benchmark at around 0.0%), and announcing that interest rates will be kept at the current or lower level until the inflation target of 2% is reached; continuing the program to purchase government bonds at a scale of JPY 80 trillion a year, launching (in May 2020) a program of additional purchase of commercial securities and corporate bonds at a total scale of JPY 15 trillion per month until September 2020, extending this program until March 2021 and afterwards until September 2021 (on the same monthly scale of JPY 15 trillion); launching a special program to support enterprises affected by the coronavirus pandemic;

- geopolitical situation in the world affecting the risk appetite in global financial markets, including but not limited:
  - uncertainty as to the future trade relationship between the EU and Great Britain, following Great Britain's exit from the European Union on 31 January 2020, and the lack of progress in negotiations in view of the forthcoming end of the transition period (by the end of 2020); the negotiations were not concluded with an agreement until 24 December 2020;
  - adoption by the European Union of a budget package for 2021-2028 in December 2020, and a recovery fund with a total budget of EUR 1.8 trillion. The EU budget is expected to be EUR 1.1 trillion, and the recovery fund EUR 750 billion (including EUR 390 billion in grants and EUR 360 billion in loans). Under the European Recovery Facility, Poland was granted EUR 23.9 billion in grants and EUR 34.2 billion in loans;
  - adoption by the US government of a stimulus package for the economy worth over USD 2 trillion, the largest in the USA history (in March 2020). The package provides, inter alia, EUR 500 billion for vulnerable industries, USD 350 billion for small business loans, USD 250 billion for aid to the unemployed and USD 100 billion for hospitals. In late December, the US Congress passed an agreement on a following support package worth ca. USD 900 billion;
  - results of the presidential election in the USA. The election was won by the former Vice-President and Democratic candidate Joe Biden, who defeated the former President D. Trump;
  - downgrade of the US credit rating outlook by the Fitch Agency from stable to negative (in July 2020), while maintaining its AAA rating. The Agency justified its decision by referring to the deteriorated condition of public finances and the lack of a credible public finances consolidation plan;
  - presentation by the US President J. Biden (in January 2021) and adoption (in March 2021) of a new USD 1.9 trillion pandemic support package for the US economy. The package includes, inter alia, further cash tranches for citizens, an extension of financial support for the unemployed, funding for vaccination campaigns and treatment in relation to the coronavirus pandemic;

- non-standard activities by other governments, central banks and international institutions to mitigate the adverse effects of the pandemic on the finances and global economy;

- fears of a global recession due to the spread of the coronavirus pandemic all over the world and the lockdown of multiple sectors; increased concerns about future waves of infection caused by the accelerating global spread of the COVID-19 pandemic and the emergence of new virus mutations and the budgetary and economic impact of relief measures introduced by individual governments;

2) local factors, including mainly:

- monetary policy of the Monetary Policy Council (RPP), the situation in the financial market and in the domestic economy, including:
  - easing of the monetary policy in March 2020 in response to the outbreak of the coronavirus pandemic: three interest rate cuts (the reference rate by a total of 140 bps to 0.1%), lowering the reserve requirement rate from 3.5% to 0.5% and the interest rate on reserves to the level of the reference rate, introducing a bill discount credit to refinance new loans granted to enterprises by banks, starting liquidity-providing (repo) operations and purchasing Treasury bonds and bonds guaranteed by the State Treasury (the bonds of the Polish Development Fund and BGK) for the first time in history During the discussed period, the National Bank of Poland purchased from banks a total of PLN 135.8 billion in bonds at 24 auctions (including PLN 76.5 billion of Treasury bonds, PLN 39.6 billion of bonds of BGK and PLN 19.8 billion of bonds of the Polish Development Fund);
  - 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;
  - outflow of foreign capital from the domestic TS market (PLN 23.6 billion in 2020 and PLN 10.3 billion during the first half of 2021) due to, inter alia, a sharp reduction in interest rates in Poland and a diminishing disparity in interest rates between Poland and the euro area, as well as the increased demand for safe assets due to the pandemic;
  - significant depreciation of the Polish Zloty against the Euro and the US Dollar in 2020, with an increase in the volatility of both currencies (the EUR/PLN volatility was 7.5% against 3.4% in 2019, the average annual market exchange rate was 4.4405 against 4.2955 on average in 2019; the USD/PLN volatility was 11.8% against 6.5% in 2019, while the average exchange rate was 3.8935 against 3.8387 on average in 2019); during the first half of 2021, the Polish Zloty continued to depreciate against the Euro and strengthen against the US Dollar, with lower volatility in both currencies (EUR/PLN: average exchange rate: 4.53, volatility: 3.5%; USD/PLN: average exchange rate: 3.76, volatility: 6.4%);
  - high volatility in the domestic Treasury bond market in 2020 and the first half of 2021 with a significant drop in interest rates: the average yield of the 2-, 5- and 10-year bonds amounted to 0.5% (1.6% in 2019), 1.0% (2.0%) and 1.5% (2.4%) in 2020, respectively, while during the first half of 2021 they stood at 0.1%, 0.9% and 1.5% respectively;

- actions of the Polish government aimed at supporting the economy and countering adverse effects of the pandemic, including:
  - launch of a government rescue program 'Anti-crisis Shield' (in March 2020), which primarily introduced subsidies for micro-enterprises, downtime benefits, benefits from the Guaranteed Employee Benefits Fund and the exemption from social security contributions. Due to the very wide range of restrictions imposed on the operation of the economy in the spring of 2020, the financial support under the 'Anti-crisis Shield' was aimed at the majority of industries. To finance activities under the 'Anti-crisis Shield', BGK set up the COVID-19 Counteracting Fund (FPC);
  - issue of bonds of Bank Gospodarstwa Krajowego, guaranteed by the State Treasury, to supply the COVID-19 Counteracting Fund: by the end of 2020, BGK issued a total of PLN 100.7 billion in bonds with maturities from 5 to 20 years, and PLN 24.8 billion in the first half of 2021;
  - launch of the government's Financial Shield program (in April 2020), addressed to enterprises and managed by the Polish Development Fund, with a total budget of up to PLN 100 billion;
  - during the period from November 2020 until March 2021, upon the consecutive waves of the pandemic, the government adopted a number of measures to protect the economy, mitigate the effects of the COVID-19 pandemic, and in particular to protect employment. Unlike the

restrictions implemented in spring 2020, which covered the entire economy, the November 2020 restrictions applied to individual sectors of the economy, mainly the service sector;

- launch of the Financial Shield 2.0 program under the existing Financial Shield of the Polish Development Fund, worth PLN 38 billion approximately (as amended), announced in November 2020, addressed to micro-, small and medium-sized enterprises, as well as to large companies. The support measures were aimed at more than 40 sectors most affected by the second wave of the coronavirus pandemic (e.g. catering, transport, hotel industry, tourism, culture and entertainment);
- amendments to the Financial Shield of PFR for large companies (e.g. extending the deadlines for financing applications and grace periods for repayment of capital and interest, lowering the interest rate for the liquidity loan);
- issuance of PFR bonds guaranteed by the State Treasury under the Financial Shield Program: by the end of 2020, PFR issued bonds with a total value of PLN 65.4 billion, with maturities ranging from 4 to 10 years, and during the first half of 2021: PLN 8.5 billion. These bonds were issued under the PLN 100 billion program;
- as estimated by the Central Statistical Office of Poland, the expenditures of the general government sector aimed at containing and fighting the effects of the COVID-19 pandemic in 2020 and supporting the affected entities amounted to PLN 103.2 billion);

- increased borrowing requirements of the state budget in 2020 in connection with the implementation of tasks to prevent the effects of the COVID-19 pandemic, the announcement and subsequent amendment of the Budget Act for 2020 which increased the budget expenditure limit by PLN 72.7 billion to PLN 508 billion and the permissible deficit to PLN 109.3 billion against zero deficit planned in the original law;
- passing by the Sejm of a bill amending the Public Finance Act (government draft) on 28 May 2020, which extends the catalogue of incidents excluding the application of the stabilising expenditure rule by adding the state of epidemic and defines pathways to automatically restore this rule. As a result of the application of the statutory provisions, the expenditure rule was suspended in 2020;
- adoption by the Sejm of a Budget Act for 2021, which assumes a State budget deficit of PLN 82.3 billion, a deficit of the public finance sector at ca. 6% of GDP, and general government debt at 64.1% of GDP;
- amendment of August 2021 to the Public Finance Act, which provides for the extension to 2022 the clause to restore the stabilising expenditure rule (SER).

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

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

- issuance policy assuming the creation of a liquid benchmark bonds series. In mid-2021, the value of 17 issuances exceeded PLN 25 billion, whereas at the end of 2020, there were 15 such issuances (15 issuances at the end of 2019). Issuances exceeding PLN 25 billion accounted for 80.0% of the face value of fixed-rate medium- and long-term bonds compared to 69.9% at the end of 2020 (74.2% at the end of 2019). The adequately high value of issuances has a significant positive effect on liquidity in the secondary market;
- issues of bonds in the EUR market with a value ensuring liquidity of a series (2 bonds over EUR 1 billion were issued in 2020);
- adjusting the volume and structure of the TS sale to the current market situation and influencing that situation through information policy;

- *sell-buy-back* (SBB) transactions between TS Primary Dealers and Primary Dealers candidates and BGK under special terms (the mechanism was introduced 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 2020 and during the first half of 2021, the face value of concluded transactions reached PLN 10.6 billion, which accounted for 0.1% of all the SBB transactions concluded in the TS market;
- 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 system of Treasury Securities Dealers. This change was introduced in 2021 and is aimed to increase 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

<table>
<tr><th colspan="7">Constraints of the Strategy objective</th></tr>
<tr><th rowspan="2">Constraint</th><th rowspan="2">Implementation level*</th><th rowspan="2">Implementation method</th><th rowspan="2">Measure</th><th colspan="3">Value</th></tr>
<tr><th>2019</th><th>2020</th><th>June 2021</th></tr>
<tr><td rowspan="2">Refinancing risk</td><td rowspan="2">Satisfactory</td><td rowspan="2">• Decreasing the share of medium- and long-term bonds in total sales of marketable bonds in the domestic market in 2020 and a marked increase in the first half of 2021 (71.5% and 83.6% of TS market sales respectively);
• Conducting switching auctions:
- 38.4% of the initial debt in bonds maturing between January 2020 and June 2021 was bought back;
- in 2020 and in the first half of 2021, bonds with a face value of PLN 83.3 billion were bought back, of which 88.3% were securities with a maturity of up to 1 year;
• Decreasing the average maturity of domestic debt and total debt below the levels set in the Strategy (i.e. 4.5 years and 5 years, respectively) in 2020, due to increased borrowing requirements and changes in market developments, including demand structure, followed by an increase in average maturity in the first half of 2021, partly compensating for these declines. The Strategy adopted in September 2020 allows for temporary deviations in average maturities from target levels due to market and budgetary conditions related to the effects of the COVID-19 pandemic;</td><td>ATM (in years)

- domestic
- foreign
- total</td><td>

4.53
6.06
4.97</td><td>

4.23
5.72
4.63</td><td>

4.30
6.56
4.90</td></tr>
<tr><td>Share in domestic TS:

- TS up to 1Y
- T-bills</td><td>

6.2%
0.0%</td><td>

12.1%
1.4%</td><td>

9.5%
0.0%</td></tr>
<tr><td rowspan="2">Foreign exchange risk</td><td rowspan="2">High</td><td rowspan="2">• Decreasing the share of debt in foreign currencies in the ST debt to the level assumed in the Strategy, i.e. below 25%;
Maintaining an effective share of euro denominated debt in foreign debt (i.e. taking into account derivative transactions) significantly above the minimum level set in the Strategy (70%).</td><td>Share of foreign debt in ST debt</td><td>26.4%</td><td>24.2%</td><td>24.2%</td></tr>
<tr><td>Share of euro denominated debt in foreign debt</td><td>81.3%</td><td>82.7%</td><td>86.4%</td></tr>
<tr><td rowspan="2">Interest rate risk</td><td rowspan="2">High</td><td rowspan="2">• Maintaining the ATR of domestic debt in the range set in the Strategy, i.e. 2.8-3.6 years;
• Following the provisions of the Strategy, the dominant share of fixed-rate instruments was maintained in the debt denominated in foreign currencies.</td><td>ATR (in years)

- domestic
- foreign
- total</td><td>

3.18
4.82
3.64</td><td>

3.16
4.72
3.57</td><td>

3.21
5.67
3.86</td></tr>
<tr><td>Duration (in years)
- domestic
- foreign
- total</td><td>
3.10
4.71
3.58</td><td>
3.09
4.76
3.55</td><td>
3.11
5.41
3.74</td></tr>
</table>

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

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 NBP - in 2020, the total value of the opened deposits amounted to PLN 181.8 billion, and to PLN 122.5 billion during the first half of 2021; • PLN denominated deposits made through BGK - in 2020, transactions with a total value of PLN 3,055.3 billion were concluded, whereas those concluded in the first half of 2021 amounted to PLN 1,511.8; • PLN denominated buy-sell-back (BSB) market deposits hedged by Treasury securities - in 2020, transactions with a total value of PLN 402.6 billion were concluded, whereas those concluded in the first half of 2021 amounted to PLN 109.7 billion; • foreign currency deposits - in 2020, the total value of the opened deposits amounted to EUR 4.5 billion, whereas those opened in the first half of 2021 amounted to EUR 0.6 billion; • sale of consolidated foreign currency assets at the NBP and on the market; in 2020, EUR 10.55 billion in foreign currencies were sold at the NBP, and EUR 0.04 billion on the market; during the first half of 2021, EUR 6.75 billion were exchanged at the NBP and the equivalent of EUR 3.04 billion on the market. As part of the consolidation of liquidity management, deposits of available funds on the accounts of the Minister of Finance in BGK amounted to PLN 101.9 billion at the end of 2020 and PLN 101.6 billion at the end of June 2021. The level of State budget liquid assets in 2020 and during the first half of 2021 ensured smooth execution of budgetary flows.
Credit risk	High	• PLN denominated BSB market deposits hedged by Treasury securities did not generate credit risk; • For unsecured deposits in BGK, a system of credit limits is in place; • Risk connected with transactions involving derivatives is limited by selection of counterparties with high credit rating; • A system of collateral on derivative transactions through blocking TS or 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. Creditworthiness of potential partners is monitored on an on-going 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 remote working.
Distribution of debt servicing costs over time	High	• Coupons of new issues were set at a level slightly below their forecasted yields. The cost amount was favourably influenced by the continuing yield of both domestic and foreign bonds on the levels allowing for issue of debt with coupons lower than those for maturing instruments. The level of debt servicing costs was affected by swap transactions concluded in 2019 and 2020 to distribute this expenditure over time by using current savings. As a result of those operations, costs incurred in 2020 increased by PLN 0.7 billion, whereas those incurred in 2021 decreased by PLN 2.0 billion.

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 the role of both domestic and foreign investors in the domestic TS market as well as possible developments in the major international markets.

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 2022. 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	2020	2021	2022	2023	2024	2025
Real GDP growth (%)	-2.7	4.9	4.6	3.7	3.5	3.5
GDP at current prices (PLN bn)	2 323.9	2 528.7	2 722.9	2 900.0	3 075.8	3 256.3
Average CPI (%)	3.4	4.3	3.3	3.0	2.7	2.5
USD/PLN - end of period	3.7584	3.83	3.83	3.83	3.83	3.83
EUR/PLN - end of period	4.6148	4.54	4.54	4.54	4.54	4.54

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 4.8% in 2021 (following a decrease by 6.0% in the previous year), and next year its growth rate will decrease relatively slightly to 4.5%. The European Commission (EC) forecasts that the EU will recover its pre-pandemic GDP during the fourth quarter of 2021. The EC has prepared its forecasts assuming a 5.9% rebound in global GDP (excluding the EU) in 2021 and by 4.2% the following year, recovering from last year's decline by 2.9%;
- applicability of the general escape clause in the EU countries up to and including 2022 - the EU Member States are allowed to pursue its fiscal policy without any EU restrictions on expenditure growth. The European Commission (EC) plans to lift the clause in 2023, while the respective decision will be taken upon assessment of the condition of the EU economy;
- launch of the excessive deficit procedure - in June 2021, the EC analysed Member States' compliance with EU reference values for general government deficit and debt and opened the excessive deficit procedure (EDP) for all EU countries excluding Romania, already subject to EDP. Although the reference values have been exceeded, the EC believes that none of the analysed countries (including Poland) should be nominated for further stages of the EDP, e.g. setting a deadline for correction of the excessive deficit. Due to the continued uncertainty about the impact of the pandemic on the economy, anti-crisis measures must be continued. In 2022, the EU Council should formulate concrete recommendations for the upcoming years, provided that uncertainty has by then decreased to an acceptable level;
- expectation that the debate about economic governance will be revived - the current EU economic governance framework implies the necessity to perform a swift fiscal consolidation in the EU countries subject to EDP in 2023. At the same time, public investment is needed to combat climate change, with regard to digital transformation or to ensure economic recovery. These investments may be only partly financed by the EU Recovery and Resilience Facility. In this context, a review of the EU economic governance framework is called for (e.g. by the European Parliament, the European Fiscal Board and the OECD) before the general escape clause expires;

- situation in the interest rate markets for the currencies in which liabilities will be incurred, in particular in the euro market, and the activities of the main central banks affecting the level of yields in the domestic debt market:
  - announcement that the ECB will maintain its easing monetary policy bias to support the symmetrical inflation target (2% in the medium term). In July 2021, the ECB announced that the interest rates would remain at current or lower levels until inflation reached 2% well before the end of the projection horizon and would remain at this level for the rest of the projection horizon, which could also mean a transitory period in which inflation is moderately above the target. The Bank will continue its purchase of assets under the APP program (at a monthly pace of EUR 20 billion) for as long as necessary, and will end it shortly before it starts raising the interest rates. It will continue the purchase of assets under the PEPP program at least until March 2022 or until it considers that the pandemic crisis is over;
  - the accommodative stance of monetary policy pursued by the Fed - according to the latest projections, only 7 Fed members expect the rates to rise in 2022, while 13 of the 18 Fed members expect at least one interest rate hike by 2023. The Bank announced that it would continue the current pace of net asset purchases at USD 120 billion per month until significant progress is made to implement the maximum employment and price stability goals. The Fed expects inflation to fall back towards its long-term target after recent sharp increases, with the median inflation forecast falling from 3.4% this year to 2.1% in 2022 to reach 2.2% in 2023. The situation in the labour market has improved, but it is still far from the target. The Fed will closely monitor the current condition of the economy and will consider announcing a plan to reduce net asset purchases at future meetings;
  - continuation of the Bank of Japan’s government bond purchase program, including yield curve control and keeping a negative reference interest rate as long as necessary to achieve and maintain the inflation target at a stable level of 2%; in June 2021, the central bank extended the duration of its purchase program for commercial securities and corporate bonds until the end of March 2022 (at a monthly pace of JPY 20 trillion), announced to continue the program of financial support the enterprises affected by the pandemic and purchase of the ETF and J-REIT funds (trust funds investing in the Japanese real estate market), and decided to introduce a new fund-provisioning program through which it provides funds to financial institutions for investments or loans aimed at addressing climate change issues. The Bank will closely monitor the impact of the pandemic and will not hesitate to use additional tools if necessary;
  - maintaining expansionary monetary policy and negative interest rates by the Swiss National Bank (the reference rate and the deposit rate of -0.75), conducting interventions in the foreign exchange market to counteract CHF excessive appreciation and provisioning the banking system with high volumes of liquid assets on favourable terms;
  - further easing of monetary policy by the People's Bank of China: the annual lending rate for corporate loans at 3.85%, while the 5-year reference rate for mortgage loans at 4.65%. In July, the central bank cut its reserve requirement ratio by 0.5%, which will release ca. CNY 1 trillion in liquid funds onto the market. The Bank stressed that reducing the reserves does not mean a change in its prudent policy;
- 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 the future course of the coronavirus pandemic due to the rapid spread of new mutations in many European countries and reactions of fiscal and monetary authorities.

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 are significant determinants of debt management. In the conditions 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 2019 until the first half of 2021, the following changes in the holders' structure of domestic TS debt were observed:

- a significant increase in domestic banks' holding, in particular in 2020 (by a total of PLN 157.2 billion, including that of the NBP by PLN 74.6 billion since April 2020) and maintaining their prevailing share in the debt holders' structure (56.9% as at the end of June 2021);
- an increase in the involvement of domestic non-banking investors by a total of PLN 15.4 billion, mainly households;
- further reduction in the involvement in domestic TS by foreign investors, by a total of PLN 33.9 billion. Their holding has decreased by 8.2 pp down to 15.2%.

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

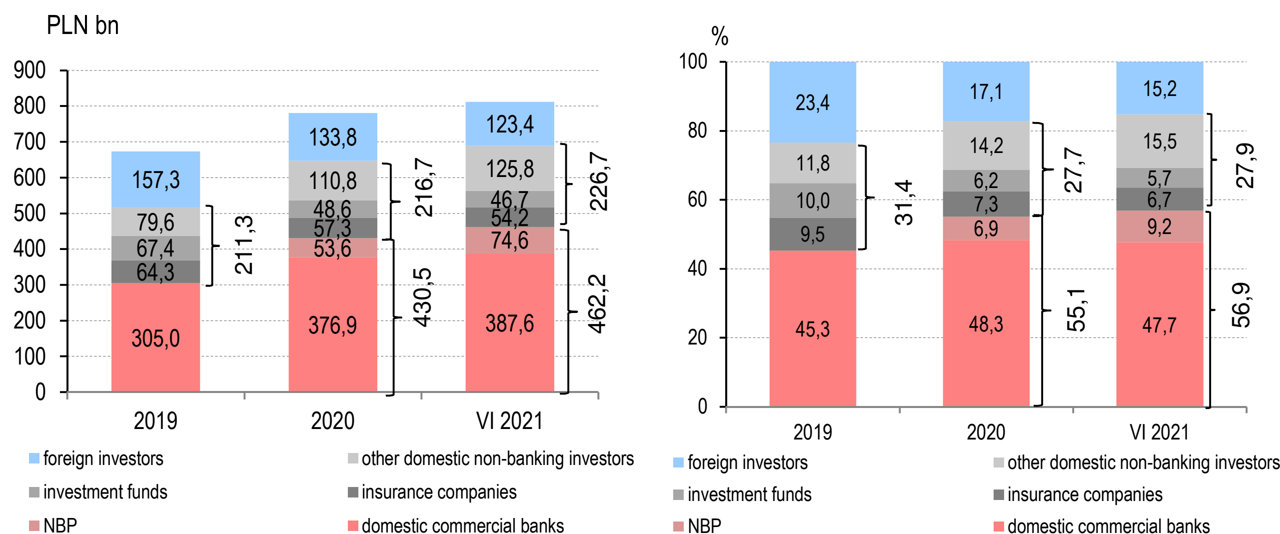
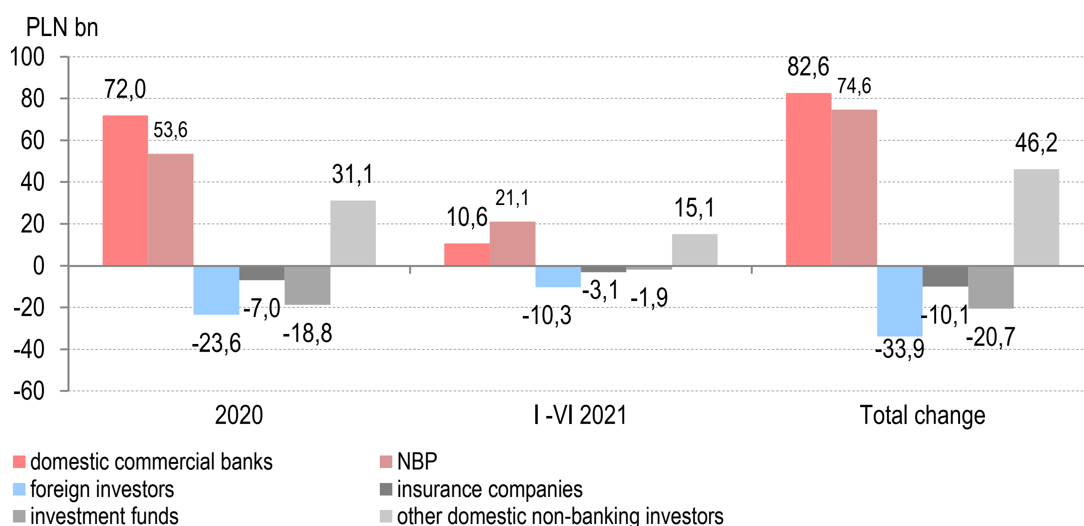


*Chart 7. Changes in domestic TS portfolios held by main groups of investors**



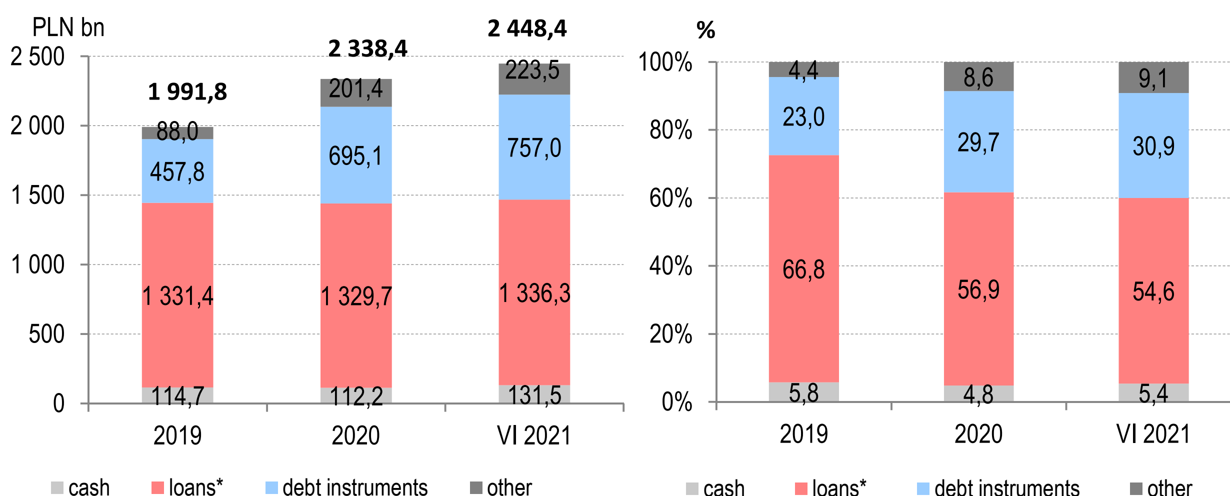
**) By face value.*

As at the end of June 2021, domestic investors held 84.8% of domestic TS debt, which represents an increase by 8.2 pp compared to the end of 2019. Institutional investors prevailed among domestic investors, however, over the recent year, a significant growth in the TS portfolio held by households has been observed. Since the end of 2019, their holdings have increased by PLN 21.8 billion (i.e. by 79.2%) to PLN 49.3 billion, which resulted mainly from growing interest in the offer of saving bonds.

IV.3.1. Domestic banks

At the end of June 2021, assets of domestic banks amounted to PLN 2.4 trillion (an increase by 22.9% compared to the end of 2019), with the dominant share of credits and other receivables from domestic entities (ca. 54.6%). Debt instruments were the second largest component of assets – as at the end of June 2021, their share was 30.9%. The prevailing share in the structure of debt instruments had Treasury securities (55.7%) and NBP monetary bills (ca. 22.7%). What contributed to the persistent significant banks' demand for TS was tax imposed on 1 February 2016 on certain financial institutions, comprising mainly banks[2)] and insurance companies, as well as the current situation in financial markets. Since April 2020, the NBP is purchasing TS and debt securities guaranteed by the State Treasury in the secondary market as part of structural open market operations. These actions are aimed at changing the long-term liquidity structure in the banking sector and at ensuring liquidity of the securities on the secondary market.

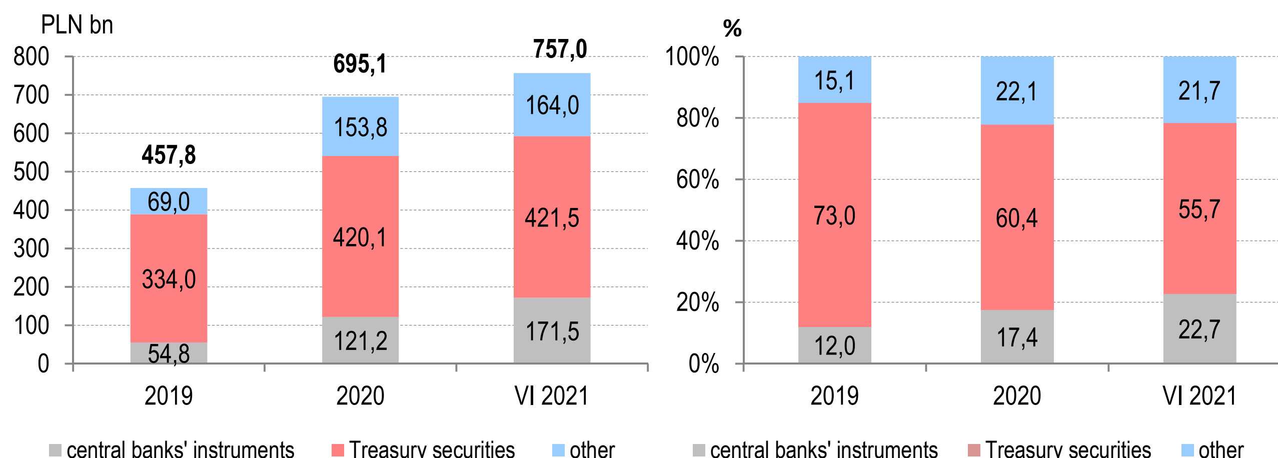
Chart 8. Structure of assets held by domestic commercial banks



** 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;

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2) Tax base – assets decreased by, *inter alia*, own funds and Polish TS.

- policy of the central bank, including with regard to the level of interest rates and the asset purchase program;
- the level of over liquidity of the banking sector;
- formal and legal conditions, including tax on certain financial institutions.

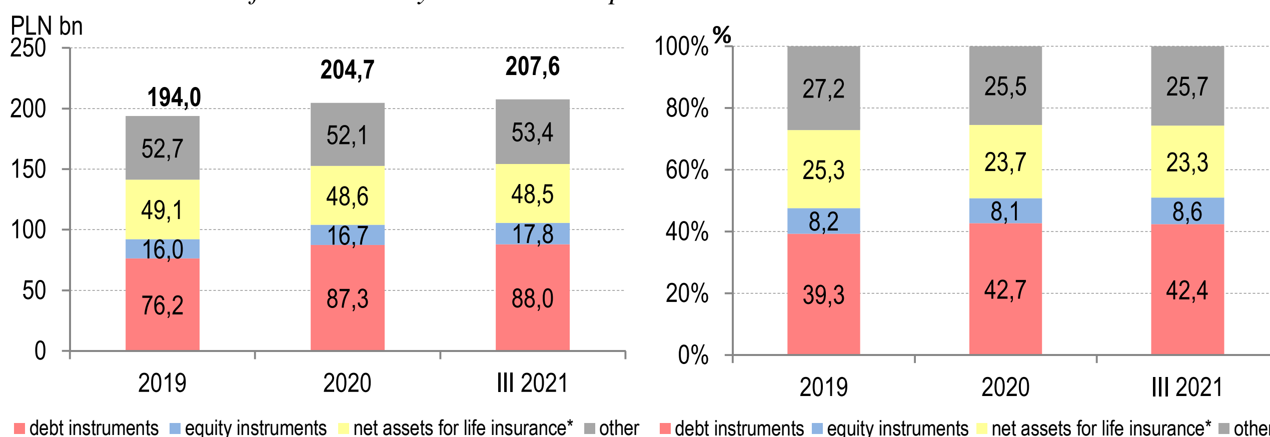
IV.3.2. Domestic non-banking investors

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.

As at the end of June 2021, insurance companies held 6.7% (decrease in the holding by 2.9 pp compared to the end of 2019), investment funds 5.7% (decrease by 4.3 pp) and other domestic non-banking investors 15.5% (increase by 3.7 pp) of domestic TS. The main factors affecting the value of the TS portfolio held by insurance companies and investment funds include the assets value and the investment policy pursued by those entities.

Assets held by insurance companies as at the end of March 2021 amounted to PLN 207.6 billion, which represents an increase by PLN 13.6 billion compared to the end of 2019, i.e. by 7.0%.

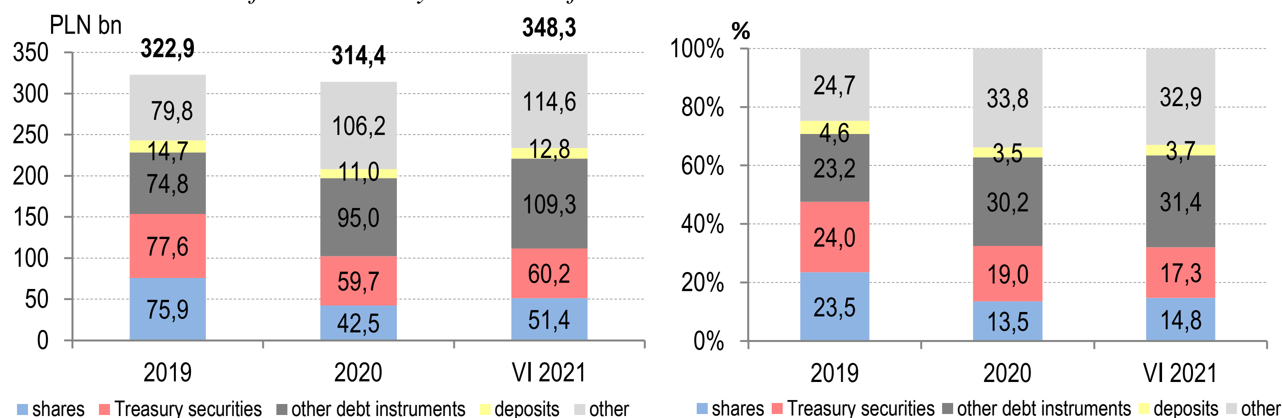
Chart 10. Structure of assets held by insurance companies



** 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 2021, assets held by investment funds increased to PLN 348.3 billion, i.e. by PLN 35.3 billion (by 7.8%) compared to the end of 2019. The value of T-bonds (issued in the domestic market and foreign ones) held by investment funds decreased by PLN 17.5 billion and their share in assets fell by 6.8 pp.

Chart 11. 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;
- low interest rates and high inflation, also indirectly affecting the investment behaviour of households and non-financial enterprises, encouraging them to search alternative capital investments to bank deposits;
- 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 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 date of their introduction has been postponed again).

IV.3.3. Foreign investors

As at the end of June 2021, the share of foreign investors in domestic TS debt was 15.2% (a decrease by 8.2 pp compared to the end of 2019). In 2020 and in the first half of 2021, foreign investors reduced their holding of domestic TS by a total of PLN 33.9 billion. The decline in the share of non-residents was driven by, i.e. the continuing high domestic investors' demand, monetary policy of main central banks and lower disparity in interest rates.

The foreign investors' demand depends, to a large extent, on the international situation, and thus, it 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 institutional and geographic terms. The structure of debt held by non-residents is dominated by institutional investors: central banks and public institutions, investment funds, pension funds and insurance companies. The geographical structure of domestic TS holders also diversified – as at the end of June 2021, TS were held in the portfolios of investors from 63 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 COVID-19 pandemic worldwide;

- Poland‘s economic foundations and the assessment of Poland’s credit risk;
- functioning of a 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).

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

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 risk and operational risk,
6) 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 of the longest maturity instruments and a significant share in debt, through the adequate selection of markets, debt management instruments, structure of 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 unfavorable 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 market for financing the State budget borrowing requirements. The supply of instruments in this market will be developed in a flexible manner, 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 to counteract the consequences of the COVID-19 pandemic;
- take advantage of attractive financing in international financial institutions;

- allow for selling currencies at the NBP and in the financial market as a foreign currency management instrument, while taking into account monetary, economic and budgetary policy.

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 and budgetary conditions related to the effects of the COVID-19 epidemic;
- aiming at maintaining the average maturity of ST debt at the level close to 5 years, subject to possible temporary deviations resulting from market and budgetary conditions related to the effects of the COVID-19 epidemic;
- 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%;
- 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 the foreign currency debt of at least 70% in the *Strategy* timeframe;

3) interest rate risk

- maintaining the average time to re-fixing (ATR) of domestic debt in the range of 2.8-3.6 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 risk 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 favorable terms;
- diversification of credit risk generated by uncollateralized transactions;
- assuring technical infrastructure allowing for running debt management processes remotly, 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.

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 it is associated with striving to eliminate the premium for insufficient liquidity and to increase the demand of investors 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 25bn, taking into account the aim for an even distribution of redemption over time;
- large liquid bond issues in the euro market;
- adapting the issuance policy, including sale, switching and buy-back auctions to market conditions.

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 the secondary market:

- adjusting the issuance timing in the domestic and foreign market to the market and budgetary conditions;
- increasing and strengthening the role of the PD system in the development of the TS market and in debt management operations – in the areas where participants of the PD 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, at the time of the COVID-19 pandemic the main forms of contact include tele- and video-conferences, including through:
  - regular meetings with banks participating in the PD 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 with foreign investors in order to promote TS issued on both domestic and foreign markets;
- active participation in conferences 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 issuance policy regarding TS issuance calendars covering the current year, quarter and month;
- promoting the electronic market through:

– adequate regulations in PD 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 PD 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 situation without increasing liquidity risk and debt servicing costs.

The following instruments will support the implementation of the task:

- depositing PLN and FX funds in the NBP and in the financial market via BGK (the State development bank);
- concluding buy-sell-back transactions directly in the financial market, as an instrument of depositing budgetary funds without bearing credit risk;
- sales of FX funds 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, the management of the liquidity of the public finance sector takes place, with liquid funds deposited by general government units and courts on the Minister of Finance account, in order to reduce the net borrowing requirements of the State budget.

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 relation 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, subject to the escape clause described in Chapter VII.2, limiting the growth rate of expenditure for a particular budgetary year.

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

VII.1.1. System changes

Starting from 2022, the provisions of the Act of 14 December 2018 on amending the Public Finance Act and certain other acts (Journal of Laws of 2018, item 2500) will apply to balancing the budget of local government units in its current part. The planned and executed current expenditures must not exceed the planned and executed current incomes increased by the proceeds from:

- repayment of loans granted in previous years,
- the surplus of the local government units' budget from previous years, less funds mentioned in the following point;
- the not used funds on the current budget account, resulting from the settlement of incomes and expenditures that are financed by them, in relation to the specific budget implementation rules laid down by separate acts and resulting from the settlement of the funds from the EU budget and the non-repayable funds from the assistance programs of the EFTA Member States and the grants for the implementation of the program, project or task financed with these funds.

As regards the limits determining the ability to repay debt of local government units, the current individual debt ratio will apply during the *Strategy* timeframe. This ratio is based on the arithmetic mean calculated for the last three years of current income increased by income from the sale of assets and reduced by current expenditure, to current income in the LGU budget.

However, statutory amendments are now being processed to be implemented in 2022 in order to adjust the fiscal rules applicable to local government units due to the COVID-19 pandemic, as well as to support the economy in the struggle with the pandemic and during the subsequent recovery. The planned regulations aim at temporarily making the rules in the Public Finance Act more flexible and concern preferences regarding the principle of balancing the current part of the budget of local government units and the individual repayment limit.

VII.1.2. Solutions introduced in connection with COVID-19

For 2021 the fiscal rules applicable to local government units were similarly loosened as the measures implemented by the Act of 2 March 2020 on special solutions relating to preventing, counteracting and eradicating COVID-19, other infectious diseases, and emergencies caused by them. These

measures were included in the Act of 19 November 2020 on special measures for the implementation of the Budget Act for 2021 (Journal of Laws item 2400) and concern, inter alia:

- the possibility to exceed the ratio regarding balancing the current income and current expenditure by the amount of planned expenditures incurred for performing tasks related to counteracting the COVID-19 pandemic or by the lost income of the unit as a result of the COVID-19 pandemic;
- upholding the measures concerning the local government units debt repayment rule (Article 243 of the Public Finance Act) which involves:
  - amending the individual debt repayment limit for local government units by excluding the liabilities from loans, credits and issued bonds which the local government unit incurred to compensate for the income lost as a result of the COVID-19 pandemic. The limit will exclude liabilities in an amount equivalent to the lost income, while the exclusion will be long-term, i.e. the loan repayment (loan, credit, bond) will be excluded from the limit throughout its entire repayment period;
  - excluding the current expenditures incurred during 2021 for performing tasks related to counteracting the COVID-19 pandemic from the current expenditures while establishing the ratio limiting the debt repayment for 2022 and beyond;
- introducing in 2021 a mechanism for protecting the budget of local government units by setting a debt limit at a level of 80% of the entity's income (by the end of the budgetary year 2021 with regard to the total executed income, by the end of the quarter with regard to the planned income for a budgetary year). Units which meet the debt repayment limit specified in Article 243(1) of the Public Finance Act, including the repayment of liabilities incurred to compensate for the lost income, will be allowed not to meet the quarterly limits or the limit set for the entire budgetary year at the level of 80% of their income.

VII.2. Stabilising expenditure rule

Proposed in March 2020 by the European Commission and accepted by the ECOFIN Council, the general escape clause enabled the EU Member States to support the economies in the face of the pandemic. Poland implemented corresponding solutions. Having fulfilled the conditions mentioned in Article 112d(1) of the Public Finance Act (i.e. the state of pandemic across the entire country and the significant economic slowdown), it suspended the stabilising expenditure rule (SER) in 2020 in order to counteract the recession caused by the pandemic and the related economy lockdown. According to the preceding provisions of the Public Finance Act and the macroeconomic forecasts, the SER consistent with the original formula of Article 112aa of the Public Finance Act was to be restored in the second budgetary year following its suspension, i.e. in 2022. In view of the current reports on the pandemic and its impact on the economy, it could be premature to withdraw the public finance support to restore economic growth as early as next year. The European Commission also encourages the continuation of the anti-crisis measures and, as the pandemic is progressing, support for the economic recovery. Taking this into account, the amendment to the Public Finance Act was prepared to adjust the restoration clause of the SER to continuously stimulate the economy in 2022 and to implement the recommendations of the EU Council.

The amendment to the Public Finance Act extended the scope of the SER to cover the State-owned special purpose funds, which marks the implementation of the first stage of the reform of the fiscal framework, as included in the National Recovery and Resilience Plan. Moreover, the amount of expenditures under the SER will also be reduced by the planned expenditures from the COVID-19 Counteracting Fund. The Fund will be included in the amount, but will not, as it has previously been the case, be subject to a maximum expenditure limit due to its “rescue” nature. The scope of the Fund's activities is limited to the duration of the pandemic and its consequences. After they cease, the Fund activities should be terminated, and the scope of the entities covered by the SER should be reduced by removing the Fund.

VII.3. Other measures

Following the Assumptions for the budget system reform and the Strategy for Responsible Development, work will continue on the development and implementation of a uniform chart of accounts integrated with the budget classification within the timeframe of the *Strategy*. This tool will enable the collecting of uniform, high-quality and consistent data on operations in public funds, as well as the assets and liabilities of the entities of the public finance sector, which are necessary for the purposes of budgetary, financial and statistical reporting.

The systemic solutions that are being prepared may bring significant by improving the quality of public finance data, extending the budget planning horizon and increasing the reliability of budgetary forecasts, while strengthening the State budget liquidity management and ST debt management and the possibilities to influence the public debt.

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	2020	2021	2022	2023	2024	2025
1. State Treasury debt*						
a) PLN bn	1,097.5	1,133.0	1,202.3	1,232.0	1,280.9	1,341.0
- domestic	831.5	872.2	945.5	977.3	1,035.6	1,101.6
- foreign	266.0	260.9	256.7	254.7	245.4	239.4
b) GDP%	47.2%	44.8%	44.2%	42.5%	41.6%	41.2%
2. Public debt						
a) PLN bn	1,111.8	1,147.2	1,192.8	1,218.3	1,260.7	1,313.7
b) GDP%	47.8%	45.4%	43.8%	42.0%	41.0%	40.3%
3. The amount specified in the article 38a (3) of the Public Finance Act**						
a) PLN bn	1,034.0	1,102.2	1,155.9	1,186.9	1,229.4	1,281.6
b) GDP%	44.5%	43.6%	42.5%	40.9%	40.0%	39.4%
4. General government debt						
a) PLN bn	1,336.6	1,441.7	1,540.2	1,590.0	1,643.0	1,722.3
b) GDP%	57.5%	57.0%	56.6%	54.8%	53.4%	52.9%
5. State Treasury debt servicing costs (cash basis)***						
a) PLN bn	29.3	26.0	26.0	25,4 - 25,7	25,7 - 26,0	28,7 - 28,9
- domestic	22.4	19.8	20.8	21.2	21.9	25.5
- foreign	6.9	6.2	5.2	4,1 - 4,4	3,8 - 4,0	3,2 - 3,4
b) GDP%	1.26%	1.03%	0.95%	0,88% - 0,89%	0.84%	0,88% - 0,89%

**) The amount of 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 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.*
****) Forecasts of the debt servicing costs for the years 2023-2025 account for the exchange rate risk provisions.*

Under the adopted assumptions, at the end of 2021 the public-debt-to-GDP ratio will decrease to 45.4% and to 43.8% in 2022. In the subsequent years covered by the *Strategy* forecast, public debt-to-GDP ratio will also decline and reach 40.3% by the end of 2025.

The ratio of the amount specified in Article 38a(3) of the Public Finance Act to GDP will stand at 43.6% in 2021, i.e. above the threshold of 43% under the stabilising expenditure rule. In 2022, the ratio will decrease below 43% to 42.5% and will continue to decline to reach 39.4% in 2025.

The general government debt-to-GDP ratio (according to the EU definition) will decline to 57.0% in 2021 and to 56.6% in 2022, followed by a further downward trend reaching 52.9% within the *Strategy* timeframe. This means that the 60% debt-to-GDP ratio reference value, as specified in the Maastricht Treaty, will not be exceeded within the Strategy timeframe.

The draft Budget Act for 2022 assumes the limit of the ST debt servicing costs in the amount of PLN 26.0 billion, i.e. 0.95% of GDP. For subsequent years, the *Strategy* assumes a further decrease in debt

servicing costs in relation to GDP to 0.84% in 2024, followed by an increase to 0.88-0.89% of GDP in 2025.

Chart 12. Debt-to-GDP ratio

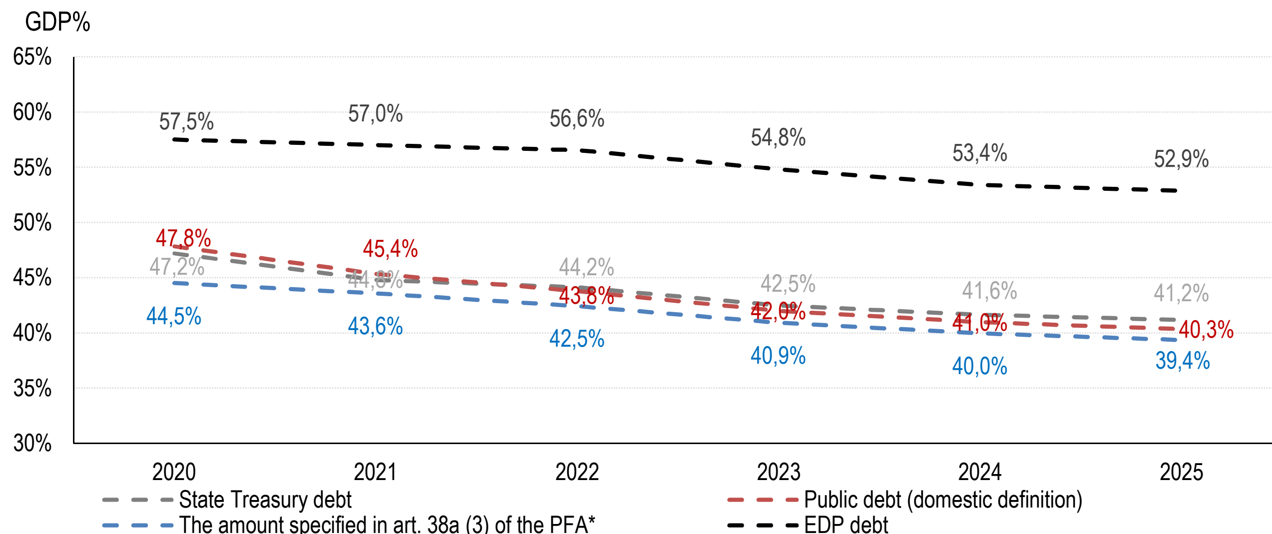


Chart 13. ST debt servicing costs-to-GDP ratio

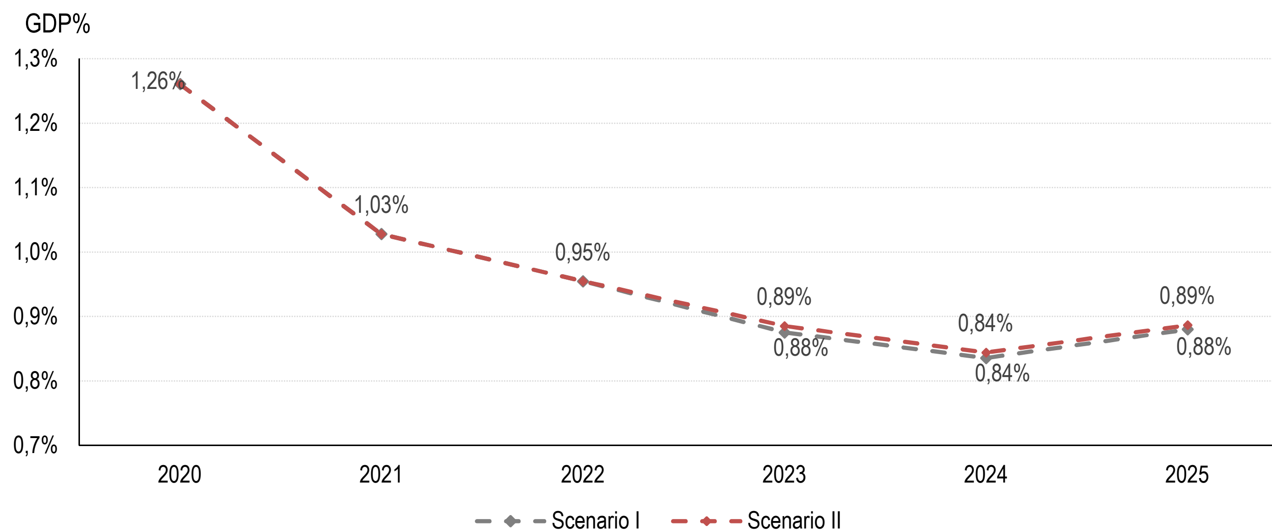
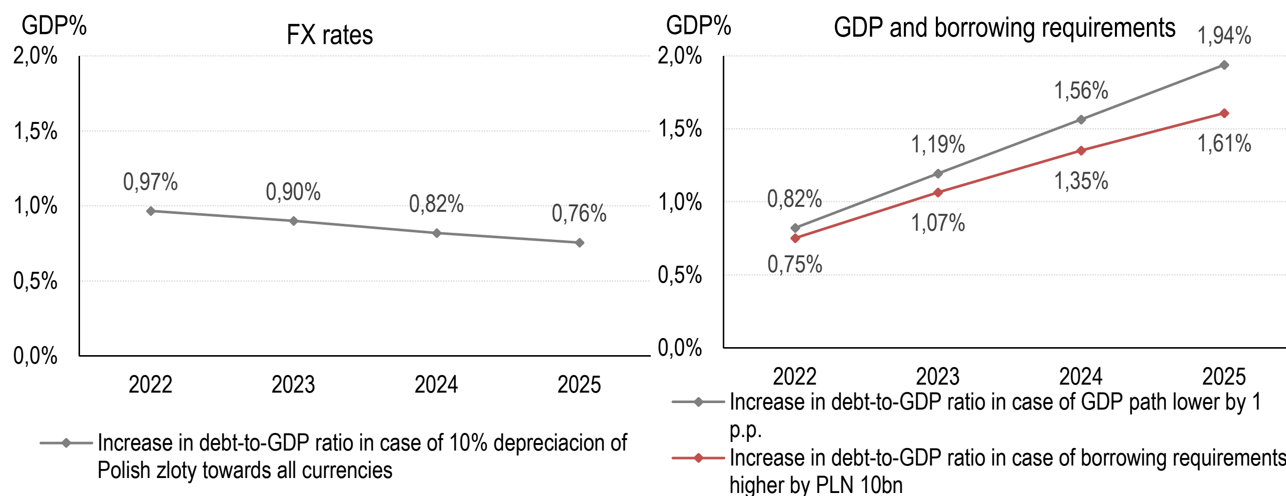
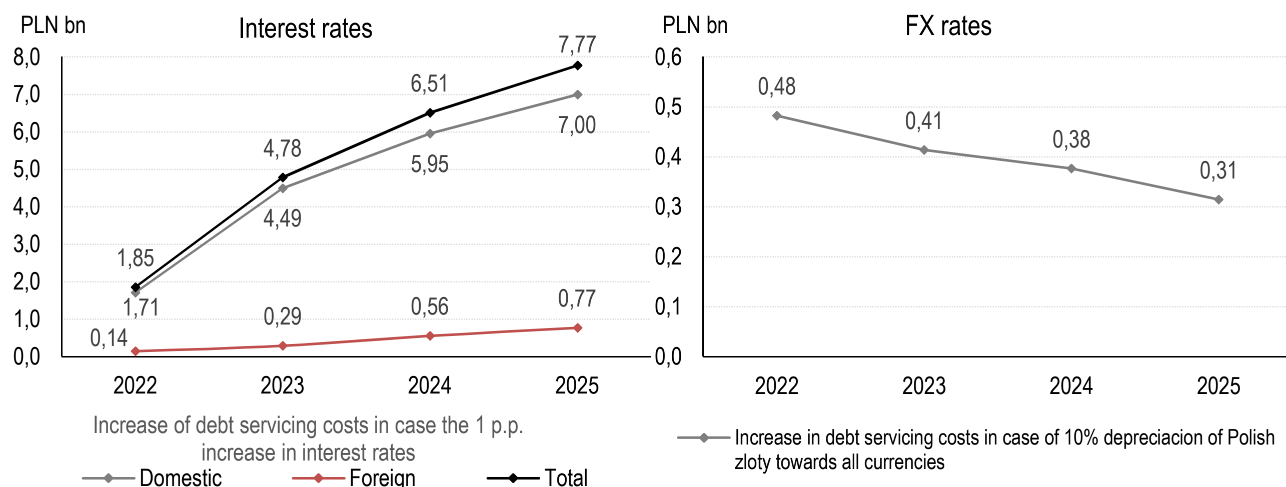


*Chart 14. Sensitivity of public debt-to-GDP ratio to changes in assumptions**



*) *Assuming the change of paths since 2022, partial sensitivities without changes in other assumptions.*

Chart 15. 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 TS will be depend on market conditions, so that the average maturity in 2025 may reach a value in the range of 4.3-4.8 years, and for the total ST debt – 4.9-5.2 years compared to, respectively, ca. 4.4 and ca.4.8 years at the end of 2021;
- 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. 3.0-3.4 years compared to ca. 3.1 years at the end of 2021, and for the total debt – ca. 3.5-3.9 years compared to ca. 3.7 years at the end of 2021, whereas the duration of the domestic marketable debt will be in the range of ca. 2.9-3.4 years compared to ca. 3.1 years at the end of 2021, while that of the total debt – in the range of ca. 3.3-3.8 years compared to ca. 3.6 years at the end of 2021;
- the share of FX debt will be reduced, and it will fall in the *Strategy* timeframe to ca. 17.8% in 2025.

Chart 16. ATM of the ST debt

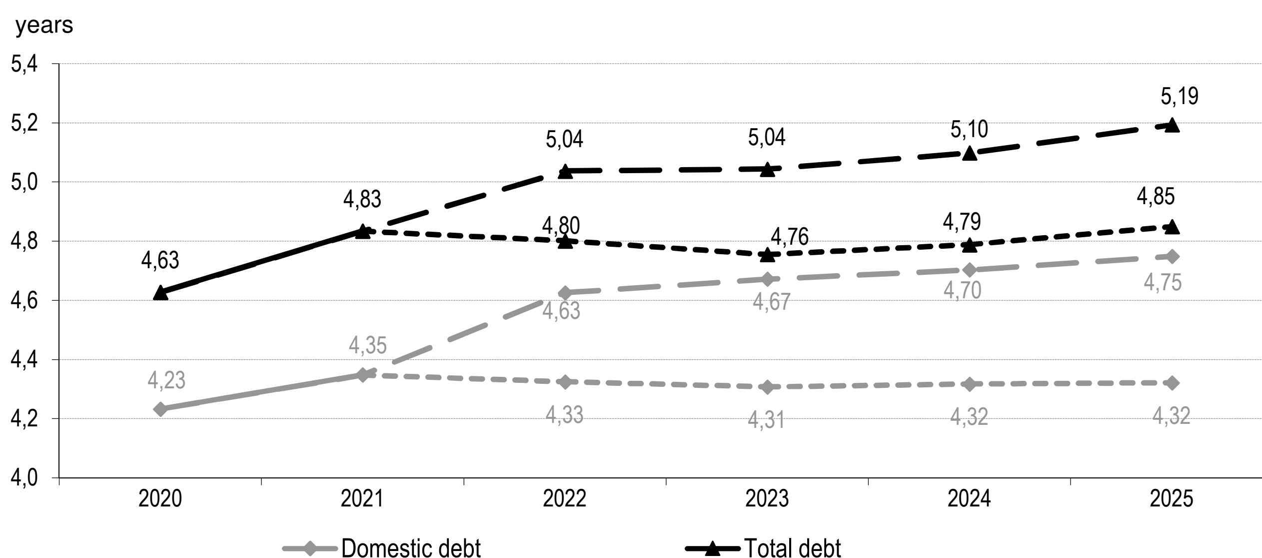


Chart 17. ATR of the ST debt

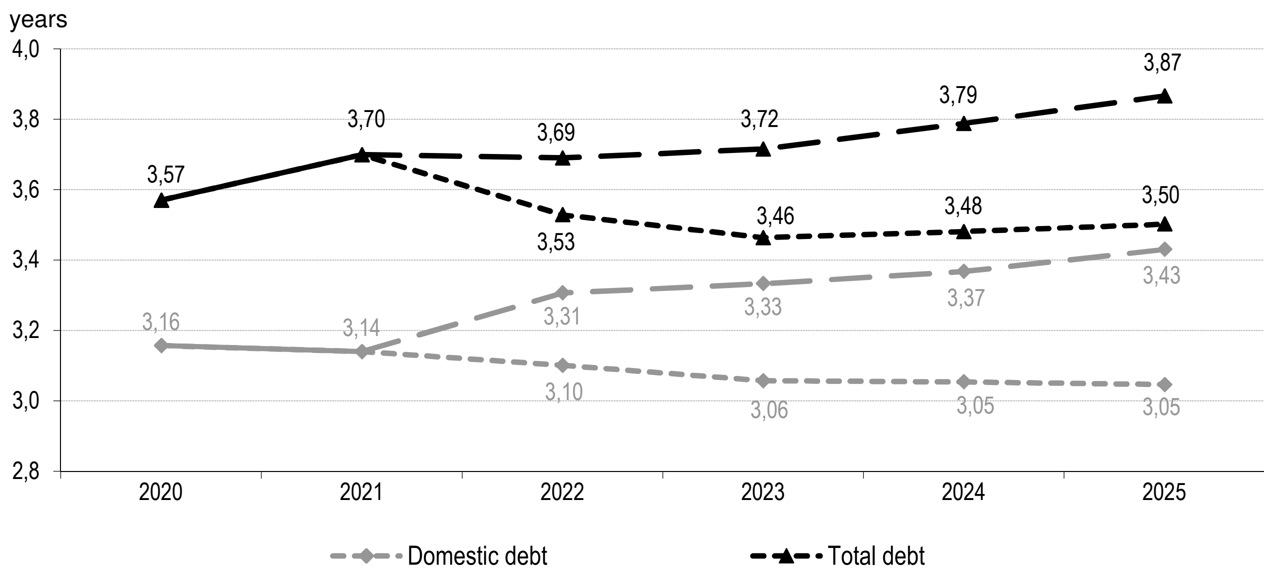


Chart 18. Duration of the ST debt

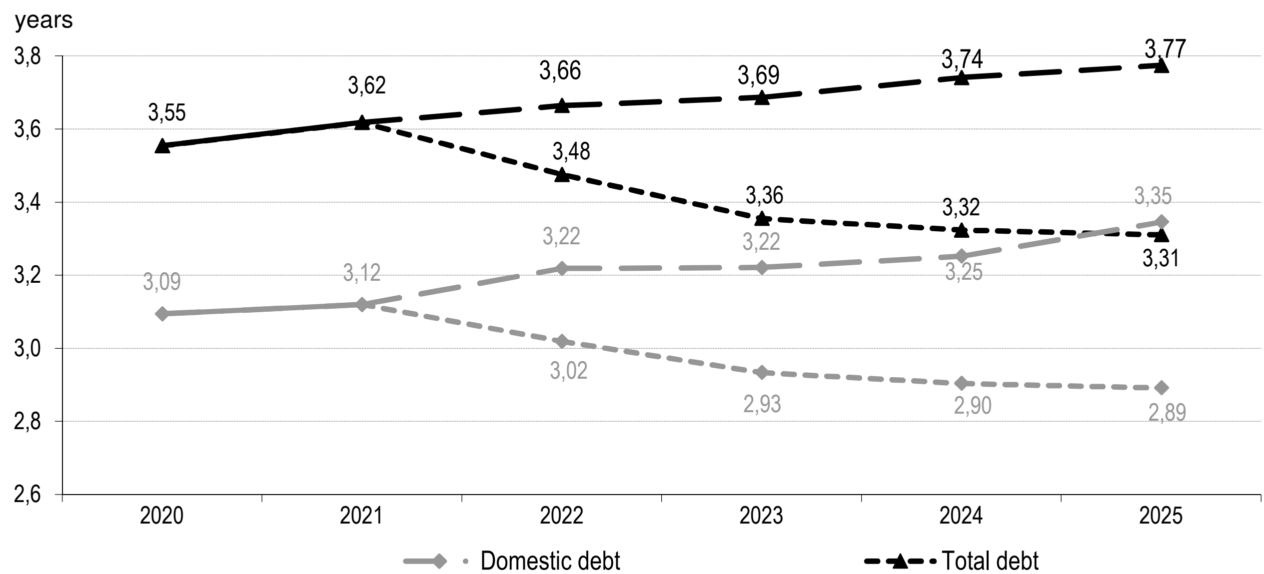
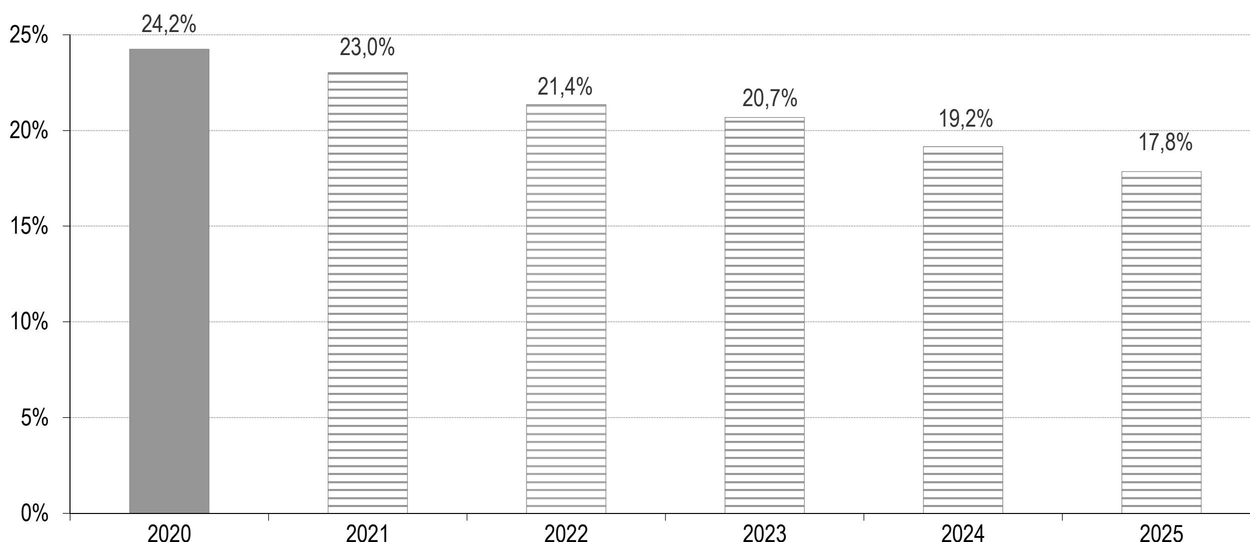


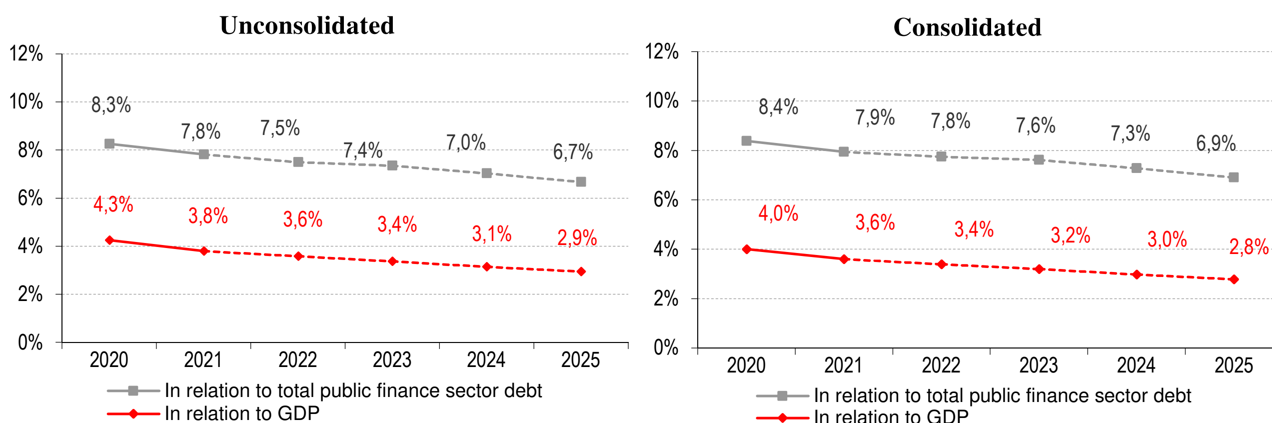
Chart 19. Share of foreign currency debt in the total ST debt



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

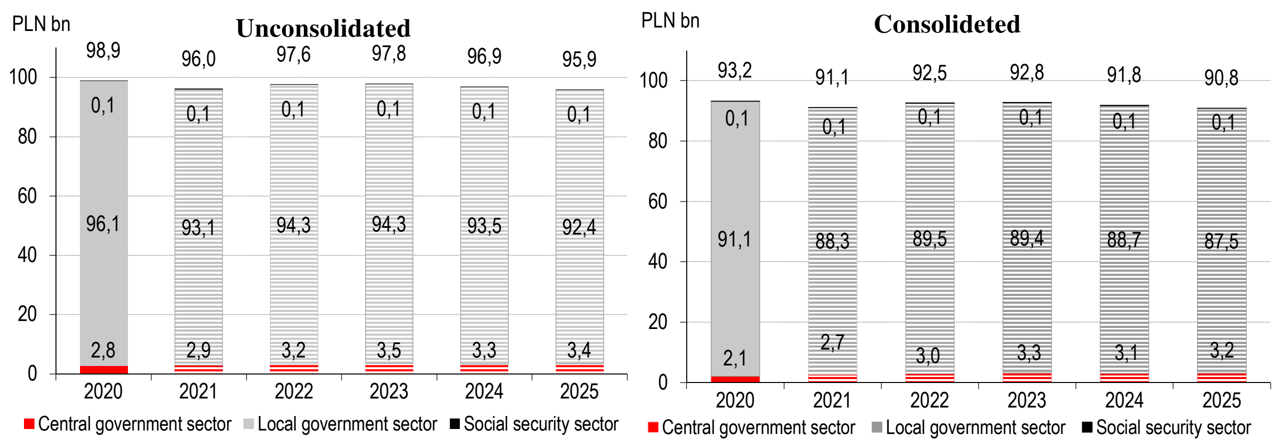
Under the adopted assumptions, in the timeframe of the *Strategy*, the unconsolidated-debt-to-GDP ratio of the remaining PFS units will decrease from 3.8% to 2.9%, whereas the consolidated debt will fall from 3.6% to 2.8%. The share of this group of entities in the consolidated public finance sector debt will fall from 7.9% in 2020 to 6.9% in 2025.

Chart 20. Unconsolidated and consolidated debt of public finance sector entities other than the State Treasury – in relation to GDP and as a share of total public finance sector debt



The nominal unconsolidated debt of public finance sector entities other than ST will increase from PLN 96.0 billion in 2021 to PLN 97.8 billion in 2023, and then will fall to PLN 95.9 billion in 2025. This trend will mainly result 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 21. 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:

- a macroeconomic and budgetary situation in Poland varying from the assumed scenario, in particular due to the consequences of the COVID-19 epidemic, volatility in foreign exchange rates, and a possible increase in interest rates;
- international conditions, including:
  - a slower than expected growth rate in the global economy resulting mainly from the COVID-19 pandemic;
  - monetary policy of major central banks, including the ECB and the Fed;
  - capital outflow towards core markets or other markets as a result of, inter alia, possible turmoil in financial markets;
- the risk of excessive growth of the public debt-to-the-GDP ratio, in connection with:
  - higher State budget borrowing requirements, depending, among others, on the future course of the COVID-19 pandemic and the condition of the Polish economy;
  - depreciation of the Polish zloty compared to the level assumed in the *Strategy*;
  - issuance of TS and their transfer due to the implementation of acts other than the public finance act;
  - considerable increase in the debt of public finance sector entities other than ST;
  - the necessity to execute sureties or guarantees granted 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 supporting 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 programs stipulating granting sureties and guarantees;
- possible continuation, to the extent necessary, of the use of guarantees and sureties to counter the effects of the COVID-19 pandemic;
- the guarantees and sureties may be used to support measures that could potentially be implemented in case of deterioration of the Polish financial system's operating conditions.

The scale of using the ST guarantee instrument will mainly result from the further actions to counteract the adverse economic and social effects of the COVID-19 pandemic and to support infrastructural investments. In the near future, potential liabilities from the ST guarantees and sureties will increase as a result of the guarantees:

- granted for the liabilities of the Polish Development Fund and BGK to counter the effects of the COVID-19 pandemic (these guarantees are not subject to the limits for guarantees and sureties that may be granted in a year, as laid down in the Budget Act in accordance with Article 31 of the Act of 8 May 1997 on the guarantees and sureties granted by the State Treasury and certain legal persons);
- granted for the BGK liabilities to supply the National Road Fund with funds for the construction of road infrastructure (these guarantees are subject to the aforementioned limit);
- granted to the PKP Polskie Linie Kolejowe S.A. for repayment of the credits incurred in order to co-finance the modernisation of infrastructure and rolling stock (these guarantees are subject to the aforementioned limit).

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

Contingent (undue) liabilities arising from the sureties and guarantees granted by public sector entities are estimated to amount to PLN 340.9 billion by the end of the first half of 2021, if compared with PLN 306.8 billion by the end of 2020 (13.2% of GDP) and PLN 114.9 billion (5.0% of GDP) by the end of 2019.

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 2021, they amounted to PLN 336.9 billion, and by the end of 2020 PLN 302.9 billion (13.0% of GDP), if compared with PLN 111.4 billion in 2019. (4.9% of GDP). The significant increase in these potential commitments results from new guarantees granted for counteracting the effects of the COVID-19 pandemic in 2020 and 2021. These guarantees amount to PLN 223.5 billion by the end of the first half of 2021.

The current activities of the ST in the field of sureties and guarantees do not pose significant threats to public finances. By the end of 2020 and the end of the first half of 2021, ca. 95% of unmatured liabilities of ST guarantees and sureties 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.

The biggest amounts of ST contingent liabilities (as at 30 June 2021) were due to:

- guarantees granted for Bank Gospodarstwa Krajowego to support the COVID-19 Counteracting Fund PLN 143.3bn

- guarantees granted to BGK PLN 85.0bn
  of which for support of the National Road Fund PLN 84.3bn
- 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 80.2bn
- guarantees granted for PKP Polskie Linie Kolejowe S.A. PLN 14.3bn
- guarantees of payments from the KFD for Gdańsk Transport Company S.A PLN 6.8bn
- guarantees of payments from the KFD for Autostrady Wielkopolskiej S.A. II PLN 5.7bn
- guarantees granted for PKP Intercity S.A. PLN 1.5bn

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

	2019	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Contingent liabilities under guaranties and sureties granted by:							
a) Public finance sector							
- PLN bn	114.9	306.8	431.2	472.8	514.4	550.8	573.5
- in relation to GDP	5.1%	13.2%	17.1%	17.4%	17.7%	17.9%	17.6%
b) State Treasury							
- PLN bn	111.4	302.9	427.1	468.5	509.9	546.0	568.5
- in relation to GDP	4.9%	13.0%	16.9%	17.2%	17.6%	17.8%	17.5%

Annex 1. Abbreviations and glossary

A. Abbreviations used in the Strategy

ATM – average time to maturity
ATR – average time to refixing
BFG – the Bank Guarantee Fund
CIRS – currency interest rate swap
EBC – European Central Bank
EC – European Commission
Fed – the Federal Reserve System in the USA
FRD – Demographic Reserve Fund
FPC - the COVID-19 Counteracting Fund
IFIs – international financial institutions
JSFP - public finance sector entities
KFD – National Road Fund
LGUs – local government units
NBP – National Bank of Poland
TSD – Treasury Securities Dealers
PDP – public debt
PFS – Public Finance Sector
PFR – Polish Development Fund
PPK - the Employee Equity Schemes
RPP – Monetary Policy Council
SER – stabilising expenditure rule
SPZOZ – independent public health care units
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:

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

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 10bn or on-the-run issues with total face value of at least PLN 2 billion. When setting benchmarks on the Polish yield curve in Reuters 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.

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

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 currency.

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 have specific rights and obligations related to the participation in the primary and secondary TS market. The dealers act as intermediaries between the issuer and other entities in TS trading and have the exclusive access to the primary market.

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

Refinancing risk – associated with debt issuance in order to finance the State borrowing needs resulting from the redemption of the existing debt. The risk applies to both the ability to redeem maturing debt and conditions on which it is refinanced (including in particular servicing costs generated by newly issued debt). The larger the payment related to the redemption of maturing debt and the closer the date of redemption, the larger the risk related to refinancing of this debt. 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 derivative contract through which two parties exchange cash flows based on a notional principal amount with rules of calculating their value specified in advance. Swap may be a separate financial instrument or it may accompany other instruments.

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,

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;

The aforementioned budget balancing rule in the current part will apply from 2022. <u>Changes to the current rule and transitional provisions are described in chapter VII.</u>

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 60%.
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 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 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 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 in constant prices is more than two percentage points lower than the mid-term real GDP dynamics projected in the draft budget bill 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).

Polish regulations	EU regulations
public debt	**general government debt**
1) scope of the public finance sector	
• Public Finance Act defines limited catalogue of units included in the public finance sector, 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 (as of January 1st 2022).	• scope of *general government*[1] sector is defined in ESA 2010[2]; no limited catalogue of units is defined;
differences in the scope of sector depending on regulations	
a) funds formed within Bank Gospodarstwa Krajowego (BGK), f. ex. : the National Road Fund (KFD), the COVID-19 Counteraction fund (FPC), the Railway Fund (FK)	
• are excluded from the public finance sector;	• are included in the general government sector [3];
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)	
• are excluded from the public finance sector;	• are included in the general government sector;
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	
• are excluded from the public finance;	• are included in the general government;
2) liabilities which constitute public debt	
• 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);	• securities; • loans; • cash and deposits;
differences in liabilities depending on regulations	
• matured payables;	• [4] • restructured or refinanced trade credits (including those with original maturity of one year or less) are included in loan category[5]
3) valuation of liabilities denominated in foreign currencies	

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 2019-2020

	2019			2020		
	GG balance	GG debt	10Y interest rate	GG balance	GG debt	10Y interest rate
	% PKB	% PKB	%	% PKB	% PKB	%
Greece	1,1	180,5	2,59	-9,7	205,6	1,27
Italy	-1,6	134,6	1,95	-9,5	155,8	1,17
Portugal	0,1	116,8	0,76	-5,7	133,6	0,41
Spain	-2,9	95,5	0,66	-11,0	120,0	0,38
Cyprus	1,5	94,0	1,07	-5,7	118,2	0,88
France	-3,1	97,6	0,13	-9,2	115,7	-0,15
Belgium	-1,9	98,1	0,19	-9,4	114,1	-0,15
Euro area	**-0,6**	**83,9**	**0,44**	**-7,2**	**98,0**	**0,05**
European Union	**-0,5**	**77,5**	**0,72**	**-6,9**	**90,7**	**0,31**
Croatia	0,3	72,8	1,29	-7,4	88,7	0,83
Austria	0,6	70,5	0,06	-8,9	83,9	-0,22
Slovenia	0,4	65,6	0,28	-8,4	80,8	0,08
Hungary	-2,1	65,5	2,47	-8,1	80,4	2,22
Germany	1,5	59,7	-0,25	-4,2	69,8	-0,51
Finland	-0,9	59,5	0,07	-5,4	69,2	-0,22
Slovakia	-1,3	48,2	0,25	-6,2	60,6	-0,04
Ireland	0,5	57,4	0,33	-5,0	59,5	-0,06
Poland	**-0,7**	**45,6**	**2,35**	**-7,0**	**57,5**	**1,50**
Netherlands	1,8	48,7	-0,07	-4,3	54,5	-0,38
Malta	0,4	42,0	0,67	-10,1	54,3	0,48
Lithuania	0,5	35,9	0,31	-7,4	47,3	0,22
Romania	-4,4	35,3	4,54	-9,2	47,3	3,89
Latvia	-0,6	37,0	0,34	-4,5	43,5	-0,06
Denmark	3,8	33,3	-0,18	-1,1	42,2	-0,36
Sweden	0,6	35,0	0,04	-3,1	39,9	-0,04
Czechia	0,3	30,3	1,55	-6,2	38,1	1,13
Bulgaria	2,1	20,2	0,43	-3,4	25,0	0,25
Luxembourg	2,4	22,0	-0,12	-4,1	24,9	-0,41
Estonia	0,1	8,4	:	-4,9	18,2	-0,03

[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 States as of September 15. 2021

Country	Standard&Poor's	Fitch	Moody's
Austria	AA+	AA+	Aa1
Belgium	AA	AA-	Aa3
Bulgaria	BBB	BBB	Baa1
Croatia	BBB-	BBB-	Ba1
Cyprus	BBB-	BBB-	Ba1
Czech Republic	AA-	AA-	AA3
Denmark	AAA	AAA	Aaa
Estonia	AA-	AA-	A1
Finland	AA+	AA+	Aa1
France	AA	AA	Aa2
Greece	B+	BB	Baa3
Spain	A	A-	Baa1
Netherlands	AAA	AAA	Aaa
Ireland	AA-	A+	A2
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	Baa3
Romania	BBB-	BBB-	Baa3
Slovakia	A+	A	A2
Slovenia	AA-	A	A3
Sweden	AAA	AAA	Aaa
Hungary	BBB	BBB	Baa3
United Kingdom	AA	AA-	Aa3
Italy	BBB	BBB-	Baa3

Source: Refinitiv

Table 7. Public debt in Poland in 2010 – VI 2021

Item	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	VI 2021
1. State Treasury debt												
a) PLN bn	701.9	771.1	793.9	838.0	779.9	834.6	928.7	928.5	954.3	973.3	1,097.5	1,133.6
domestic *	507	524.7	543	584.3	503.1	543.3	609.2	644.5	674.4	716.5	831.5	859.0
foreign *	194.8	246.4	250.9	253.8	276.9	291.3	319.5	283.9	279.8	256.9	266.0	274.7
b) GDP %	48.5%	49.3%	48.9%	50.9%	45.6%	46.3%	49.8%	46.7%	45.0%	42.4%	47.2%	-
2. Public debt (domestic definition)												
a) PLN bn	747.9	815.3	840.5	882.3	826.8	877.3	965.2	961.8	984.3	990.9	1,111.8	1,152.2
b) GDP %	51.7%	52.1%	51.8%	53.6%	48.3%	48.7%	51.8%	48.3%	46.4%	43.2%	47.8%	-
3. General government debt (EU definition)												
a) PLN bn	774.7	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	1,402.0
b) GDP %	53.5%	54.7%	54.4%	56.5%	51.1%	51.3%	54.2%	50.6%	48.8%	45.6%	57.5%	-

**) place of issue criterion*

Table 8. GDP and exchange rates in 2010 – VI 2021

Item	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	VI 2021
1. Gross Domestic Product												
PLN bn	1,446.8	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	2,323.9	-
2. Exchange rate (end of period)												
a) EUR	3.96	4.42	4.09	4.15	4.26	4.26	4.42	4.17	4.3	4.26	4.61	4.52
b) USD	2.96	3.42	3.1	3.01	3.51	3.9	4.18	3.48	3.76	3.80	3.76	3.80

Source: GUS. NBP