



Annual Report 2023



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Warszawa 2024

Compiled on basis of NBP materials.

Photo of the Governor of NBP
Piotr Małecki

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Adam Glapiński
Governor of Narodowy Bank Polski

Dear Readers,

In recent years, the Polish economy, like many others, has grappled with crises and challenges the likes of which have never been seen before. First, it was the pandemic, then the war beyond our eastern border. The impact of Russia's aggression against Ukraine has been particularly severe for the Polish economy and for other countries of our region. In 2023, the economic aftermath of those shocks gradually subsided, though the shocks continued to affect the economy.

Today, I can proudly say that the Polish economy came out of the previous years' turbulence unscathed. Inflation, which was temporarily high, has been effectively reduced. From the peak in February 2023 to mid-2024, it decreased by nearly 16 percentage points and returned to the NBP inflation target of 2.5% +/-1 percentage point. This demonstrates the effectiveness

of the monetary policy pursued. Seeing inflation decrease sharply and the real interest rate grow, the Monetary Policy Council adjusted the NBP interest rates in the face of a marked economic downturn, cutting them by a total of 1 percentage point, including the reference rate to 5.75%.

What is important, the disinflation process did not generate any unnecessary costs for the Polish economy and general public. Most significantly, we have continued to close the distance to the wealthier countries at a fast pace. At the beginning of 2024, real GDP was nearly 11% higher than it was before the pandemic. After a temporary economic slowdown in previous quarters, we can see a recovery in Poland, with real wages rising rapidly. In addition, we have managed to shield Poles from a rise in unemployment, which has very often accompanied disinflation in the past. The unemployment rate remains at an all-time low and we are the European leader in this regard.

The situation in the Polish financial system was also stable. This is proven by cyclical stress tests of the banking sector. They demonstrated that the banks are perfectly capable of absorbing potential losses, while retaining the ability to provide financial services even under highly pessimistic scenarios. I would like to emphasise that the Polish banks are characterised by a high level of liquidity. What is more, the economic slowdown in 2023 and higher costs of credit did not increase credit risk. The non-performing loan ratios are lower than they were before the pandemic. What continues to be a major threat is legal risk associated with foreign currency housing loans. Yet, even though the number of court cases has increased, the risk has abated. This is because the banks have established appropriate provisions to cover the costs of the risk and offer amicable settlements to their clients. The revenues of the banking sector, significantly higher than in previous years, mainly due to higher interest margins,

have given the banks adequate space to establish considerable provisions.

Let me also draw your attention to the measures taken by NBP to diversify risk and increase returns on foreign exchange reserves in the long term. To this end, we started buying shares in exchange traded funds (ETFs), ensuring a diversified exposure to the global equity market. At the end of 2023, equities accounted for 1.5% of our foreign exchange reserves, whereas at the end of the first quarter of 2024 they accounted for 5.2%.

Gold constitutes an important part of our official reserve assets. It diversifies the risk of other investments and increases yields, especially during crises and episodes of heightened market tensions. Let me remind you that in 2018–2023, Narodowy Bank Polski purchased nearly 256 tonnes of gold, increasing its holdings to 359 tonnes. We are not going to stop at that, aiming to build up the gold reserves. The adopted strategy

is confirmed by the decision of the NBP Management Board to continue investing in gold, which is ultimately to constitute 20% of official reserve assets (nearly 600 tonnes). This will make Poland one of the biggest holders of gold in the world.

I am convinced that last year will go down in the history of Poland as a period of an extremely fast decrease in inflation without any painful economic and social costs.

I invite you to read the *Report* in the hope that it will be a precious source of knowledge about the activity of NBP and material for in-depth analyses.



MONETARY POLICY COUNCIL

Chairperson

Adam Glapiński

Members:

Ireneusz Dąbrowski

Iwona Duda

Wiesław Janczyk

Cezary Kochalski

Ludwik Kotecki

Przemysław Litwiniuk

Gabriela Masłowska

Joanna Tyrowicz

Henryk Wnorowski

NBP MANAGEMENT BOARD

Chairperson

Adam Glapiński

Deputy Governor – First Deputy Governor of NBP

Marta Kightley

Deputy Governor of NBP

Adam Lipiński

Members:

Marta Gajęcka

Paweł Mucha

Piotr Pogonowski

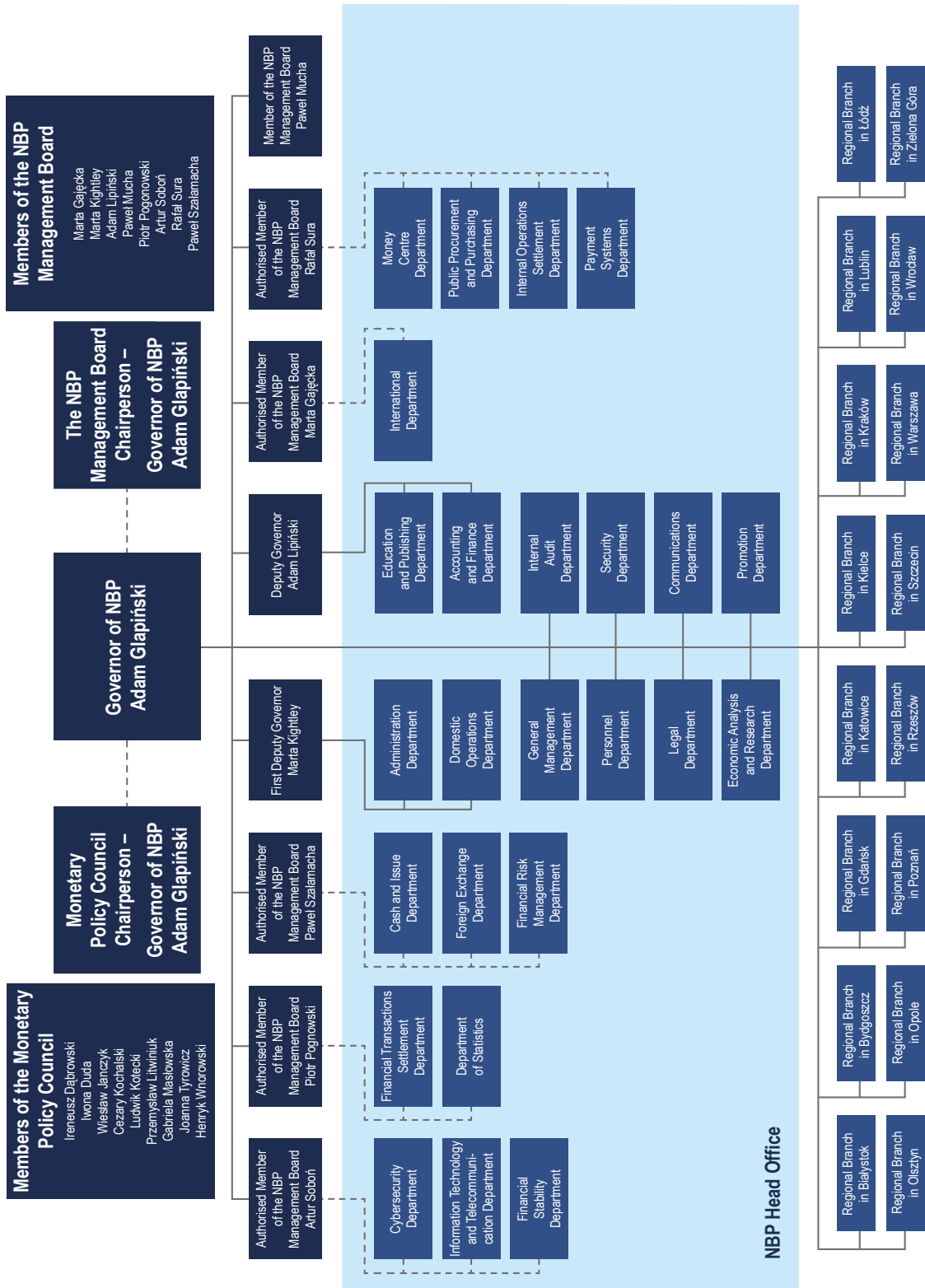
Artur Soboń*

Rafał Sura

Paweł Szalamacha

* On 6 December 2023 Mr Artur Soboń was appointed Member of the NBP Management Board.

Organisation chart of Narodowy Bank Polski as at 31 December 2023



--- Day-to-day oversight exercised pursuant to an authorisation granted by the NBP Governor to Members the NBP Management Board.
 — Day-to-day oversight exercised on the basis of the NBP reporting structure, according to the areas of work of organisational units assigned by the NBP Governor to be managed by the NBP Deputy Governors.

Summary

Summary

1. According to Article 227 section 1 of the Constitution of the Republic of Poland: “The central bank of the State shall be Narodowy Bank Polski. It shall have the exclusive right to issue money as well as to formulate and implement monetary policy. Narodowy Bank Polski shall be responsible for the value of Polish currency.” The basic objectives of NBP are stipulated in the Act of 29 August 1997 on Narodowy Bank Polski and in the Banking Act of 29 August 1997, as well as in the Treaty on the Functioning of the European Union and the Statute of the European System of Central Banks and of the European Central Bank. In 2023, NBP conducted its activities in line with the *Monetary Policy Guidelines for 2023* and the *Narodowy Bank Polski Plan of Activity for 2023–2025*.
2. The *Report* presents the implementation of the statutory responsibilities of NBP in 2023 in the following areas: monetary policy, pursuit of financial stability, issue of currency, foreign exchange reserves management, foreign exchange activities, the payment system, services to the State Treasury, analysis and research, statistics, education and information, and international cooperation. The *Report* also presents the legislative activity, the internal development as well as an overview of the financial and equity position and financial result of NBP for 2023.
3. According to the Constitution of the Republic of Poland and the Act on Narodowy Bank Polski, the governing bodies of NBP comprise: the Governor of Narodowy Bank Polski, the Monetary Policy Council and the Management Board of Narodowy Bank Polski. In 2023, the organisational structure of NBP comprised the Head Office and 16 organisational units.
4. In 2023, in connection with Russia’s aggression against Ukraine, the Management Board of Narodowy Bank Polski continued to provide extensive assistance to the National Bank of Ukraine (NBU).
5. In 2023, monetary policy was conducted in line with the *Monetary Policy Guidelines for 2023*. As in previous years, the main objective of monetary policy was to maintain price stability, while supporting sustainable economic growth and financial stability. In the conduct of monetary policy, NBP continued to apply the strategy of direct inflation targeting. Since 2004, the medium-term inflation target has been 2.5%, with a symmetrical band for deviations of ± 1 percentage point. The Monetary Policy Council strived to bring inflation down to a level consistent with the NBP inflation target in the medium term. The monetary policy decisions were made on the basis of available information, taking into account the current and expected macroeconomic situation, including inflation developments and the economic conditions.

In 2023, economic growth slowed down markedly in the euro area, while Germany saw a slight fall in GDP. Against the backdrop of weakened demand pressure in many countries and a fall in cost pressure resulting from lower commodity prices than the year before as well as the fading of the earlier global supply chain tensions, global inflation declined during 2023 following a sharp increase in previous years. Despite this, in many economies, including in the euro area and the United States, inflation was still higher than the inflation targets of the central banks. Amid a downturn abroad in 2023,

a marked weakening of economic activity growth was also seen in Poland. In 2023, annual GDP growth slowed down to 0.2% (from 5.3% in 2022) and was the lowest since at least 1996 (except for 2020, i.e. at the beginning of the COVID-19 pandemic). At the same time, domestic demand fell by 3.8%, and consumption fell by 1.0%. On the other hand, investment continued to grow, amid a markedly negative contribution of changes in inventories to GDP growth. Against this background, during 2023 a marked fall in CPI inflation was seen in Poland (from the peak in February 2023, annual price growth fell by 12.2 percentage points to 6.2% in December 2023). The decrease in inflation during 2023 resulted from a fall in annual growth of all the main components of the CPI index. At the same time, all measures of core inflation declined. During 2023, the measures of inflation expectations of consumers and enterprises also declined, as well as the inflation forecasts of financial sector analysts (formulated over the horizon of both four and eight quarters). The fall in inflation was supported by a decline in cost pressure – reflected in particular in a fall in industrial producer prices – due to the gradual fading of the earlier external supply shocks, which had resulted in high price growth in previous years. Inflation was also lowered by reduced demand pressure, amid a tightening of NBP monetary policy undertaken in 2021–2022 and the subsequent period of keeping NBP interest rates unchanged. The decline in inflation was also supported by the appreciation of the zloty exchange rate against the major currencies in 2023. According to incoming data at the beginning of 2024, inflation continued to decline in 2024 Q1 and from February was running at a level consistent with the NBP inflation target (according to Statistics Poland data, CPI inflation stood at 2.8% y/y in February and 2.0% y/y in March 2024). At its meetings between January and July 2023, the Council kept the NBP interest rates unchanged, including the reference rate at 6.75%, following the previous interest rate increases in 2021–2022. Consequently, from September 2022 to August 2023 the NBP reference rate was running at the highest level since the NBP inflation target was set at the current level (i.e. since 2004). At the same time, it was the longest period in the Council's history (i.e. since 1998) of keeping NBP interest rates unchanged after previous increases. At that time, the Council judged that given the scale and persistence of the earlier shocks, which remained beyond the impact of domestic monetary policy, the return of inflation to the NBP inflation target would be gradual. Information available in September and October 2023 confirmed the systematic and rapid fall in inflation in Poland as well as the marked decline in inflation expectations. Incoming data from the economy pointed to a prolonged significant weakening of activity, including a fall in domestic demand. Alongside that, the data signalled lower cost pressure and a prolonged weakening of the economic conditions in Poland's main trading partners, which caused a fall in Polish exports. Lower than expected data on inflation in Poland, which was available in September and October 2023 – along with weaker-than-expected growth of domestic economic activity – indicated that the medium-term path of price growth might also run below the forecasts and inflation might return to the inflation target faster. At the same time, the fall in inflation and inflation expectations contributed to an increase in the restrictiveness of monetary policy. Considering these circumstances – and taking into account the time lags in the monetary policy transmission to the economy – at the meetings in September and October 2023, the Council adjusted the NBP interest rates, including cuts in the NBP reference rate in total from 6.75% to 5.75%. In turn, at the meetings in November and December 2023, the Council – considering the adjustment in the interest rates introduced in the previous months together with the uncertainty about the future course of fiscal and regulatory policies and their impact on inflation – kept NBP interest rates unchanged.

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6. In 2023, NBP conducted monetary policy using instruments provided for in the *Monetary Policy Guidelines for 2023*. The NBP interest rates were the key instrument of monetary policy in 2023. As in previous years, the operational target of monetary policy was to keep the POLONIA rate close to the NBP reference rate. The main instrument used to achieve this task was the main open market operations carried out on a regular weekly basis, in the form of issuance of NBP bills, in principle with a 7-day maturity. A supplementary role was played by the fine-tuning open market operations. The achievement of the operational target of monetary policy was supported by the required reserve system, helping to stabilise the POLONIA rate. In 2023, banks were able to place surplus funds as overnight deposit with NBP, as well as supplement shortages of funds by drawing on the lombard credit offered by NBP. In the period under discussion, NBP did not conduct structural operations. At the end of 2023, the nominal value of the portfolio of debt securities purchased by NBP under these operations in the years 2020–2021 reached PLN 135.1 billion compared to PLN 136.2 billion at the end of 2022. In 2023, excess liquidity persisting in the banking sector increased compared to the previous year. In December 2023, the average level of funds at the disposal of the banking sector in excess of the required reserve amounted to PLN 301.2 billion, and was approx. PLN 64.6 billion higher than in the corresponding period of 2022. Excess liquidity increased in 2023 mainly on account of the net purchase of foreign currency by NBP by order of the clients. On the other hand, the increase in the amount of currency in circulation exerted downward pressure on excess liquidity in the banking sector.
 7. In accordance with Article 3(2)(6) of the Act on Narodowy Bank Polski, the responsibilities of NBP shall include “establishing the necessary conditions for the development of the banking system”. The Polish central bank performs this responsibility on an ongoing basis by acting to ensure stable conditions for the functioning of banks and the whole financial system. In 2023, NBP continued to undertake activities aimed at developing the payment system and safeguarding its smooth functioning. Moreover, Narodowy Bank Polski participated in developing legal provisions on the banking sector, conducted analyses and research on the national banking system and cooperated with the Polish Bank Association.
 8. Narodowy Bank Polski carries out analytical and research work on the stability and development of the financial system, nationally and internationally. The results of the work are published in cyclical reports. NBP fulfils its obligations as provided for in the laws by participating in the work of the Financial Stability Committee on macroprudential supervision (FSC-M) and crisis management (FSC-C). The NBP analyses and reports are extensively used by the FSC when making macroprudential supervision decisions. Narodowy Bank Polski cooperates with domestic financial safety net institutions, including the Ministry of Finance, the Polish Financial Supervision Authority (KNF) and the Bank Guarantee Fund (BFG). NBP also conducts analyses and research aimed at increasing the knowledge of financial processes and interdependencies between the financial system and the economy, and used for the operationalisation of macroprudential policy. It also cooperates with European institutions on identification and mitigation of systemic risk.
 9. The main aim of NBP’s issuing activity is to ensure the safety and liquidity of cash transactions. In 2023, the value of currency in circulation (including bank vault cash) increased by 2.4% and at the end of December 2023 amounted to PLN 377.5 billion (the lowest increase since 2012). NBP continued cooperation with the National Bank of

Ukraine pursuant to the agreements entered into in 2022 concerning the storing, by NBP, of hryvnia purchased in Poland and hryvnia purchased and transferred to Poland by foreign central banks. Hryvnia purchased as part of the programme and delivered to NBP was transferred to the National Bank of Ukraine at the end of 2023. As part of the issue of collector coins and notes, NBP issued and put into circulation 25 collector coins and one collector banknote. The implementation of the National Strategy for Cash Circulation Security was continued. NBP also conducted a public opinion survey on banknotes and coins in circulation.

10. When managing foreign exchange reserves, NBP seeks to ensure the safety and adequate liquidity of invested funds. At the same time, while observing these criteria, it also undertakes measures aimed at raising the long-term yield on the reserves. In 2023, Narodowy Bank Polski increased its gold holdings by 130 tonnes (to 358.7 tonnes) and started investing in shares in exchange-traded funds (ETFs).
11. The foreign exchange activity of NBP involves maintaining a register of bureaux de change, issuing decisions on foreign exchange matters and carrying out statutory inspections. In 2023, a total of 757 inspections relating to foreign exchange matters were carried out, 17 decisions on foreign exchange matters and 33 decisions concerning the breach of the rules of conduct of the currency exchange business or failure to comply with the responsibilities attached to this business were issued. As at 31 December 2023, a total of 4,521 bureaux de change were operating in Poland.
12. The activities of NBP with respect to the payment system consisted mainly in the operation of the payment systems and the performance of interbank settlements, the organisation of payments, and the oversight of the payment system. In 2023, Narodowy Bank Polski continued to work on the development of SORBNET3, a new RTGS system in the Polish zloty. On 20 March 2023, a new RTGS system for payments in euro – the TARGET2-NBP – was launched. It is the Polish component of the pan-European clearing system. As part of the efforts to ensure a high level of cyber resilience in the Polish payment system, NBP assessed the retail payment systems operated by KIR SA in terms of compliance with the CROE requirements and conducted a survey on the cyber resilience of payment systems and securities clearing and settlement systems.
13. The provision of bank services to the State Budget by NBP contributed to ensuring the safety and smoothness of settlements of the public finance sector. As at 31 December 2023, NBP operated 29,003 accounts for 2,924 clients. Narodowy Bank Polski handled the State Budget international liabilities and claims and trade in securities. In 2023, a total of 23 sale and swap auctions for Treasury securities were organised and 10 auctions for the sale of bonds issued by Bank Gospodarstwa Krajowego for the COVID-19 Prevention Fund. Moreover, NBP cooperated with the Ministry of Finance within the Public Debt Management Committee.
14. The analytical and research work conducted at NBP in 2023 aimed to assess the current and future situation in the Polish economy, including in relation to inflation indices and the price-setting process, inflation expectations, GDP and its components, the situation in the labour market and the financial standing of households and enterprises. NBP analysed the global economy and the impact of the external environment on the economy of Poland. Work was also conducted on the development and improvement

of the analytical and prognostic tools. Findings from these analyses and research are used by the Management Board of NBP and the Monetary Policy Council in the decision-making process. NBP organised four international scientific conferences and two other international scientific events.

15. Narodowy Bank Polski performs statistical tasks comprising the collection of reporting data, primarily from entities of the financial sector and non-financial corporations. In 2023, NBP aligned its reporting infrastructure with the new requirements of the European Banking Authority in this area. NBP continued research into migration processes among the refugees from Ukraine in Poland and published two reports with findings from the surveys. In addition, NBP launched the Erydan internal economic database and upgraded the Statistical Hub.
16. Narodowy Bank Polski is the initiator of and participant in educational projects carried out across the country. In 2023, NBP completed the third edition of the nationwide educational programme NBP Gold Schools and subsidised 92 economic education projects. NBP also expanded the educational offering and exhibits of the NBP Money Centre and continued communication activities on the Internet, in particular in social media.
17. NBP participates in the work of the Standing Committee of the Council of Ministers, the Committee for European Affairs and other inter-ministerial bodies, and cooperates with government bodies by issuing opinions on draft normative acts regarding economic policy and with relevance for the banking system. As part of its cooperation with the European Central Bank (ECB), Narodowy Bank Polski participates in reviewing the ECB's draft opinions on proposals of EU and national (Member States') legislative acts. In 2023, the proposals covered, among others, financial and banking matters, including settlement services, financial supervision, financial stability, crisis management and deposit guarantee schemes, payment systems, cash payments, the digital euro and sustainable growth.
18. NBP representatives participate in the work of the EU bodies, including the General Council of the ECB, the General Council of the European Systemic Risk Board (ESRB), the committees and working groups of the ESCB and the ESRB, the Council of ECOFIN (informal meetings), as well as the committees and working groups of the Council of the European Union and the European Commission. In 2023, the most important work focused on draft Community regulations on the functioning of the financial system and completing the establishment of the banking union. NBP also cooperates with international banking institutions (the World Bank Group, the European Bank for Reconstruction and Development and the Bank for International Settlements) and international financial institutions, including the International Monetary Fund (IMF). In 2023, NBP continued to participate in the temporary increase of the IMF financial resources under the New Arrangements to Borrow (NAB) and a bilateral loan agreement.
19. In 2023, the average headcount at NBP was 55 full-time posts lower than in 2022 and amounted to 3,289 full-time posts.
20. The financial result of NBP for 2023 was negative and amounted to PLN -20.8 billion. Owing to the appreciation of the zloty against foreign currencies, in 2023 NBP recorded a negative net result on foreign exchange gains/losses of PLN -31.0 billion. In order to

cover these losses, an FX risk provision of PLN 15.1 billion was released in full. In 2023, the negative net result on monetary policy reached PLN -20.6 billion. On the other hand, NBP posted a positive result on the management of foreign exchange reserves (in the currency of the instrument) amounting to PLN 18.9 billion. In 2023, operating expenses and depreciation and amortisation expenses amounted to PLN -1.8 billion.

Chapter 1

Governing bodies of NBP

Governing bodies of NBP

According to the Constitution of the Republic of Poland and the Act on Narodowy Bank Polski, the governing bodies of NBP comprise the Governor of Narodowy Bank Polski, the Monetary Policy Council and the Management Board of Narodowy Bank Polski.

1.1. Governor of Narodowy Bank Polski

In 2023, as part of his responsibilities, the Governor of Narodowy Bank Polski chaired the meetings of the Monetary Policy Council and the NBP Management Board as well as the Financial Stability Committee in its macroprudential capacity. Additionally, while representing Narodowy Bank Polski and the Republic of Poland, the Governor of NBP attended (or was represented in) the following meetings of international banking and financial institutions:

- meetings of the General Council of the European Central Bank,
- the annual meeting of the Board of Governors of the European Bank for Reconstruction and Development,
- meetings of the Boards of Governors of the World Bank Group and the International Monetary Fund,
- informal sessions of the ECOFIN,
- meetings of the General Board of the ESRB,
- meetings of the Governors of the Bank for International Settlements.

In 2023, the Governor of NBP issued 28 ordinances, including 20 concerning the issue of collector items and commemorative coins. Moreover, the Governor of NBP issued ten announcements: eight containing uniform texts of legal acts issued by the governing bodies of NBP, an announcement concerning the publication of the list of convertible currencies, as well as an announcement concerning the balance sheet and the profit and loss account of Narodowy Bank Polski for 2022.

In his capacity as the head of staff, the Governor of NBP participated in developing and implementing the Bank's human resources policy and supervised compliance with the work standards at NBP.

1.2. Monetary Policy Council

In 2023, the Monetary Policy Council acted in accordance with the *Monetary Policy Guidelines for 2023*. In 2023, the MPC held 12 meetings (including 11 decision-making meetings), adopting eight normative resolutions and one non-normative resolution. MPC resolutions were published in *Monitor Polski* (Official Gazette) and *Dziennik Urzędowy Narodowego Banku Polskiego* (Official Journal of Narodowy Bank Polski).

In 2023, the Monetary Policy Council adopted two resolutions on the reference rate, the interest rate on refinancing loans, the interest rate on term deposits, and the rediscount rate and the discount rate on the bills of exchange at Narodowy Bank Polski (Table 1.1). In 2023, the Monetary Policy Council did not amend its resolutions on the required reserve

ratio for banks, credit unions and the National Association of Credit Unions and the level of interest rate on the required reserve (Table 1.2).

Table 1.1. NBP interest rates as at the end of 2022 and 2023 (in %)

Reference rate		Lombard rate		Deposit rate		Rediscount rate		Discount rate	
31.12.2022	31.12.2023	31.12.2022	31.12.2023	31.12.2022	31.12.2023	31.12.2022	31.12.2023	31.12.2022	31.12.2023
6.75	5.75	7.25	6.25	6.25	5.25	6.80	5.80	6.85	5.85

Source: NBP data.

Table 1.2. Required reserve ratios and the interest rate on the required reserve funds as at the end of 2023

Required reserve ratio / interest rate on the required reserve funds	In %	In force as of
The required reserve ratio on funds in Polish zloty and funds in foreign currency deposited on bank accounts and on funds received in respect of issue of securities	3.50	31 March 2022
The required reserve ratio on funds received from repo and sell-buy-back transactions, as well as funds received for the duration of at least 2 years	0.00	1 March 2018
The interest rate on the required reserve funds*	5.75	5 October 2023

* 1.0 of the reference rate.

Source: NBP data.

The other resolutions adopted by the MPC in 2023 concerned:

- the approval of the annual financial statements of Narodowy Bank Polski as at 31 December 2022,
- the approval of the *Report on Monetary Policy Implementation in 2022*,
- the evaluation of the activities of the NBP Management Board regarding the implementation of the monetary policy guidelines for 2022,
- the approval of the *Report on NBP Operations in 2022*,
- the setting of the monetary policy guidelines for 2024,
- the approval of the *Financial Plan of Narodowy Bank Polski for 2024*,
- the selection of a certified auditor to audit the annual Financial Statements of Narodowy Bank Polski for the years 2023, 2024 and 2025.

With regard to Article 23(1)(1) of the Act on Narodowy Bank Polski, the MPC adopted the following documents:

- the *Balance of Payments of the Republic of Poland* for 2022 Q3 and Q4 and for 2023 Q1 and Q2,
- the *International Investment Position of Poland in 2022*,
- the *Forecast of the Balance of Payments of the Republic of Poland for 2024*,
- the *Opinion on the 2024 Draft Budget Act*.

The Monetary Policy Council also examined inflation and GDP projections and adopted three *Inflation Reports* (in March, July and November).

In 2023, members of the MPC participated in meetings with market analysts and in conferences and economic research seminars.

1.3. Management Board of Narodowy Bank Polski

Pursuant to the Act on Narodowy Bank Polski, the activity of NBP is directed by its Management Board. The Management Board adopts resolutions on matters which are not the exclusive competence of other bodies of NBP and implements the MPC-adopted resolutions. In 2023, the NBP Management Board performed its basic responsibilities in accordance with the *Monetary Policy Guidelines for 2023, the Narodowy Bank Polski Plan of Activity for 2023–2025* and the *Financial Plan of Narodowy Bank Polski for 2023*.

The NBP Management Board examined draft resolutions and other materials to be discussed at the MPC meetings.

In 2023, the NBP Management Board addressed the issues concerning:

- inflation and GDP projections,
- current macroeconomic developments in Poland, including the path of inflation processes, the position of public finance, the economic situation of enterprises and households and the developments in the labour, real estate, financial, credit and foreign exchange markets,
- current developments in the world financial markets, including the euro area financial markets and the financial markets of Central and Eastern European countries,
- financial system stability in Poland, including the assessment of the functioning of the banking system and the outlook for its development,
- banking sector liquidity and monetary policy instruments,
- the situation in the interbank market and open market operations.

The NBP Management Board also discussed topics concerning the issue of currency, the management of official reserves, the functioning of the Polish payment system and providing banking services to the State budget.

In 2023, the NBP Management Board held 43 meetings. It adopted 96 resolutions of the NBP Management Board (including: 51 normative acts and 45 non-normative acts)¹ and 134 management resolutions of the NBP Management Board.

The resolutions adopted by the NBP Management Board were primarily related to:

- the procedure and detailed rules for banks submitting to Narodowy Bank Polski the data necessary for determining monetary policy and for the periodic assessments of the monetary situation of the state, as well as the assessment of the financial situation of banks and the risks for the banking sector,
- the rules for the POLONIA reference rate fixing,
- the rules for determining the schedules of issue of collector coins and the schedule of issue of commemorative coins issued by Narodowy Bank Polski, approving their graphic and production designs, taking decisions on launching their production and on the handling of coins withdrawn from sale,
- the terms and conditions of sale by Narodowy Bank Polski of coins, banknotes, and numismatic items for collection and other purposes,
- the functioning of the Payment System Council,

¹ In accordance with Article 53 and 54 of the Act on Narodowy Bank Polski of 29 August 1997 (Journal of Laws of 2022, item 2025), resolutions of the Management Board of Narodowy Bank Polski constituting normative acts are published in the Official Gazette or in the Official Journal of Narodowy Bank Polski.

- the operation of bank accounts by Narodowy Bank Polski,
- the rules of maintenance by Narodowy Bank Polski of bank accounts and the provision of e-banking services,
- the rules of execution by Narodowy Bank Polski of foreign currency and domestic currency payment orders and cheque operations in cross-border and domestic transactions, as well as purchases and sales of foreign currencies for bank account holders,
- bank fees and commissions charged by NBP,
- renewal of NBP's membership in the Official Monetary and Financial Institutions Forum (OMFIF),
- the detailed rules and mode of preparation of the *Financial Plan of Narodowy Bank Polski* and reporting on its implementation,
- the rules of the management of accounting at Narodowy Bank Polski,
- the organisational rules of NBP.

The management resolutions adopted by the NBP Management Board concerned, among others:

- the extension of the bilateral loan agreement between NBP and the IMF,
- the conclusion by NBP as a member of international Central Bank Counterfeit Deterrence Group (CBCDG) new agreements providing continued access to technologies available for this group to prevent the misuse of digital devices for counterfeiting banknotes,
- joint issue of silver collector coins by Narodowy Bank Polski and the National Bank of Ukraine, including the transfer of financial support by NBP to Ukraine in the amount of the total revenue from the sale of these coins (less the cost of issuance),
- commencement of work on the reorganisation of monetary policy instruments and their accounting records at NBP,
- the application and compliance by NBP with national and international sanction lists.

In connection with Russia's aggression against Ukraine, Narodowy Bank Polski continued the activities aimed at providing assistance to the National Bank of Ukraine and its staff, including the extension of the agreement between NBP and the National Bank of Ukraine on a zloty/hryvnia currency swap line and the expansion of technical cooperation.

In addition, in 2023 the NBP Management Board prepared the NBP annual financial statements for 2022.²

1.4. Narodowy Bank Polski Plan of Activity

In 2023, the *Narodowy Bank Polski Plan of Activity for 2023–2025*, adopted by the NBP Management Board on 28 October 2022, was implemented. The *Plan* sets out NBP's goals for the forthcoming years and tasks aimed at their implementation.

In accordance with the rules for planning activity at NBP, the NBP Management Board adopted the *Narodowy Bank Polski Plan of Activity for 2024–2026*, effective as of 1 January 2024.

² In accordance with Article 17(4)(12) of the Act on Narodowy Bank Polski.

Chapter 2

Monetary policy

Monetary policy¹

In presenting the *Report on Monetary Policy*, the Monetary Policy Council acts in accordance with Article 227 of the Constitution of the Republic of Poland, which imposes the obligation on the Council to present a report on the achievement of the purposes of monetary policy within 5 months following the end of the fiscal year. In accordance with Article 53 of the Act on Narodowy Bank Polski, the *Report on Monetary Policy* is announced in the Official Gazette of the Republic of Poland, Monitor Polski. The *Report* presents the main elements of the monetary policy strategy, a description of macroeconomic conditions and decisions taken with respect to monetary policy in the year under review, as well as a description of the monetary policy tools applied.

The *Report on Monetary Policy in 2023* is accompanied by the appendices presenting selected macroeconomic data, as well as by *Voting records of the Monetary Policy Council members on motions and resolutions* in the year the *Report* encompasses.

An ex-post assessment of the conduct of monetary policy should take into account, above all, that the decisions of monetary authorities affect the economy with a considerable lag and that they are taken under uncertainty about future macroeconomic developments. Moreover, the economy is subject to macroeconomic shocks that – while remaining outside the control of the domestic monetary policy – may to a large extent affect economic conditions and domestic inflation developments in the short and sometimes in the medium term. In recent years, macroeconomic shocks have been primarily associated with the economic impact of the COVID-19 pandemic and Russia’s military aggression against Ukraine. Due to their particular strength and persistence, these shocks significantly affected the macroeconomic situation, including inflation developments, globally and in Poland.

2.1. Monetary policy strategy in 2023

In 2023, the Monetary Policy Council (hereinafter the Council or the MPC) conducted monetary policy in line with the *Monetary Policy Guidelines for 2023*, adopted by the resolution No. 15/2022 from 7 September 2022 on formulating monetary policy guidelines for 2023 (Official Gazette of the Republic of Poland, Monitor Polski, item 915). The main elements of the monetary policy strategy pursued in 2023 are presented below.

As in previous years, the main objective of monetary policy was to maintain price stability, while supporting sustainable economic growth and financial system stability. This way, the Council pursued the basic objectives of Narodowy Bank Polski set out in the Constitution of the Republic of Poland of 2 April 1997 (Journal of Laws, No. 78, item 483, Journal of Laws of 2001, No. 28, item 319, Journal of Laws of 2006, No. 200, item 1471, Journal of Laws of 2009, No. 114, item 946) and the Act on Narodowy Bank Polski of 29 August 1997 (Journal of Laws of 2022, item 2025). According to Article 227 Section 1 of the Constitution of the

¹ The chapter *Monetary Policy* is the *Report on Monetary Policy for 2023*, which the Monetary Policy Council adopted at the meeting on 8 May 2024. The responsibilities in this field are exercised in pursuance with Article 3 (2)(5), Article 12, Article 16, Article 17 (3)(1) and (4)(2), Articles 23–24 and the provisions of Chapter 6 of the Act on Narodowy Bank Polski.

Republic of Poland “Narodowy Bank Polski shall be responsible for the value of Polish currency.” The Act on Narodowy Bank Polski (hereinafter NBP) states in Article 3 section 1 that “the basic objective of the activity of NBP shall be to maintain price stability, while supporting the economic policy of the Government, insofar as this does not constrain the pursuit of the basic objective of NBP.”

The Council has been pursuing the price stability objective by using an inflation targeting strategy. Under this strategy, since 2004 the monetary policy objective has been to keep inflation – understood as the annual change in the consumer price index – at 2.5%, with a symmetric band for deviations of ± 1 percentage point in the medium term.

The medium-term nature of the inflation target means that – due to macroeconomic and financial shocks – inflation may temporarily deviate from the target and even run outside the band for deviations from the target. The response of monetary policy to shocks is flexible and depends on their causes and the assessment of persistence of their consequences, including the impact on inflation developments. Each time inflation deviates from the target, the Council flexibly determines the desirable time necessary to bring it back to the target, as bringing inflation rapidly back to the target may entail significant costs to macroeconomic and financial stability. When deciding on the changes of monetary policy parameters, the Council takes into consideration price adjustments taking place in the economy, whose sources are beyond the impact of domestic monetary policy. In the *Monetary Policy Guidelines for 2023* it was indicated that in the current conditions these adjustments were mostly related to the shocks caused by Russia’s military aggression against Ukraine and the consequences of the COVID-19 pandemic as well as to the effects of the structural changes taking place in the economy, including the energy transition, and to the process of Poland’s convergence to the more advanced economies.

The monetary policy strategy pursued by the Council assumes flexibility of the instruments applied. This means that the range of instruments used by NBP can be adapted to the nature of the disturbances observed in the economy and market conditions. The flexible use of monetary policy instruments is conducive to the effective functioning of the transmission mechanism as well as macroeconomic and financial stability.

While taking monetary policy decisions, the Council considers the time lags in the transmission mechanism of monetary policy. The time lag between a decision on monetary policy parameters and its peak impact on real variables (such as output or employment) and on inflation takes several quarters and may change over time. Moreover, monetary policy is conducted under uncertainty, in particular about future economic developments.

Stabilising inflation at a low level is an important, yet insufficient condition to maintain balance in the economy, which, in turn, supports price stability in the long term. Imbalances in the financial sector may pose a threat to long-term price stability. Those imbalances should be counteracted mainly by macroprudential policy aimed at reducing systemic risk and in that manner supporting long-term, sustainable economic growth. This is important especially amid the free movement of capital and highly integrated financial markets. The monetary policy conducted by the Council supports macroprudential policy, and in particular is conducive to financial system stability and mitigates the risk of imbalances building up in the economy, taking into account developments in asset prices (including real estate prices) and lending growth insofar as this does not constrain the pursuit of the basic objective of NBP.

Besides monetary and macroprudential policy, fiscal policy plays an important role in maintaining macroeconomic stability. A fiscal policy which mitigates the impact of economic shocks, while ensuring long-term stability of public finance, is necessary to maintain macroeconomic stability.

In 2023, as in previous years, the Council implemented the inflation targeting strategy under the floating exchange rate regime. The floating exchange rate regime does not rule out interventions in the foreign exchange market whenever it is warranted by the market conditions or conducive to ensuring the country's macroeconomic or financial stability.

2.2. Monetary policy and macroeconomic developments in 2023

In 2023, monetary policy parameters, including NBP interest rates, were adjusted to the economic situation so as to ensure long-term price stability and, at the same time, support sustainable economic growth and financial stability. The Council strived to bring inflation down to a level consistent with the NBP inflation target in the medium term. The monetary policy decisions were made on the basis of available information, taking into account the current and expected macroeconomic situation, including inflation developments and the economic conditions.

In 2023, economic growth slowed down markedly in the euro area, while Germany saw a slight fall in GDP. Against the backdrop of weakened demand pressure in many countries and a fall in cost pressure resulting from lower commodity prices than the year before as well as the fading of the earlier global supply chain tensions, global inflation declined during 2023 following a sharp increase in previous years. Despite this, in many economies, including in the euro area and the United States, inflation was still higher than the inflation targets of the central banks.

Amid a deterioration in the economic situation abroad in 2023, a marked weakening of economic activity growth was also seen in Poland. In 2023, annual GDP growth slowed down to 0.2% (from 5.6% in 2022) and was the lowest since at least 1996 (except for 2020, i.e. at the beginning of the COVID-19 pandemic). At the same time, domestic demand fell by 3.2%, and consumption fell by 1.0%. In turn, investment continued to grow, amid a markedly negative contribution of changes in inventories to GDP growth.

Against this background, during 2023 a marked fall in CPI inflation was seen in Poland (from the peak in February 2023, annual price growth fell by 12.2 percentage points to 6.2% in December 2023; Figure 2.1).² The decrease in inflation during 2023 resulted from a fall in annual growth of all the main components of the CPI index. At the same time, all measures of core inflation declined.³ During 2023 the measures of consumer and enterprise inflation expectations also declined, as well as the inflation forecasts of financial sector analysts (formulated over the horizon of both four and eight quarters). The fall in inflation was supported by a decline in cost pressure – reflected in particular in a fall in industrial producer prices – due to the gradual fading of the earlier external supply shocks, which had resulted in

² Annual average CPI inflation declined to 11.4% in 2023 compared to 14.4% in 2022.

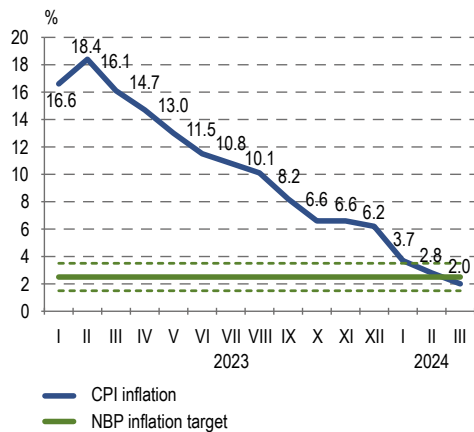
³ CPI inflation excluding food and energy prices declined from its peak of March 2023 by 5.4 percentage points, i.e. to 6.9% y/y in December 2023.

high price growth in previous years. Inflation was also lowered by reduced demand pressure, amid a tightening of NBP monetary policy undertaken in 2021–2022 and the subsequent period of keeping NBP interest rates unchanged.⁴ The decline in inflation was also supported by the appreciation of the zloty exchange rate against the major currencies in 2023.

According to incoming data at the beginning of 2024, inflation continued to decline in 2024 Q1 and from February was running at a level consistent with the NBP inflation target (according to Statistics Poland data, CPI inflation stood at 2.8% y/y in February and 2.0% y/y in March 2024).

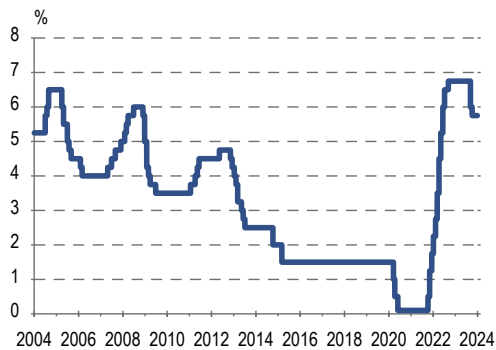
At its meetings between January and July 2023,⁵ the Council kept the NBP interest rates unchanged, including the reference rate at 6.75%, following the previous interest rate increases in 2021–2022 (Table 2.1). Consequently, from September 2022 to August 2023 the NBP reference rate was running at the highest level since the NBP inflation target was set at the current level (i.e. since 2004; Figure 2.2). At the same time, it was the longest period in the Council’s history (i.e. since 1998) of keeping NBP interest rates unchanged after previous increases. At that time, the Council judged that given the scale and persistence of the earlier shocks, which remained beyond the impact of domestic monetary policy, the return of inflation to the NBP inflation target would be gradual.

Figure 2.1. CPI inflation in Poland and NBP inflation target (y/y)



Source: Statistics Poland (GUS) and NBP data.

Figure 2.2. NBP reference rate



Source: NBP data.

Information available in September and October 2023 confirmed the systematic and rapid fall in inflation in Poland as well as the marked decline in inflation expectations. Incoming data from the economy pointed to a prolonged significant weakening of activity, including a fall in domestic demand. Alongside that, the data signalled lower cost pressure and a prolonged

⁴ The effects of earlier NBP monetary policy tightening were in particular visible in the credit market. The total bank debt of the private non-financial sector in relation to GDP in 2023 declined further and at the end of the year was approx. 15 percentage points lower than before the outbreak of the COVID-19 pandemic and the lowest since 2007.

⁵ Meetings on the following dates: 3–4 January, 7–8 February, 7–8 March, 7–8 April, 9–10 May, 5–6 June and 5–6 July 2023.

weakening of the economic conditions in Poland's main trading partners, which caused a fall in Polish exports. Lower than expected data on inflation in Poland, which was available in September and October 2023 – along with weaker-than-expected growth of domestic economic activity – indicated that the medium-term path of price growth might also run below the forecasts and inflation might return to the inflation target faster. At the same time, the fall in inflation and inflation expectations contributed to an increase in the restrictiveness of monetary policy. Considering these circumstances – and taking into account the time lags in the monetary policy transmission to the economy – at the meetings in September and October 2023⁶ the Council adjusted the NBP interest rates, including cuts in the NBP reference rate in total from 6.75% to 5.75%.

In turn, at the meetings in November and December 2023⁷ the Council – considering the adjustment in the interest rates introduced in the previous months together with the uncertainty about the future course of fiscal and regulatory policies and their impact on inflation – kept NBP interest rates unchanged.

Table 2.1. NBP interest rates at the end of the respective months (%)

Month	Reference rate	Lombard rate	Deposit rate	Rediscount rate	Discount rate
December 2022	6.75	7.25	6.25	6.80	6.85
January 2023	6.75	7.25	6.25	6.80	6.85
February 2023	6.75	7.25	6.25	6.80	6.85
March 2023	6.75	7.25	6.25	6.80	6.85
April 2023	6.75	7.25	6.25	6.80	6.85
May 2023	6.75	7.25	6.25	6.80	6.85
June 2023	6.75	7.25	6.25	6.80	6.85
July 2023	6.75	7.25	6.25	6.80	6.85
August 2023	6.75	7.25	6.25	6.80	6.85
September 2023	6.00	6.50	5.50	6.05	6.10
October 2023	5.75	6.25	5.25	5.80	5.85
November 2023	5.75	6.25	5.25	5.80	5.85
December 2023	5.75	6.25	5.25	5.80	5.85

Source: NBP data.

The following part of the Chapter provides information on the background to the Council's decisions regarding NBP interest rates in 2023 divided into two sub-periods, i.e. from January to August 2023 and from September to December 2023.

⁶ Meetings on 5–6 September and 3–4 October 2023.

⁷ Meetings on 7–8 November and 5–6 December 2023.

Monetary policy and macroeconomic developments in January–August 2023

Incoming data between January and August 2023 indicated that the economic conditions in the environment of the Polish economy, particularly in the euro area, were weakening.⁸ At the same time, economic conditions in the United States remained relatively strong.⁹ Global economic activity was further adversely affected by the effects – albeit gradually fading – of the earlier supply shocks associated with the COVID-19 pandemic and Russia’s military aggression against Ukraine and the effects of the monetary tightening. Also, uncertainty about the global economic outlook persisted.¹⁰ Data and forecasts available at that time suggested that activity growth in the environment of the Polish economy would be markedly lower in 2023 than in 2022.¹¹ At the same time, the situation in the labour markets of many economies remained good.

In the period under analysis, the previous negative supply shocks were gradually fading. The prices of energy and agricultural commodities were running below the record-high levels of 2022 while remaining above their pre-pandemic averages.¹² Tensions in global supply chains were also receding. The easing cost pressure was reflected in a marked decline in industrial producer price growth in many economies.

Amid the gradually fading supply shocks, slowing economic activity growth and higher interest rates than in previous years, inflation in many economies declined during the first eight months of 2023 while remaining elevated. In the euro area, HICP inflation declined from 8.6% y/y in January to 5.2% y/y in August 2023 (Figure 2.3), although core inflation continued to be markedly elevated. Available forecasts indicated that in the subsequent quarters inflation in the environment of the Polish economy should continue to decrease, although this was to happen gradually. At the same time, consumer price growth in the economies of the Central and Eastern Europe was also declining, although it was running higher on average than in the major advanced economies (Figure 2.4).

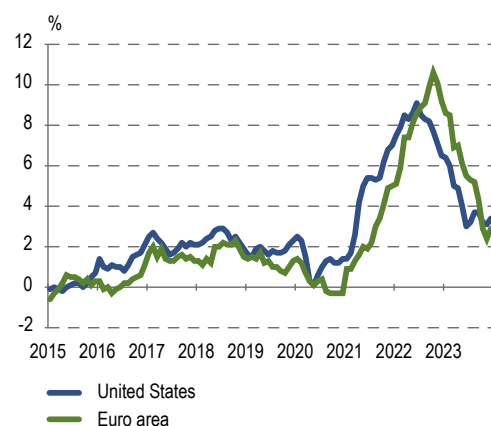
⁸ GDP growth in the euro area stood at 1.9% y/y in 2022 Q4, 1.3% y/y in 2023 Q1, and 0.6% y/y in 2023 Q2.

⁹ GDP growth in the United States stood at 0.7% y/y in 2022 Q4, 1.7% y/y in 2023 Q1 and 2.4% y/y in 2023 Q2.

¹⁰ From March 2023, tensions observed in the banking sector in the United States and Europe constituted an additional factor of uncertainty for the global economic outlook.

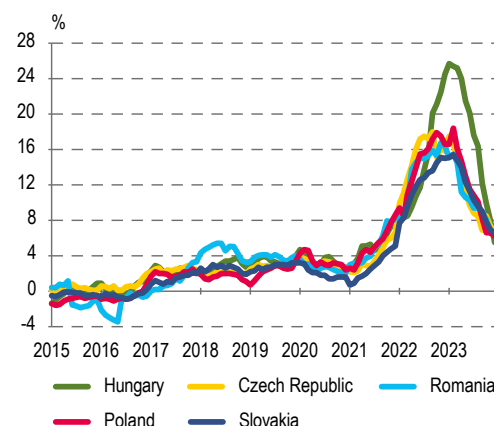
¹¹ This concerned in particular the German economy, where, according to the forecasts available in the period under analysis, GDP growth in 2023 was expected to be close to zero or negative.

¹² The average oil price (Brent crude oil price in US dollars per barrel) in 2023 was approximately 40% higher than the pre-COVID-19 average (i.e. the 2015–2019 average) and approximately 17% lower than the 2022 average; the average price of natural gas (futures contracts quotes for natural gas delivered to the Dutch TTF hub in US dollars per megawatt hour) was more than twice as high as the 2015–2019 average and about three times lower than the 2022 average, the average coal price (quotes for hard coal futures contracts at Richard’s Bay in US dollars per tonne) was about 60% higher than the 2015–2019 average and about half the 2022 average, and the average agricultural commodity price index (in euros) was about 50% higher than the 2015–2019 average and about 4% lower than the 2022 average.

Figure 2.3. Consumer price inflation in the United States and the euro area (y/y)

United States – CPI inflation. Euro area – HICP inflation.

Source: Bureau of Labor Statistics and Eurostat data.

Figure 2.4. Consumer price inflation in CEE countries (y/y)

Poland, Czech Republic, Hungary, Romania – CPI inflation. Slovakia – HICP inflation.

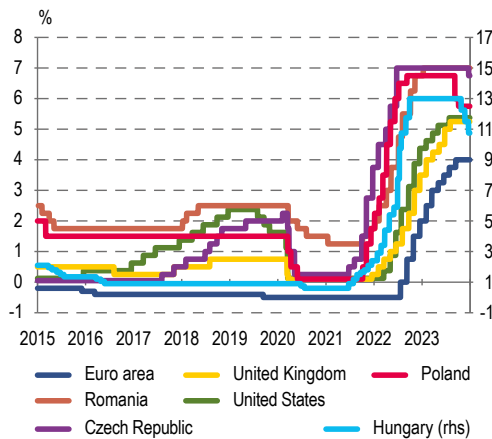
Source: Eurostat, OECD and national statistical offices data.

Against this background, from January to August 2023 central banks in many economies continued to raise interest rates, albeit on a smaller scale than in 2022. The European Central Bank (hereinafter the ECB), raised interest rates between January and July 2023, including the deposit facility rate by a total of 1.75 percentage points (from 2.00% to 3.75%; Figure 2.5). Between January and July 2023, the Federal Reserve of the United States (hereinafter the Fed) increased the target range for the fed funds rate in total by 1.00 percentage point (from 4.25–4.50% to 5.25–5.50%). At the same time, in Central and Eastern Europe, the Czech central bank kept interest rates unchanged, while the Hungarian central bank eased monetary policy by cutting interest rates.

In the domestic economy, incoming data between January and August 2023 pointed to a decline in annual GDP growth, including falling below zero in the first half of 2023 (Figure 2.6). GDP growth amounted to 2.8% y/y in 2022 Q4, subsequently declining to -0.4% y/y in 2023 Q1, and -0.6% y/y in 2023 Q2. At the same time, annual growth in domestic demand also fell below zero (it stood at 1.3% y/y in 2022 Q4, -4.8% y/y in 2023 Q1 and -2.6% y/y in 2023 Q2). In particular, the effects of the earlier external supply shocks – which reduced household income growth and limited consumption growth in the first half of 2023 – as well as the weakened economic conditions in the euro area and the persistent uncertainty related to Russia's military aggression against Ukraine – contributed to lowering economic activity growth. The effects of the NBP interest rates hikes undertaken in 2021–2022 also had a downward effect on demand growth. On the other hand, economic activity was boosted by the relatively robust investment growth, the effects of fiscal policy measures and the continuing favourable situation in the labour market. Available forecasts, including inflation and GDP projections of March and July 2023, indicated that the annual average GDP growth in 2023 would be markedly lower than in 2022.

In the period under analysis, despite a slowdown in economic activity, the situation in the labour market remained favourable. The low unemployment rate and marked growth in nominal wages continued. At the same time, the number of working persons remained high, although annual employment growth in the enterprise sector was slowing down.

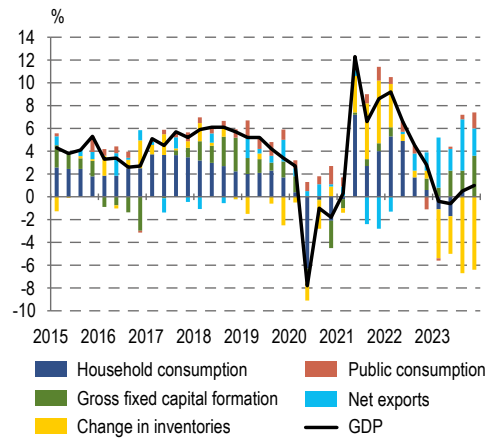
Figure 2.5. Interest rates of selected central banks



Central bank interest rate: for the United States – the midpoint of the fed funds range; for the euro area – the deposit facility; for the United Kingdom – Bank Rate; for Czech Republic – repo 2W; for Romania – monetary policy rate; for Hungary – base rate; for Poland – NBP reference rate.

Source: Bloomberg data.

Figure 2.6. GDP growth in Poland and its components (y/y)



Source: Statistics Poland (GUS) data, NBP calculations.

CPI inflation in Poland – after rising at the beginning of 2023 (from 16.6% y/y in January to 18.4% y/y in February; Figure 2.7)¹³ – declined markedly in subsequent months and stood at 10.1% y/y in August 2023. The fall in inflation was driven by slower annual growth in all the main components of the CPI index, i.e. prices of food and non-alcoholic beverages, energy prices as well as CPI inflation excluding food and energy prices (including both non-food goods and services). The decline in inflation was supported by the fading cost pressures related to the earlier external negative supply shocks, including lower global commodity prices and the easing of the tensions in global supply chains, as well as weakening consumer demand. Disinflation was also supported by the appreciation of the zloty against major currencies. According to available forecasts, inflation was expected to decline further. The GDP and inflation projections from March and July 2023 indicated that, under the assumption of unchanged NBP interest rates, inflation would gradually decline to a level consistent with the NBP inflation target.

¹³ The increase in CPI inflation in early 2023 resulted, among others, from an increase in the average bill on electricity, heating and gas on the back of the restoration of the base VAT rates for energy products to the levels from before the introduction of the so-called Anti-Inflation Shield and changes in some tariffs accompanied with the introduction of regulations limiting the increase in household payments, as well as a statistical base effect associated with the reduction in the VAT rate on basic food products in February 2022 and further, albeit weakening, growth in CPI inflation excluding food and energy prices.

At the same time, the impact of the strong tightening of the NBP monetary policy undertaken in 2021–2022 and the subsequent period of keeping NBP interest rates unchanged, which was reflected, among others, in credit market conditions, contributed to lowering inflation. In the period under analysis, annual growth in the household sector bank debt – despite gradually picking up – remained negative (in August 2023 it stood at -3.2% y/y).¹⁴ This was accompanied by a sharp decline in the growth of the non-financial corporation sector bank debt (from 9.9% y/y in January to -3.0% y/y in August 2023; Figure 2.8).

Figure 2.7. Composition of CPI inflation (y/y)

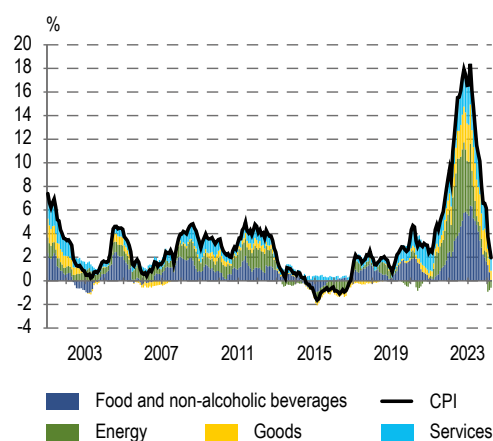
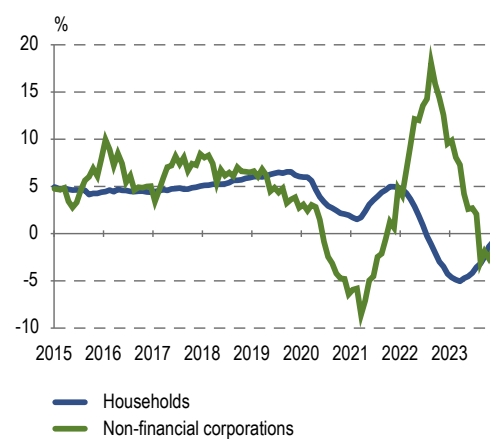


Figure 2.8. Growth in household and non-financial corporation sectors bank debt resulting from transaction changes in Poland (y/y)



Source: Statistics Poland (GUS) data, NBP calculations. Source: NBP data.

To sum up, information available in the period of January–August 2023 indicated that the weakening of the external economic conditions, together with lower commodity prices, would curb global inflation, which should also contribute to lower price growth in Poland. At the same time, incoming data indicated that the decline in inflation in Poland would also be supported by the weakening of domestic GDP growth, including consumption, amid a significant decrease in credit growth. Against this background, the previous strong monetary policy tightening undertaken by NBP and the subsequent period of keeping NBP interest rates unchanged (the NBP reference rate was then running at the highest level since the NBP inflation target was set at the current level, i.e. 2004) led to a decrease in inflation in Poland towards the NBP inflation target. At that time, the Council judged that given the scale and persistence of the earlier shocks, which remained beyond the impact of domestic monetary policy, the return of inflation to the NBP inflation target would be gradual. This assessment was supported by the forecasts available at the time, including the March and July 2023 inflation and GDP projections. Therefore, at the meetings held from January to July 2023, the Council kept the NBP interest rates unchanged, including the reference rate at 6.75%.

¹⁴ The monetary and credit aggregate growth data cited in the *Report* are defined as annual growth resulting from transaction changes. The data refer to monetary financial institutions.

Monetary policy and macroeconomic developments in September–December 2023

Data available between September and December 2023 indicated that weakened economic conditions and uncertainty about the activity outlook persisted in the environment of the Polish economy. In the euro area, annual GDP growth was close to zero, and in Germany it was negative.¹⁵ Incoming information indicated that the expected economic recovery in the euro area in 2024 will be weaker than earlier forecast. In turn, the economic situation in the United States was favourable.¹⁶ At the same time, the situation in the labour markets in most economies remained good.

The weakened economic situation along with the fading of the effects of the earlier negative supply shocks contributed to a further fall in inflation in the environment of the Polish economy, while consumer price growth continued to be elevated in many countries.¹⁷ In the largest economies annual industrial producer price growth was negative, which was evidence of low cost pressure. At the same time, in many economies core inflation remained elevated, although it was gradually declining. At the end of 2023 in the economies of Central and Eastern Europe, consumer price growth, despite a significant fall, was still higher on average than in the major advanced economies (Figure 2.4). Towards the end of 2023, uncertainty about the development of energy commodity prices and the functioning and costs of international transport increased due to the marked escalation of geopolitical tensions in the Middle East.

In these conditions, the central banks of the major advanced economies stopped raising interest rates. After raising interest rates by 0.25 percentage points in September 2023 (including the deposit rate to 4.00%), the ECB kept them unchanged at the subsequent meetings (Figure 2.5). In turn, following the last interest rate hike in 2023 in July, the Fed kept the target range for the fed funds rate unchanged. Among the central banks of Central and Eastern European economies, which after the pandemic crisis began tightening monetary policy earlier and raised interest rates to a greater extent than the central banks of the advanced economies, in the period under analysis particularly the Hungarian central bank continued the easing of monetary policy parameters begun in April 2023, while the Czech central bank lowered interest rates in December 2023.

Data available in September 2023 indicated that economic activity growth in Poland remained markedly weakened and was running below earlier expectations, including the July projection. In 2023 Q2, the fall in GDP deepened to 0.6% y/y (compared to the July projection indicating a fall of 0.1% y/y), with a further fall in consumption (consumption growth amounted to -2.9% y/y) and a decline in exports in annual terms, although annual investment growth remained positive (Figure 2.6).¹⁸ GDP growth was significantly lower than the estimated potential growth of the Polish economy. Incoming data in the last months of 2023 indicated

¹⁵ GDP growth in the euro area was 0.1% y/y in 2023 Q3 and Q4 (compared to 0.6% y/y in 2023 Q2), while the annual average GDP growth in 2023 was 0.4% y/y. In Germany GDP growth stood at -0.3% y/y in 2023 Q3 and -0.2% y/y in 2023 Q4 (compared to 0.1% y/y in 2023 Q2 and -0.1% y/y in 2023 Q1), while the annual average GDP growth in 2023 was -0.3% y/y.

¹⁶ In the United States GDP growth stood at 2.9% y/y in 2023 Q3 and 3.1% y/y in 2023 Q4 (compared to 2.4% y/y in 2023 Q2).

¹⁷ In the euro area, HICP inflation stood at 2.9% y/y in December 2023 (compared to 4.3% y/y in September 2023). In turn, in the United States CPI inflation stood at 3.4% y/y in December 2023 (compared to 3.7% y/y in September 2023).

¹⁸ Monthly data available at the time pointed to the persisting low economic activity growth also in 2023 Q3 – in particular industrial output and retail sales continued to fall in annual terms in July and August.

that – despite some increase – economic activity growth continued to be low and weaker than earlier forecasts. In 2023 Q3, GDP grew by 0.5% y/y (i.e. 0.7 percentage points less than indicated by the July projection), while the fall in domestic demand deepened (standing at 4.1% y/y), despite a certain rebound of consumption.¹⁹ Forecasts available in the last months of 2023 indicated that in the coming quarters the GDP growth rate will accelerate.

In the period from September to December 2023 the labour market situation remained good, with the unemployment rate running at a low level and the number of working persons remaining high. However, annual growth in employment in the enterprise sector continued to decline and was negative in the last months of 2023. At the same time, in view of the sharp fall in inflation amid a marked increase in nominal wages, annual wage growth was positive in real terms.

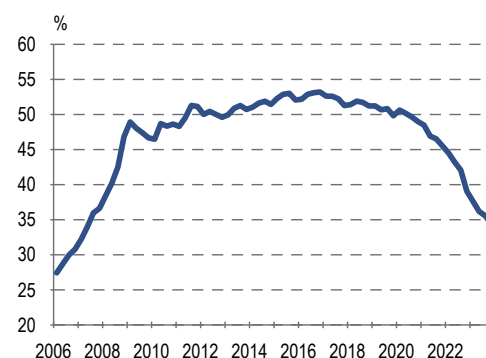
Amid weakening cost and demand pressure, the period between September and December 2023 saw a further marked fall in CPI inflation in Poland (to 6.2% y/y in December 2023), which was the result of slower growth in prices of food and non-alcoholic beverages and the fall in CPI inflation excluding food and energy prices (including both non-food goods and services), and also – albeit to a lesser extent – energy price growth (Figure 2.7).²⁰ The fall in CPI inflation and CPI inflation excluding food and energy prices was stronger than earlier forecasts.²¹ This was accompanied by a fall in annual industrial producer price growth (in the period from July to December 2023 this growth was negative; Figure 2.9). The decline in inflation was also supported by the stronger zloty exchange rate against the major currencies than a year ago.

Figure 2.9. Industrial producer price inflation in Poland (y/y)



Source: Statistics Poland (GUS) data.

Figure 2.10. Total bank debt of household and non-financial corporation sectors in relation to GDP in Poland



GDP – four-quarter rolling sum.

Source: NBP and Statistics Poland (GUS) data.

¹⁹ In 2023 Q4, GDP growth stood at 1.0% y/y (0.6 percentage points lower than indicated in the July projection and 0.3 percentage points lower than indicated in the November projection).

²⁰ At the same time, in the period under analysis, all the remaining measures of core inflation also declined.

²¹ In 2023 Q3, CPI inflation stood at 9.7% y/y (i.e. it was 0.6 percentage points lower than indicated in the July projection). CPI inflation excluding food and energy prices also stood at 9.7% y/y (i.e. it was 0.3 percentage points lower than indicated in the July projection). In turn, CPI inflation stood at 6.4% y/y in 2023 Q4 (i.e. it was 1.4 percentage points lower than indicated in the July projection and 0.3 percentage points lower than indicated in the November projection), and CPI inflation excluding food and energy prices stood at 7.4% (i.e. it was 1.1 percentage points lower than indicated in the July projection and 0.2 percentage points lower than indicated in the November projection).

In the period under analysis, available information and forecasts, including the NBP projections, indicated that inflation will continue to decline in the coming quarters. At the same time, there was an uncertainty about the future VAT rates on food products and energy price regulations as well as other elements of fiscal policy in the coming years and also their impact on inflation in the short and medium term.

In the period between September and December 2023, the decline in inflation continued to be supported by the effects of NBP's earlier strong monetary policy tightening. Until November 2023, annual growth rates of both household and non-financial corporation sector bank debt remained negative, despite signs of a recovery in lending, particularly in the housing loan segment, which was supported by the "Safe Mortgage" programme.²² At the same time, at the end of 2023 household sector bank debt remained lower than before the first NBP interest rate hike in 2021. In turn, the ratio of private non-financial sector bank debt to GDP continued to decline throughout 2023 and at the end of the year was approx. 15 percentage points lower than before the outbreak of the COVID-19 pandemic and the lowest since 2007 (Figure 2.10).²³

Information available in September and October 2023 confirmed the systematic and rapid fall in inflation as well as the marked decline in inflation expectations. Incoming data from the economy pointed to a prolonged significant weakening of economic activity, including a fall in domestic demand and in particular a deepening of the fall in consumption in 2023 Q2. At the same time, the domestic and external data signalled lower cost pressure and a prolonged weakening of the economic conditions in Poland's main trading partners, which caused a fall in Polish exports. Lower than expected data on inflation in Poland, which was available in September and October 2023 – along with weaker-than-expected growth of domestic economic activity – indicated that the future path of price growth might also run below the forecasts. Against this background, the likelihood of a faster return of inflation to the NBP inflation target increased. At the same time, the fall in inflation expectations and inflation contributed to an increase in the restrictiveness of monetary policy.

Considering these circumstances – and taking into account the time lags in the monetary policy transmission to the economy – at the meetings in September and October 2023 the Council adjusted the NBP interest rates, including cuts in the NBP reference rate in total from 6.75% to 5.75%. In turn, at the meetings in November and December 2023 the Council – considering the adjustment in the interest rates introduced in the previous months together with the uncertainty about the future course of fiscal and regulatory policies and their impact on inflation – kept NBP interest rates unchanged, judging that their level is conducive to meeting the inflation target in the medium term.

2.3. Monetary policy instruments in 2023

In 2023, NBP conducted monetary policy using instruments provided for in the *Monetary Policy Guidelines for 2023*. In the period from January to August 2023, NBP interest rates were

²² Growth of household sector bank debt was 0.3% y/y in December 2023 compared to -2.5% y/y in September 2023 (earlier, from July 2022 to November 2023 it remained negative). In turn, growth of non-financial corporation sector bank debt was 0.5% y/y in December 2023 compared to -1.9% y/y in September 2023 (in the period from August to November 2023 it remained negative).

²³ In 2023 Q4 total bank debt of the household and non-financial corporation sector was 34.3% of GDP compared to 49.8% of GDP at the end of 2019.

kept unchanged. In September and October 2023 these rates were lowered by the Council, after which in November and December 2023 they remained unchanged.

Banking sector liquidity

In 2023 liquidity surplus prevailing in the banking sector increased in comparison with the previous year. The average daily level of funds at the disposal of the banking sector in excess of the required reserve stood at PLN 301 239 million in December 2023 and was PLN 64 639 million higher than in the corresponding period of 2022.²⁴

The increase in liquidity surplus in 2023 was largely a result of the net purchases of foreign currency carried out by NBP on behalf of clients. Foreign currency purchase transactions involved mainly funds from the Ministry of Finance, and their sale was carried out mainly for the needs of the European Commission. The net purchase of foreign currency carried out in 2023 caused an increase in the level of funds at the disposal of the banking sector of PLN 53 230 million, comparing the average daily value from December 2023 to the value from December 2022.

On the other hand, liquidity surplus in the banking sector was curbed by the increase in currency in circulation observed in 2023. As a result, the level of funds at the disposal of the banking sector declined by PLN 6 507 million (after a comparison of averages is made, as above).

As a result of increased liquidity surplus in the banking sector, in December 2023 the average daily level of short-term monetary policy operations²⁵ stood at PLN 301 012 million, i.e. it increased by PLN 64 625 million against the corresponding value from December 2022.

NBP interest rates

The NBP interest rates were the key instrument of monetary policy in 2023.

The NBP reference rate determined the yield obtainable on the NBP main open market operations, while at the same time affecting the level of short-term market interest rates.

The NBP lombard rate determined the interest on the lombard credit offered by NBP, allowing to obtain funds from the central bank on an overnight basis.

The NBP deposit rate determined the interest on the deposit facility, allowing to deposit funds with NBP on an overnight basis.

In 2023, the MPC cut the NBP interest rates on two occasions. These changes took effect from 7 September 2023 (a cut of 75 bps) and 5 October 2023 (a cut of 25 bps). As a result of

²⁴ In Chapter 2 the data and calculations are generally presented in a format where a given month or year refers to the corresponding required reserve maintenance periods.

²⁵ This item encompasses: the main open market operations (issue of NBP bills), the fine-tuning operations (issue of NBP bills with maturities shorter than the main open market operations) and the NBP standing facilities.

these changes, the NBP reference rate was lowered from 6.75% to 5.75%, the NBP deposit rate from 6.25% to 5.25%, and the NBP lombard rate from 7.25% to 6.25%.

In 2023, the NBP interest rate corridor, set by the levels of the NBP deposit rate and the NBP lombard rate, was symmetric around the NBP reference rate and stood at +/-50 bps.

The NBP deposit rate determined the interest on the deposit facility, allowing to deposit funds with NBP on an overnight basis.

In 2023, the MPC cut the NBP interest rates on two occasions. These changes took effect from 7 September 2023 (a cut of 75 bps) and 5 October 2023 (a cut of 25 bps). As a result of these changes, the NBP reference rate was lowered from 6.75% to 5.75%, the NBP deposit rate from 6.25% to 5.25%, and the NBP lombard rate from 7.25% to 6.25%.

In 2023, the NBP interest rate corridor, set by the levels of the NBP deposit rate and the NBP lombard rate, was symmetric around the NBP reference rate and stood at +/-50 bps.

Open market operations

In 2023, the operational target of monetary policy was to keep the POLONIA rate²⁶ close to the NBP reference rate. The main instrument used to achieve this task was the main open market operations. By using these operations, NBP offered banks the opportunity to balance their liquidity positions during the required reserve maintenance periods, striving to ensure that liquidity conditions in the banking sector were appropriate in view of achieving its operational target.

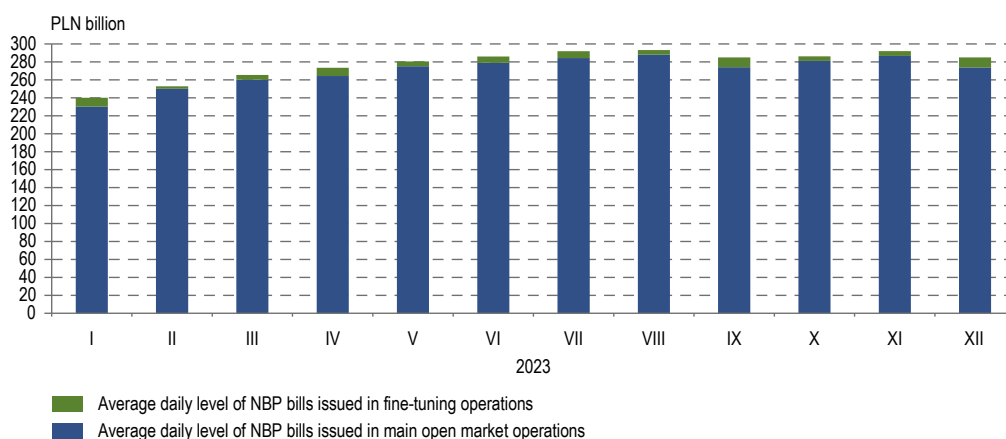
In 2023, the main open market operations were carried out on a regular weekly basis, in the form of issuance of NBP bills, usually with a 7-day maturity.²⁷ By using these operations, NBP absorbed the majority of the excess funds at the disposal of the banking sector relative to the required reserve. The yields on the individual operations equalled the level of the NBP reference rate on the day of the operation. In 2023, NBP conducted 52 main operations. The average daily volume of NBP bills issued under these operations amounted to PLN 270 832 million and was PLN 79 196 million higher than in 2022 (Figure 2.11).

A complementary role with respect to the NBP operational target was played by the fine-tuning operations. In 2023 such operations were carried out in the form of issuance of NBP bills. The yields on these operations equalled the level of the NBP reference rate on the day of the operation. In 2023, NBP conducted 12 fine-tuning operations on the last business days of the required reserve maintenance periods, and 35 fine-tuning operations on other days within such periods. Maturities of these operations varied from 1 day to 4 days. The average daily level of fine-tuning operations in 2023 amounted to PLN 7 136 million and was PLN 1 138 million higher than in 2022.

²⁶The POLONIA rate (Polish Overnight Index Average) is determined as the average (weighted by the volume of the individual transactions) of the interest rates on unsecured interbank overnight deposits on a given business day until 4.30 p.m. between the Participants in the POLONIA Reference Rate Fixing.

²⁷Except for the operation conducted on 5 January 2023 (8-day maturity).

Figure 2.11. Average daily level of NBP liquidity-absorbing open market operations in individual required reserve maintenance periods in 2023 (nominal value of NBP bills)

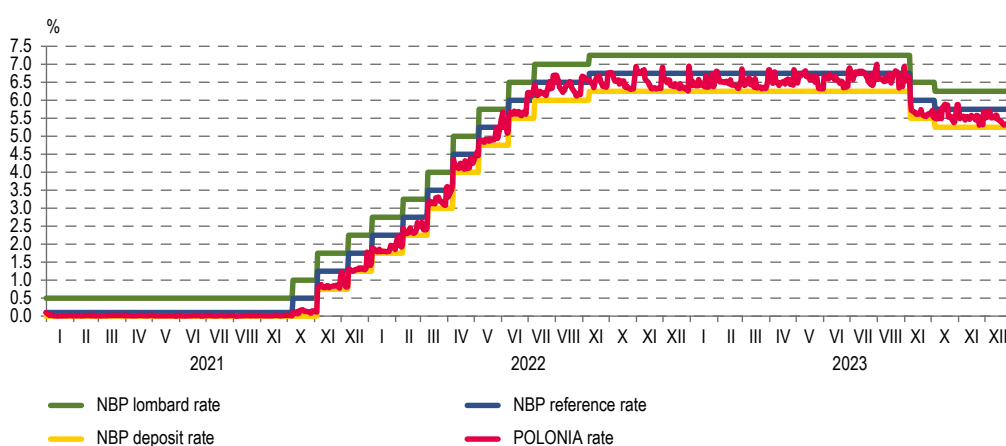


Source: NBP data.

In 2023 banks remained more cautious about managing their liquidity positions. This caution manifested itself in banks' preference for investing some of their surplus funds in instruments allowing the maximum flexibility in liquidity management, including the deposit facility offered by the central bank.

This attitude of banks towards managing own liquidity positions was reflected in the POLONIA rate (Figure 2.12). The average daily absolute deviation of this index from the NBP reference rate in 2023 amounted to 30 bps and was 2 bps lower than in 2022 (32 bps).²⁸

Figure 2.12. NBP interest rates and the POLONIA rate in 2021–2023

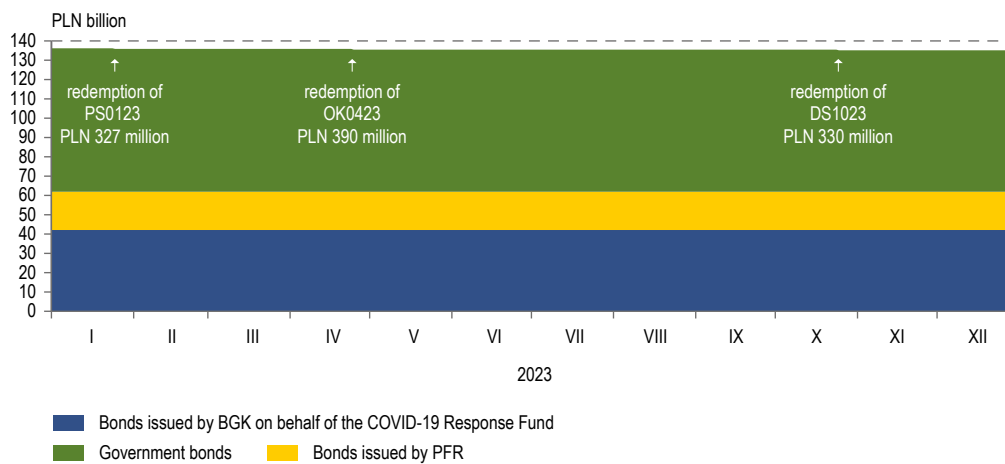


Source: NBP data.

²⁸ Due to the fact that the POLONIA rate is calculated in accordance with the act/365 convention, while for NBP bills issuance the act/360 convention is used, the average daily absolute deviation of this index from the NBP reference rate is based on a uniform 365-day year, and thus it is quoted against the NBP reference rate converted on a 365-day year basis.

In 2023, NBP did not conduct structural operations. At the end of 2023 the nominal value of the securities portfolio (i.e. government bonds and government-guaranteed debt securities issued by Bank Gospodarstwa Krajowego on behalf of the COVID-19 Response Fund and by Polski Fundusz Rozwoju SA) purchased by NBP in 2020–2021 amounted to PLN 135.1 billion, as compared to PLN 136.2 billion as at the end of 2022 (Figure 2.13).²⁹

Figure 2.13. The nominal value of portfolio of the bonds purchased by NBP in 2020 and 2021 as part of the structural open market operations



Source: NBP data.

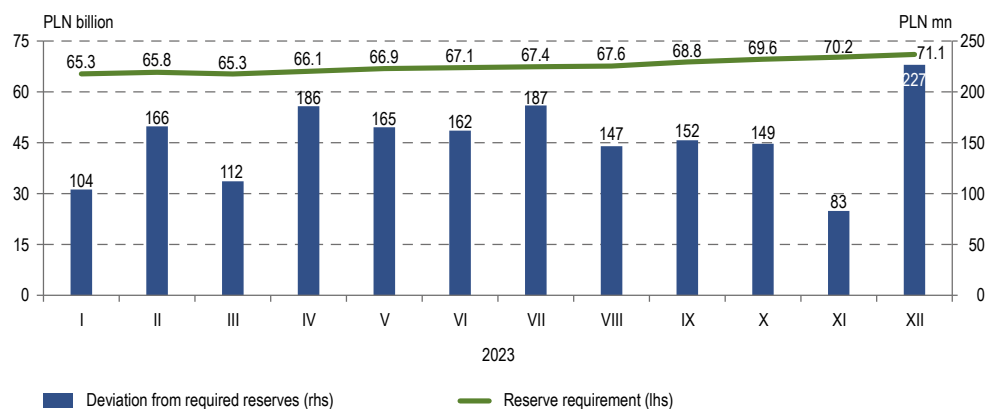
Reserve requirement

The required reserve system supported the achievement of the operational target of monetary policy, stabilising the POLONIA rate. The average reserve maintenance mechanism enabled institutions subject to the reserve requirement the freedom to decide on the amount of funds deposited on accounts with the central bank on particular days of the reserve requirement period, provided that the average balance of funds in the accounts with NBP is maintained at a level not lower than the required reserve level.

In 2023, banks, branches of credit institutions, branches of foreign banks operating in Poland, credit unions and the National Association of Cooperative Savings and Credit Unions were subject to the reserve requirement.

²⁹ In 2023, redemption of government bonds took place involving the PS0123 series (on 25 January 2023), the OK0423 series (on 25 April 2023), and the DS1023 series (on 25 October 2023), whose nominal value in the NBP portfolio stood, respectively, at PLN 327 million, PLN 390 million and PLN 330 million.

Figure 2.14. Deviation of the average balance of institutions' subject to the reserve requirement accounts kept in NBP from the required reserve level in individual required reserve maintenance periods in 2023



Source: NBP data.

The required reserve level in December 2023 stood at PLN 71 051 million, including the required reserve of commercial banks – PLN 65 741 million, cooperative banks – PLN 5 006 million, and the credit unions – PLN 304 million. In comparison to the required reserve in December 2022 there was an increase in the above-mentioned reserve by PLN 5 481 million, which was due to an increase in the funds which form the reserve base (Figure 2.14).

The remuneration of required reserve in 2023 corresponded to the NBP reference rate. Over the period under analysis, on account of the Council cutting the NBP interest rates, the remuneration declined from 6.75% to 5.75%.

In 2023, the average daily level of surplus funds held on accounts with NBP by institutions subject to the reserve requirement (i.e. exceeding the amount of the required reserve) varied among the required reserve maintenance periods from PLN 83 million to PLN 227 million.

In the period under analysis, there were two cases when institutions subject to the reserve requirement failed to maintain the required reserve at the required level.

Moreover, in 2023 one bank benefited from partial exemption from the reserve requirement.

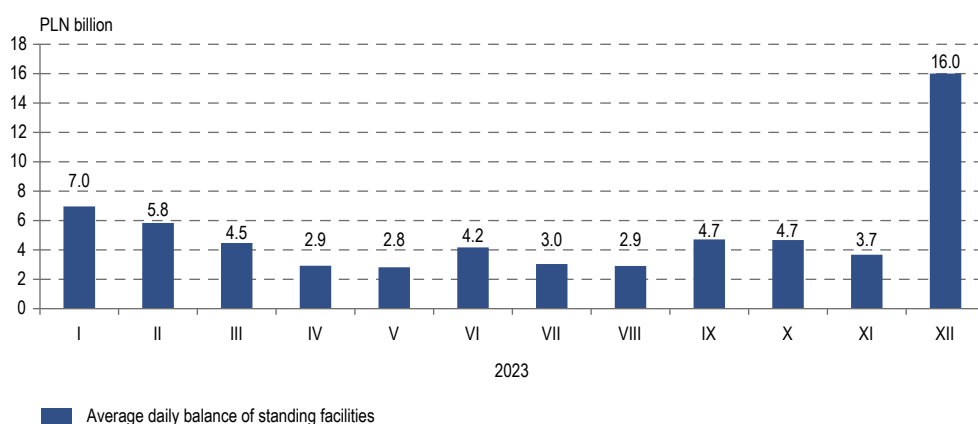
Standing facilities

The standing facilities offered by NBP were aimed at limiting the scale of fluctuations of the POLONIA rate by stabilising the liquidity conditions in the banking sector.

The lombard credit enabled banks to obtain funds from NBP in 2023 on each operating day on an overnight basis. The collateral on the loans drawn by banks was mainly in the form of government securities and government-guaranteed debt securities.

In turn, the deposit facility enabled banks in 2023 to deposit on each operating day their surplus funds on an overnight basis with the central bank.

Figure 2.15. Average daily balance of standing facilities in individual required reserve maintenance periods in 2023



Source: NBP data.

In 2023, similarly as in previous years, banks used the lombard credit only occasionally. The total amount of the lombard credit provided to banks by NBP in 2023 – calculated for the days when it was used – stood at PLN 89 million, against PLN 62 million in 2022. Its average daily level amounted to PLN 0.24 million against PLN 0.17 million in 2022 (Figure 2.15).

In 2023, the total value of overnight deposits placed by banks with NBP (calculated as the total days of their placement) amounted to PLN 1 913 437 million and was PLN 1 575 292 million lower in comparison to deposits placed in 2022. The average daily level of such deposits in the period under analysis amounted to PLN 5 242 million (against PLN 9 506 million in 2022).

Bill discount credit

NBP may offer the bill discount credit aimed at refinancing loans granted to entrepreneurs by banks.

In 2023, NBP did not use this instrument.

Foreign exchange swaps

By using foreign exchange swaps, NBP may purchase (or sell) the Polish zloty against a foreign currency on the spot market, with its simultaneous resale (or repurchase) as part of a forward transaction on a specified date.

In 2023, NBP did not conduct any such operations.

Foreign exchange interventions

As part of the current monetary policy strategy, NBP may purchase or sell foreign currency for the Polish zloty in the foreign exchange market.

In 2023, NBP did not conduct any such operations.

Chapter 3

Financial system

Financial system¹

A stable-functioning financial system is essential for sustainable economic development in the long-term and for the implementation of the main goal of NBP, i.e. maintaining price stability. The financial stability tasks conferred upon Narodowy Bank Polski include acting with the aim of eliminating or mitigating systemic risk, establishing the necessary conditions for the development of the banking system and acting in favour of the stability of the financial system.

Maintaining the safety of the banking system, whose assets account for three fourths of the assets of domestic financial institutions, is of special significance for the preservation of financial stability in Poland.

3.1. Macroprudential supervision

Narodowy Bank Polski implemented the tasks arising from the Act on NBP through substantive and formal organisation of the work of the Financial Stability Committee as the competent authority for macroprudential supervision (FSC-M). The Committee held four meetings in 2023.

As part of FSC-M work in 2023 Narodowy Bank Polski:

- Prepared and provided analyses, studies and opinions on the identification and assessment of basic sources of systemic risk, nationally and internationally, including NBP regular reports: *Financial Stability Report* (twice a year) and *Macroeconomic Stability of the Polish Economy* (once a year) and *Polish Payment System Oversight Report* (once a year).²
- Prepared the analyses constituting the base for the FSC-M to formulate opinions and recommendations of actions taken by other financial safety net institutions who are members of the Committee to mitigate systemic risk, including actions on the countercyclical capital buffer (maintaining its requirement at a 0% rate) and risk weights for exposures secured by mortgages on residential real estate.
- Analysed the developments in the domestic residential and commercial real estate market, using, among others, indicators specified in the recommendations of the European Systemic Risk Board.³
- Monitored the foreign exposures of the Polish banking sector in compliance with the ESRB's recommendation concerning the reciprocity rule in the application of macroprudential policy measures taken by other EU countries.

¹ Tasks in this area are fulfilled pursuant to Article 3(2)(6), (6a) and (6b) of the Act on Narodowy Bank Polski.

² See Chapter *Payment system-oriented activities*.

³ Recommendation of the European Systemic Risk Board of 21 March 2019 amending Recommendation ESRB/2016/14 on closing real estate data gaps (ESRB/2019/3) and Recommendation of the European Systemic Risk Board of 1 December 2022 on vulnerabilities in the commercial real estate sector in the European Economic Area (ESRB/2022/9).

- Provided services of a formal and legal nature with respect to resolutions adopted by the Committee.
- Participated in law-making processes dealing with legislation on macroprudential supervision.
- Cooperated, on behalf of the Committee, with European Union bodies and institutions as well as with macroprudential supervision authorities of other EU Member States on their policies.

The Governor of NBP – acting as Chairperson of the FSC-M – submitted to the Sejm of the Republic of Poland (the Polish Parliament) the *Annual Report on Macroprudential Supervision Activity of the Financial Stability Committee 2022*.⁴ NBP also communicated the work of the Committee to the public and financial system participants via the NBP website.

A representative of NBP chaired the work of the permanent working group which provides analytical support to the Committee. Based on materials provided by NBP, the sources of systemic risk were discussed and analyses were prepared to support the Committee's decision-making processes on a regular basis. In 2023, the work included, among others, methods for assessing the adequacy of capital levels in the banking sector in the context of systemic risk, including the need for creating an additional capital buffer and determining the method of its calibration, methods for assessing the cross-border effects of Polish macroprudential instruments, macroprudential supervision communication policy, and the assessment of micro- and macroprudential policy coordination and cooperation.

3.2. Cooperation with other public institutions on financial stability

Narodowy Bank Polski participates in the work of the Financial Stability Committee in its crisis management capacity (FSC-C), chaired by the Minister of Finance. The FSC-C held four meetings in 2023. Its members discussed the economic and financial condition of commercial banks and actions aimed at preserving financial stability.

Representatives of NBP participated in the work of the National Working Group for Benchmark Reform. The group coordinates actions aimed at replacing, in an orderly manner, the WIBOR and WIBID benchmarks with WIRON benchmark.⁵

In 2023, Narodowy Bank Polski appointed its representatives to work in the BFG-established college for the resolution of KDPW_CCP SA (the requirement to set up a permanent college stems from the provisions of the EU Regulation).⁶ Representatives of NBP also participated

⁴ Pursuant to Article 9(2) of the Act of 5 August 2015 on Macroprudential Supervision (Journal of Laws of 2022, item 2536, as amended). The document is available on the NBP website.

⁵ Information on the work of the group is posted on the website of the Polish Financial Supervision Authority.

⁶ The college was established pursuant to Article 4 of Regulation (EU) 2021/23 of the European Parliament and of the Council of 16 December 2020 on a framework for the recovery and resolution of central counterparties and amending Regulations (EU) No. 1095/2010, (EU) No. 648/2012, (EU) No. 600/2014, (EU) No. 806/2014 and (EU) No. 2015/2365 and Directives 2002/47/EC, 2004/25/EC, 2007/36/EC, 2014/59/EU and (EU) 2017/1132 by the Bank Guarantee Fund, which has been designated as the resolution authority for CCP established in Poland pursuant to Article 258b(1) of the Act of 10 June 2016 on the Bank Guarantee Fund, Deposit Guarantee Scheme and Resolution.

in the work of the supervision college for this clearing house, concerning, among others, the expansion of the scope of financial instruments it clears.

NBP's cooperation with domestic financial safety net institutions also included the following:

- membership of an NBP Management Board member delegated by the Governor of NBP in the Polish Financial Supervision Authority (KNF)⁷ and membership of two representatives delegated by the Governor of NBP in the Bank Guarantee Fund Council,⁸
- exchange of information with the Office of the Polish Financial Supervision Authority (UKNF) and the Bank Guarantee Fund – under the statutory authorisations regarding the rules for submitting information.⁹

3.3. Financial system analytical and research activities

In 2023, NBP conducted financial system research on numerous financial stability and financial system development issues. As NBP has the mandate to regulate the liquidity and refinancing of banks, it also analysed the position of individual banks. The results of key studies were made available to the FSC and UKNF. Some of the studies were released as regular reports.

- *Financial Stability Report* (June, December 2023). According to NBP, the cost of legal risk of residential FX loans remained the key source of risk for the banking sector. At the same time, it was indicated that this risk should not pose a direct threat to financial stability due to the significant increase in provisions, the continuation of voluntary settlements and the high level of capital in banks. In the first half of 2023, there were concerns that the increase in the regulatory burden on banks and the entry into force of the fully applicable MREL requirement¹⁰ towards the end of 2023 would lead – for the first time in years – to a significant decline in excess capital in the Polish banking system and adversely affect the propensity and capacity of banks to expand lending. However, at the end of 2023 this risk decreased, mainly due to the high profits earned by banks and the issuance of MREL-eligible debt instruments by some of them. There was also no credit crunch whereas the decline in credit growth observed in 2023 resulted mainly from the demand factors. The results of stress tests showed that the capital accumulated at banks and current profits would be sufficient even if several negative shocks overlapped. The reports also offered recommendations of desired actions aimed at mitigating risk to financial system stability in Poland.
- *Financial System in Poland 2022* (November 2023). The report presents the analysis of conditions for the development of financial institutions and markets in Poland. At the end of 2022, the assets of the domestic financial system represented 117.0% of GDP, significantly less than in 2021 (133.4%). Such a large decline was mainly a statistical effect (strong nominal GDP growth). At the end of the period under analysis, the value of assets

⁷ Pursuant to Article 5(2)(3) of the Act of 21 July 2006 on Financial Market Supervision (Journal of Laws of 2023, item 753, as amended).

⁸ Pursuant to Article 7(4)(2) of the Act of 10 June 2016 on the Bank Guarantee Fund, Deposit Guarantee Scheme and Resolution (Journal of Laws of 2022, item 2253).

⁹ Pursuant to Article 17(1) of the Act on Financial Market Supervision and Article 328(2) of the Act of 10 June 2016 on the Bank Guarantee Fund, Deposit Guarantee Scheme and Resolution.

¹⁰ The minimum requirement for eligible liabilities means minimum own funds and liabilities subject to write-down or conversion that can be used in the event of bank resolution.

of the institutions making up the Polish financial system amounted to PLN 3.6 trillion, 2.6% more than a year earlier. This increase was mainly caused by an increase in the value of the banking sector's assets which accounted for 75.6% of the Polish financial system assets at the end of 2022. As in previous years, loans to the non-financial sector (mainly loans for the purchase of real estate by households) represented the largest portion of the banking sector's assets; Treasury securities and Treasury-guaranteed securities were the second largest item. Capitalisation of the WSE main market at the end of 2022 decreased to PLN 1,114.2 billion (by 16.2%) and the capitalisation-to-GDP ratio of domestic companies fell to 18.7%. This was due to the strong decline in the prices of equity instruments on global equity markets, including the WSE. The development level of individual segments of the financial system remained diversified (financial institutions, including the banking sector, were better developed than financial markets).

- *Senior loan officer opinion survey on bank lending practices and credit conditions.*¹¹ The quarterly reports presented the analyses of bank lending policies and loan demand developments. In the first half of 2023, along the deteriorating macroeconomic outlook and growing expectations of a decline in loan portfolio quality, banks tightened their lending policies, with the exception of lending policy with respect to housing loans. The demand for corporate loans decreased, while the demand for consumer and housing loans increased. In the second half of 2023, banks continued to tighten their lending terms. A further drop in the demand for loans was recorded (with the exception of short-term loans to large companies). In the second half of 2023, housing loan demand grew significantly, mostly due to the launch of the Safe 2% Mortgage scheme.
- *Report on the situation in the housing and commercial real estate market in Poland* (report for the period January 2022 – September 2023; quarterly reports of 2023). The year 2023 saw a gradual increase in demand on the residential real estate market, with a simultaneous decline in the number of available dwellings and new investment projects. As a result of this imbalance, nominal housing prices were rising throughout the period, while real prices were falling y/y – both in terms of CPI and wage dynamics. Housing purchases were largely financed with own funds, and since the third quarter of 2023, bank loan financing (mainly under the Safe 2% Mortgage scheme) has also increased. The year 2023 saw a significant increase in rental housing rates. The commercial real estate market has been stable since the end of 2022. The supply of warehouse space continued to grow and the office and retail segments slightly increased.

Moreover, Narodowy Bank Polski conducted research on the selected aspects of systemic risk and macroprudential policy. The research projects focused, among others, on the impact of monetary policy on the profitability and capital of the commercial banking sector, the development of tools for measuring and forecasting loan quality, the development of early warning models for determining the level of the countercyclical capital buffer and the calibration methodology for the level of the non-zero neutral countercyclical capital buffer (nCCyB). As part of the 2023 research programme for public statistics, NBP also analysed residential, land and commercial real estate prices.

¹¹ This study is prepared based on a quarterly questionnaire survey addressed to senior loan officers of commercial banks.

Analyses were also carried out on technological innovation in the financial system, the functioning of crypto-asset markets and the development of new forms of consumer loan origination and of raising capital by companies.

3.4. International cooperation for financial stability

In 2023, Narodowy Bank Polski continued its cooperation with EU institutions responsible for the identification and assessment of systemic risk and counteracting against its build-up. The Governor of NBP is a member of the General Board of the ESRB. NBP representatives actively participated in the work of the ESRB and the European System of Central Banks (ESCB) structures. The work addressed, among others, the impact of high interest rates and elevated inflation on the financial system, risks originating from the expansion of non-bank financial institutions and the crypto-asset market, mitigating risks in the residential and commercial real estate market, the development of stress testing methods, and the functioning of central counterparties (CCPs).

Moreover, NBP representatives participated in meetings of the Board of Supervisors of the European Banking Authority (EBA), the Regional Consultative Group for Europe at the Financial Stability Board (FSB), the European Coordination Initiative (“Vienna” Initiative) as well as the Committee on Financial Markets, Organization for Economic Co-operation and Development. NBP representatives also participated in the work of resolution colleges established for the European cross-border banking groups comprising banks active in Poland.

3.5. NBP operational activities aimed at maintaining financial stability

In 2023, no need arose to provide liquidity support to banks in the form of refinancing loans.

In 2023, one bank was exempted from the obligation to maintain a part of the required reserve.

Highlights in 2023:

- chairing the work of the FSC-M and FSC-C, including the extensive use of NBP-prepared analyses and studies in the decision-making of the FSC-M,
- analytical work conducted with the aim of increasing knowledge about financial processes and interdependencies of the financial system and the economy, and about the operationalisation of macroprudential policy,
- cooperation with European institutions to identify systemic risk and contain a build-up of such risk.

Chapter 4

The issue of currency

The issue of currency¹

Narodowy Bank Polski holds the exclusive right to issue the currency of the Republic of Poland. Banknotes and coins issued by NBP are legal tender in the territory of Poland. By putting into circulation banknotes and coins in full denominational structure, NBP guarantees smooth cash settlements and the adequate quality of currency in circulation.

4.1. Currency in circulation

The value of currency in circulation (including bank vault cash), as at 31 December 2023, amounted to PLN 377.5 billion. Compared to the status as at 31 December 2022, it increased by PLN 8.9 billion, i.e. 2.4%. This increase was the lowest since 2012 (at that time it amounted to 1.4% compared to the end of the previous year).

Following significant rises in the value of cash in circulation in 2020 (the COVID-19 pandemic) and in Q1 2022 (Russia's aggression against Ukraine), the situation in the cash circulation market was stable in 2023. The value of cash circulation remained below its maximum value recorded on 14 March 2022 (PLN 395.7 billion) for the entire year.

The largest denominations showed the highest growth rate: PLN 500 (an increase of 10.6%) and PLN 200 (8.6%). In the case of the denomination of PLN 100, a decrease amounting to 5.6% was recorded. For the remaining banknote denominations, annual increases amounted to: 1.9% for PLN 50, 4.5% for PLN 20 and 4.9% for PLN 10.

The supply of currency to banks and Poczta Polska S.A. proceeded uninterruptedly.

In 2023, manufacturers of legal tender delivered to NBP 408.4 million pieces of notes and 985.3 million pieces of coins. This means that in relation to the deliveries in 2022 (542.8 million pieces of notes and 438.7 million pieces of coins), the number of notes purchased by NBP decreased by 24.8%, while the number of coins increased by 124.6%.

4.2. Issue of collector coins and notes

Narodowy Bank Polski issues collector coins and notes, commemorating important historical anniversaries and famous Poles. The bank also aims to develop the interest of the public in Polish culture, science and tradition.

In 2023, in accordance with the *Schedule of Issue of Polish Collector Items and Commemorative Coins*, Narodowy Bank Polski issued 6,300 pieces of gold collector coins, 166,000 pieces of silver collector coins and 100,000 collector notes (in 2022, 2,400 gold coins, 200,000 silver coins and 80,000 collector notes).

¹ Tasks in this field are performed pursuant to, among others, Article 4 and Articles 31–37 of the Act on Narodowy Bank Polski.

In 2023, 25 collector coins and a collector note under 19 themes were issued. The following are particularly noteworthy:

- *Nicolaus Copernicus* – a polymer collector banknote with a face value of 20 zł and a silver coin with an amber insert, with a face value of 50 zł,
- *The Polish Family* – a silver coin with a face value of 10 zł, inaugurating the series *In Poland I Believe*,
- *Soviet Aggression against Poland – 17 September 1939* – a silver coin with a face value of 20 zł,
- *30th Anniversary of the Withdrawal of the Soviet Army from Poland* – a silver coin with a face value of 10 zł,
- *The Battle of Vienna* – a gold coin with a face value of 100 zł and a silver coin with a face value of 50 zł,
- *Friendship and Brotherhood Are the Greatest Wealth* – two silver coins with a face value of 10 zł and 10 hryvnia, issued together with the National Bank of Ukraine,
- *250th Anniversary of the Commission of National Education* – a silver coin with a face value of 10 zł, issued in cooperation with the Bank of Lithuania.

In 2023, Narodowy Bank Polski continued to issue gold bullion coins *White-tailed Eagle*, with a face value of 500 zł, 200 zł, 100 zł and 50 zł as well as circulation coins with commemorative images, with a face value of 5 zł.

4.3. The functioning of cash transactions

In 2023, NBP carried out, among others, the following activities related to the functioning of currency circulation:

- Banks and Poczta Polska SA lodged in NBP PLN 181.7 billion (in 2022 – PLN 190.0 billion), and withdrew PLN 190.6 billion (in 2022 – PLN 203.1 billion), of which PLN 60.6 billion in the deposit system (in 2022 – PLN 62.7 billion) and PLN 130.0 billion in the main system (in 2022 – PLN 140.4 billion). Compared to 2022, 2023 saw a decrease in the value of cash withdrawals from NBP by 6,1% as well as in the value of deposits to NBP by 4.4%. The difference in the value of withdrawals and deposits in 2023 amounted to PLN 8.9 billion (in 2022 – PLN 13.1 billion). In 2023, the supply of Polish currency to banks proceeded uninterruptedly.
- The exchange of coins for banknotes or coins of adequately high denominations by means of self-service machines installed at NBP regional branches was further developed. The exchange service was provided to customers of further banks, with the possibility to have their bank accounts instantly credited through the BLIK system. In 2023, a further three devices were installed at NBP regional branches (a total of 32 devices are in operation). The total number of exchange transactions amounted to 219,000 and was higher than in 2022 by 34%. 265 million coins worth PLN 152 million were exchanged

(in 2022, 224 million pcs and PLN 137 million, respectively). The largest portion (51%) of the exchanged coins were coins with the lowest denominations, i.e. 1 grosz, 2 grosz and 5 grosz coins.

- Narodowy Bank Polski continued cooperation with the National Bank of Ukraine under agreements concluded in 2022 on the storage by NBP of the hryvnia banknotes purchased in Poland as well as purchased and delivered to NBP by foreign central banks. This was aimed at facilitating the use of cash for refugees following Russia's aggression against Ukraine. The hryvnias purchased in Poland and delivered to NBP by nine central banks under the Hryvnia Exchange Programme were transferred to the National Bank of Ukraine at the end of 2023.

4.4. Activities aimed at streamlining cash transactions

In 2022, the Cash Circulation Council (a consultative and advisory body to the Management Board of Narodowy Bank Polski) continued working. It worked further on the implementation of the National Strategy for Cash Circulation Security, adopted in 2021 by the NBP Management Board. The activities were of an analytical, legislative, self-regulatory and recommendatory nature and concerned: the universal acceptance and availability of cash, the undisturbed supply of the market with Polish currency, the physical security of banknotes and coins and the cyber security of the IT systems used in cash circulation.

A public opinion survey on banknotes and coins in circulation was conducted for the fifth time and considered: availability and acceptance of cash, cash withdrawal, dispensing change in coins, functioning of self-service coin deposit devices, quality of coins and banknotes, images of currency, and accumulation of banknotes and coins.

4.5. Counterfeit of Polish currency

As at 31 December 2023, there were 2,981.28 million pieces of general circulation banknotes and 1,123.54 million pieces of 2-złoty² and 5-złoty coins in circulation.

Compared to 2022, 2023 saw a decline in the number of disclosed counterfeit banknotes (from 4,094 pieces to 3,869 pieces) and an increase in the number of detected counterfeit coins (from 230 pieces to 253 pieces).³ The total number of counterfeit banknotes and coins per million banknotes and coins decreased when compared to the previous year and amounted to 1.00 pc (1.07 pcs in 2022, 1.37 pcs in 2021 and 2020).

Data on the number of counterfeit notes and coins detected in 2020–2023 are shown in Table 4.1.

² Excluding coins struck from the Nordic Gold alloy.

³ Excluding coins struck from the Nordic Gold alloy.

Tabela 4.1. The number of counterfeit Polish notes and coins detected in the years 2020–2023

Counterfeits	2020	2021	2022	2023
Banknotes	4 697	6 035	4 094	3 869
Coins	429	406	230	253
Total	5 126	6 441	4 324	4 122

Source: NBP data.

Highlights in 2023:

- transfer to the National Bank of Ukraine of the hryvnia banknotes purchased and delivered to NBP under the Hryvnia Exchange Programme,
- further implementation of the National Strategy for Cash Circulation Security,
- conducting a public opinion survey on banknotes and coins in circulation.

Chapter 5

Foreign exchange reserves management

Foreign exchange reserves management¹

Pursuant to Article 52(1) of the Act on Narodowy Bank Polski, the central bank holds and manages foreign exchange reserves as well as takes measures to ensure the safety of Poland's foreign exchange operations in terms of payment liquidity. In the context of a floating exchange rate, the role of foreign exchange reserves is primarily to enhance the country's financial credibility, thereby reducing the cost of financing in the global markets and the volatility of the zloty exchange rate, as well as mitigating the risk of a sudden outflow of capital. Incidentally, these reserves may be used to support the stability of financial markets or the banking sector in the event of significant disturbances in their functioning.

5.1. Level of the official reserve assets

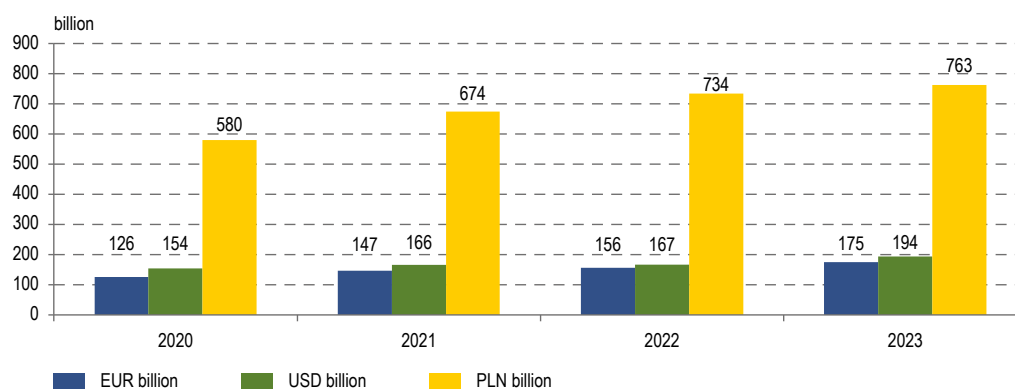
In 2023, the NBP official reserve assets² increased:

- in euro terms by EUR 18.9 billion (12.1%) to EUR 175.4 billion,
- in dollar terms by USD 27.1 billion (16.3%) to USD 193.8 billion,
- in zloty terms by PLN 28.9 billion (3.9%) to PLN 762.7 billion.

The increase in the official reserve assets was primarily driven by: a positive balance of external cash flows, investment income and increased use of simultaneous repo and reverse repo transactions, concluded to raise the yield on the foreign exchange reserves.

In 2023, NBP purchased 130 tonnes of gold. At the end of 2023, the gold reserves amounted to 358.7 tonnes, representing 12.3% of NBP's official reserve assets.

Figure 5.1. Official reserve assets in 2020–2023 (as at the end of the given year)



Source: NBP data.

¹ Tasks in this area are performed pursuant to Article 3(2)(2) and Article 52 of the Act on Narodowy Bank Polski.

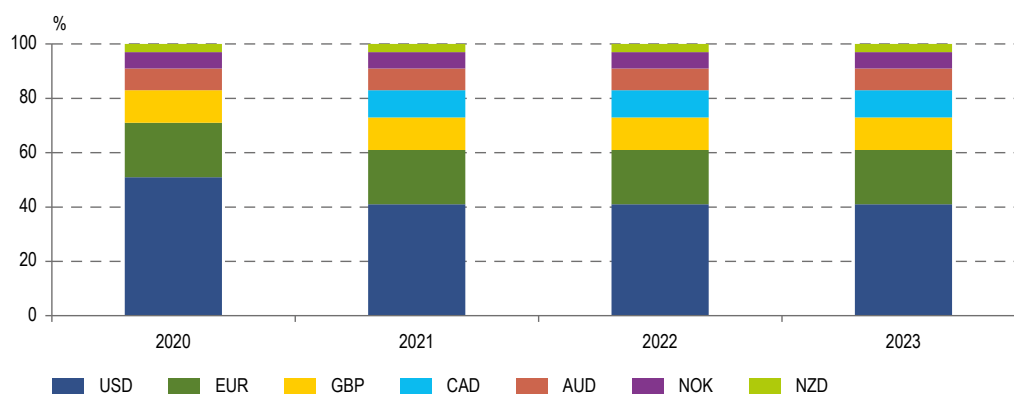
² According to the definition of the International Monetary Fund (IMF), official reserve assets include readily available, liquid foreign assets held by the central bank. This category includes monetary gold, special drawing rights (SDRs), the reserve position in the IMF and foreign currency assets, mostly in the form of securities, deposits and cash.

5.2. Foreign exchange reserves management strategy³

Ensuring the safety of the invested funds and their adequate liquidity is the priority in foreign exchange reserves management. While observing these criteria, Narodowy Bank Polski also undertakes measures to raise the yield on the reserves in the long-term horizon.

In 2023, the currency composition and modified duration⁴ of the reserves did not change substantially as compared to the previous year. At the end of 2023, the currency composition of the official reserves was as follows: 41% USD, 20% EUR, 12% GBP, 10% CAD, 8% AUD, 6% NOK and 3% NZD. The modified duration of the reserves stood at 3.1.

Figure 5.2. Currency composition of the official reserve assets in 2020–2023 (as at the end of the given year)



Source: NBP data.

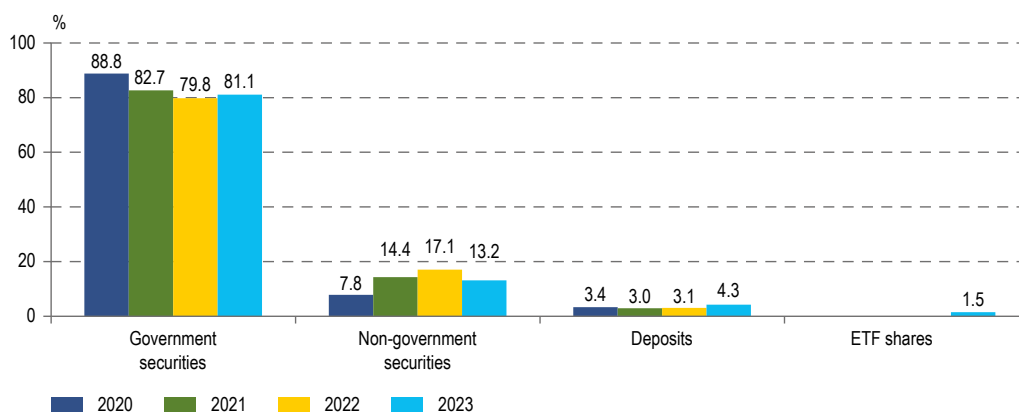
As in previous years, government securities characterised by the highest level of security and liquidity had a dominant share in NBP foreign currency reserves (Figure 5.3). Narodowy Bank Polski also invested in non-government securities, including in those issued by government agencies and non-financial corporations, and it held part of funds in short-term deposits at banks of high creditworthiness. Some of the securities held in the NBP portfolio (approximately 1.1% of the foreign currency reserves) are green bonds and sustainable development bonds. Bond futures transactions were also used in managing investment portfolios, and as part of investment in equity markets – equity index futures contracts.

In 2023, NBP launched purchases of shares in investment funds (exchange-traded funds, ETF) replicating equity indexes in the markets of the US, the euro area, the United Kingdom, Canada and Australia. At the end of the year, they accounted for 1.5% of the foreign exchange reserves.

³ Excluding funds held on the foreign currency accounts operated by NBP for the Ministry of Finance.

⁴ Modified duration is a measure of interest rate risk, representing the sensitivity of investment portfolios to fluctuations in yields on financial instruments.

Figure 5.3. Share of investment instruments in NBP foreign exchange reserves (excluding gold) in 2020–2023 (as at the end of the given year)



Due to rounding, the data may not add up to 100%.

Source: NBP data.

5.3. Financial risk management in the process of foreign exchange reserves management

Investment risk management is one of the key elements in the management of foreign exchange reserves. It is based on a system of investment limits and restrictions.

In 2023, due to the expansion of active investment strategies – in particular, by the addition of bond futures contracts – the restrictions on yield volatility risk, previously based on modified duration, were extended to include key rate duration limits, i.e. a measure taking into account non-parallel shifts in the yield curve.

Table 5.1. Investment limits and restrictions applicable at NBP in the financial risk management

Risk	Mitigation methods
Credit risk	Limited share of deposit transactions and non-government securities Counterparty selection criteria and ongoing monitoring of counterparty creditworthiness Limits for NBP counterparties Limited maturity of deposit transactions Minimum accepted rating of securities Limits for issuers of securities Collateral in reverse repo transactions
Market risk	Currency composition of the Strategic Asset Allocation along with fluctuation ranges determining the scope of active investment policy Level of modified duration of the Strategic Asset Allocation along with fluctuation ranges determining the scope of active investment policy Range of acceptable deviations of key rate duration from benchmark parameters Limited exposure to equity index futures and ETFs replicating equity indexes
Liquidity risk	Investments in the most liquid financial markets Limited share of deposit transactions Securities selection criteria

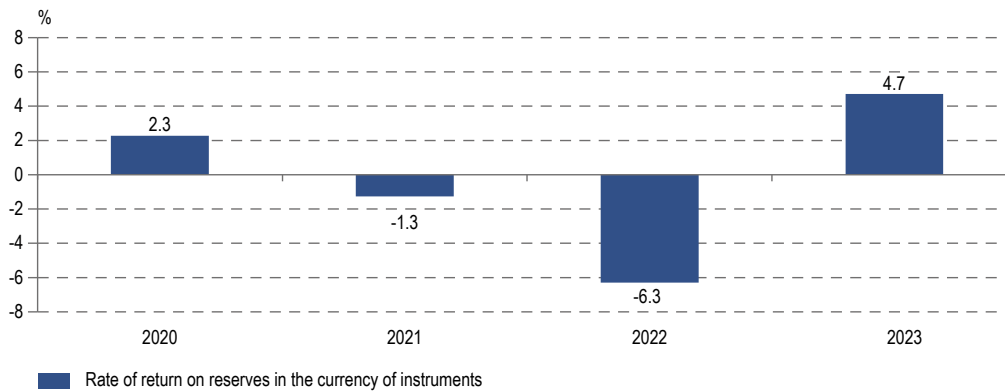
Source: NBP data.

5.4. Rate of return on foreign currency reserves⁵

The rate of return on the invested foreign currency reserves depends, most of all, on market conditions: changes in currency exchange rates, the level of yields and changes in investment instrument prices.

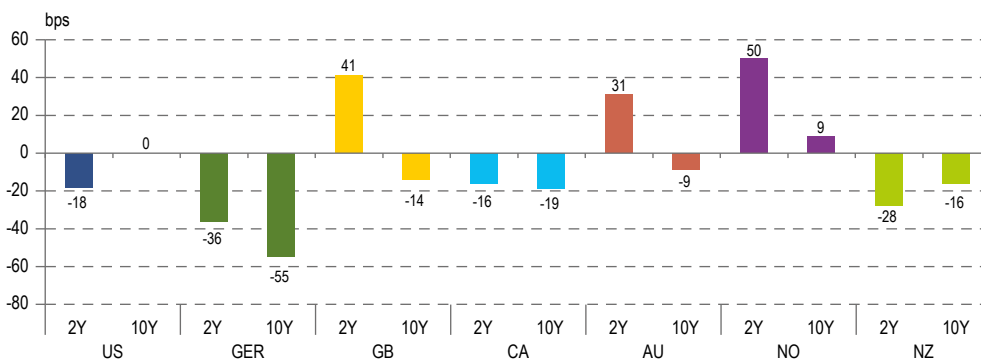
In 2023, the rate of return on foreign currency reserves investment in the currency of the instrument⁶ amounted to 4.7% (Figure 5.4 and Figure 5.5). Its high level was primarily the result of high debt security yields resulting from a series of monetary policy tightening measures adopted by the major central banks since 2022. To a lesser extent, the reserves yield increased as a result of the rise in debt security prices and in equity indexes.

Figure 5.4. Rate of return on the NBP foreign currency reserves excluding the impact of foreign exchange rate changes in 2020–2023



Source: NBP data.

Figure 5.5. Fluctuations in yields on 2-year and 10-year government securities in major markets in 2023



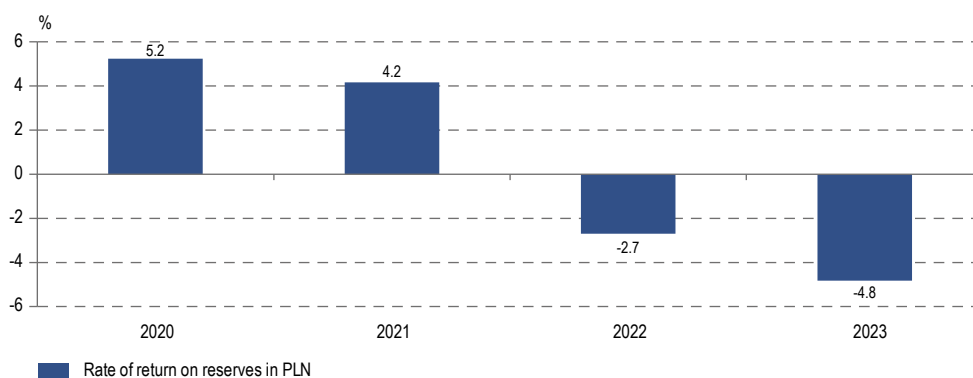
Source: NBP data.

⁵ Foreign currency reserves correspond to foreign exchange reserves excluding gold.

⁶ The rate of return on foreign currency reserves in the currency of individual investment portfolios is calculated on the basis of daily fluctuations in the market value of instruments (excluding the impact of the changes in foreign exchange rates).

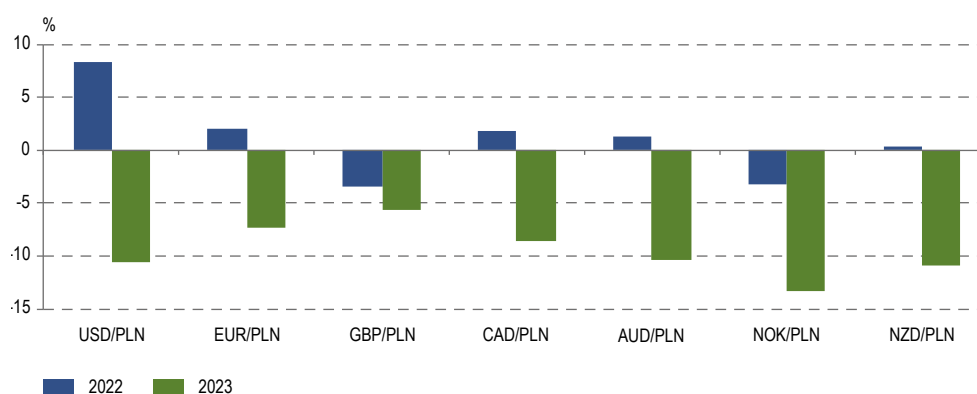
However, as a result of a strong depreciation of the reserve currencies against PLN⁷ (Figure 5.7) – despite the high rate of return on foreign currency reserves calculated in the currency of the instrument – in 2023 the rate of return on foreign currency reserves calculated in PLN⁸ amounted to -4.8% (Figure 5.6).

Figure 5.6. Rate of return on NBP foreign currency reserves including the impact of foreign exchange rate changes in 2020–2023



Source: NBP data.

Figure 5.7. Fluctuations in the exchange rates of major reserve currencies in relation to PLN in 2022 and 2023



Source: NBP data.

5.5. Investment income

In 2023, the income on investment related to foreign exchange reserves management, excluding realised and unrealised foreign exchange gains/losses, was positive and amounted

⁷ A decline in the exchange rates: USD/PLN by 10.6%, EUR/PLN by 7.3%, GBP/PLN by 5.6%, CAD/PLN by 8.6%, AUD/PLN by 10.4%, NOK/PLN by 13.3% and NZD/PLN by 10.9% (NBP average exchange rates).

⁸ The rate of return on foreign currency reserves in PLN additionally takes into account the impact of fluctuations in the exchange rates of the reserve currencies against PLN.

to PLN 18.9 billion (compared to PLN -28.8 billion in 2022). This was mainly affected by the positive interest income on deposits and debt securities (PLN 20.5 billion). The income was lowered by unrealised losses from price valuation of debt securities in foreign currencies and shares in foreign currency investment funds (PLN -0.5 billion) as well as income on realised price variations resulting from futures transactions and transactions relating to securities in foreign currencies (PLN -1.1 billion).

In 2023, income on realised exchange rate effects of foreign currencies and gold amounted to PLN -2.7 billion, while unrealised losses from currency revaluation of foreign currency holdings reached PLN -28.2 billion.⁹

Highlights in 2023:

- increase in NBP's gold reserves from 130 tonnes to 358.7 tonnes,
- investment in shares in investment funds replicating equity indexes (ETFs),
- extension of the system of limits on yield volatility risk.

⁹ Pursuant to the accounting principles of NBP, currency revaluation gains (unrealised gains) do not affect the financial result of NBP, but are recognised in the balance sheet liabilities. On the other hand, unrealised currency revaluation losses are subtracted from the financial result of NBP in the same way as losses resulting from realised currency revaluation differences.

Chapter 6

Foreign exchange activity

Foreign exchange activity¹

Foreign exchange activity involves maintaining a register of bureaux de change, issuing decisions on foreign exchange matters and controlling the following: bureaux de change (including for the purposes of compliance with the obligations imposed on them under the Act on Counteracting Money Laundering and Terrorism Financing), use of granted individual foreign exchange authorisations and the performance of the reporting responsibilities by residents and operators of bureaux de change for the purposes of balance of payments and international investment position statistics. The purpose of this activity is to ensure the security of foreign exchange transactions.

6.1. Register of bureaux de change

In 2023, 789 entries were made to the register of bureaux de change (as compared to 745 in 2022), of which 142 entries concerned new entities (as compared to 147 in 2022). The remainder regarded the deletion of entities or data updates in the register.

As at 31 December 2023, 4,521 bureaux de change were active in Poland (as at 31 December 2022 – 4,577).

6.2. Foreign exchange-related decisions

In 2023, a total of 17 decisions on foreign exchange operations were issued, including 9 authorisations and 8 other decisions (24 decisions on foreign exchange operations were issued in 2022).

Authorisations were granted for the waiver of restrictions on foreign exchange transactions with non-residents from countries that are not members of the EU, the OECD and the EEA. Other decisions concerned, among others, prolongation of the validity of authorisations.

6.3. Control of foreign exchange turnover

The control of foreign exchange turnover by the Governor of NBP in 2023 included inspections of residents who were obliged to transfer data necessary for the compilation of balance of payments and international investment position statistics to Narodowy Bank Polski, and inspections of operators of bureaux de change.

In 2023, a total of 757 inspections were carried out (in 2022 – 751), including:
– 259 inspections concerning the performance of the reporting obligation for compiling balance of payments statistics (in 2022 – 203),

¹ Tasks in this field are performed pursuant to Article 3(2)(3) and Article 52(2) of the Act on Narodowy Bank Polski, Article 130(2)(1)(a) of the Act of 1 March 2018 on Counteracting Money Laundering and Terrorism Financing (Journal of Laws of 2023, item 1124 as amended) and the provisions of the Act of 27 July 2002 – the Foreign Exchange Law (Journal of Laws of 2022, item 309).

- 497 inspections of bureau de change activity (in 2022 – 547),
- 1 inspection of the use of individual foreign exchange authorisations (in 2022 – 1).

Irregularities were reported in the course of 413 inspections, i.e. 55% of all the inspections (in 2022 – 53%), including during:

- 145 inspections of compliance with the reporting obligation for the purposes of balance of payments statistics (in 2022 – 109),
- 268 inspections of bureau de change activity (in 2022 – 287).

In seven cases of a gross violation of the rules of conduct of bureau de change activity, seven decisions were issued to prohibit the entrepreneur from pursuing currency exchange business and delete the entrepreneur from the register of bureaux de change (in 2022 – 5). Twenty-six decisions were also issued to impose a financial administrative penalty in connection with the non-fulfilment by the operators of the bureaux of responsibilities laid down by the Act on Counteracting Money Laundering and Terrorism Financing. Narodowy Bank Polski notified the competent financial authorities of 410 cases of violation of legal provisions. Having conducted the appropriate proceedings, tax offices and customs and tax offices informed NBP of penalties imposed on 51 bureaux de change, 149 cases of submission of the so-called active repentance and three cases of consenting to voluntary submission to liability. The results of all the inspections for compliance by entrepreneurs pursuing currency exchange business with responsibilities laid down in the Act on Counteracting Money Laundering and Terrorism Financing were delivered to the General Inspector of Financial Information.

Inspections carried out by NBP ensure that:

- foreign exchange trading in bureaux de change is compliant with the rules of conduct of regulated activity,
- responsibilities in the area of counteracting money laundering and terrorism financing are properly fulfilled,
- data provided by reporting entities for the purposes of BoP statistics are compliant with source documents.

Highlights in 2023:

- 757 foreign exchange inspections performed,
- 17 foreign exchange decisions issued and 33 decisions issued concerning sanctions for the breach of rules of conduct of the currency exchange business or failure to comply with responsibilities attached to this business.

Chapter 7

Payment system-oriented activities

Payment system-oriented activities¹

The activities of Narodowy Bank Polski with respect to the payment system comprise operational tasks, including the operation of the payment systems and performance of interbank settlements, the activities relating to the payment system policy and development, including organising payment settlements and drafting relevant legal regulations and the oversight of the payment system.

The objective of Narodowy Bank Polski is to ensure efficient functioning of the payment system, enabling fast and safe flow of money between individuals, economic agents, public institutions and other entities that are parties to the payment transaction.

7.1. Performance of operational tasks

7.1.1. Operation of accounts in the SORBNET2 system

The SORBNET2 system is a Polish RTGS system,² in which the interbank settlement of zloty-denominated high-value payments is carried out. It is used for maintaining banks' current accounts, auxiliary accounts for entities operating retail payment systems and securities settlement systems, and minimum reserve accounts for banks that do not have a current account. In the RTGS system, payment orders are executed in accordance with the gross settlement principle (processing of single orders, without their mutual offsetting) and the rule of real time settlement (on an on-going basis during the day). SORBNET2 processes payments on account of monetary policy operations, interbank financial market transactions and high-value customer orders. The system also provides for the settlement of orders cleared in retail payment systems.

As at 31 December 2023, accounts operated in the SORBNET2 system included zloty current accounts of 46 banks (in 2022 – 47), the current account of Krajowa Spółdzielcza Kasa Oszczędnościowo-Kredytowa (National Association of Cooperative Savings and Credit Unions), as well as accounts for KIR SA, KDPW SA and KDPW_CCP SA. No new current accounts in PLN were opened in 2023 and one account was closed.

In 2023, 5.6 million payment orders were executed in the SORBNET2 system (in 2022 – 5.4 million) totalling PLN 136.4 trillion (in 2022 – PLN 131.0 trillion). This represents an increase in the number of executed payment orders by 3.6% and a rise in their value by 4.1% compared to 2022. The average value of a single payment order in 2023 was PLN 24.2 million (in 2022 – PLN 24.0 million) and it increased by 0.5% as compared to the previous year.

¹ Tasks in this area are performed pursuant to Article 3(2)(1), (6) and (6a) of the Act on Narodowy Bank Polski and the Act of 24 August 2001 on Settlement Finality in Payment and Securities Settlement Systems and the Rules of Oversight of these Systems (Journal of Laws of 2022, item 1581, as amended).

² Real Time Gross Settlement.

7.1.2. Operation of accounts in EUR in the TARGET-NBP system

Narodowy Bank Polski is the operator of the RTGS system for payments in euro. Until 19 March 2023, NBP operated the TARGET2-NBP system, which was replaced by the TARGET-NBP system on 20 March 2023. The change was related to the NBP's participation in the ECB-coordinated consolidation of the TARGET2 system with the TARGET2-Securities platform (T2S). The TARGET-NBP system is a Polish component of the TARGET system – the Pan-European RTGS system used for settlements of euro-denominated payments. As at 31 December 2023, the TARGET-NBP system operated accounts in euro for 19 entities: NBP, KIR SA, KDPW SA and KDPW_CCP SA as well as for 15 commercial banks (no change compared to the end of 2022, when the TARGET2-NBP system was in operation).

In 2023, a total of 0.5 million transactions were carried out in the TARGET2-NBP system, totalling EUR 0.6 trillion, and a total of 1.9 million transactions for the total amount of EUR 2.5 trillion were processed in the TARGET2-NBP system. Compared to 2022, the number of completed operations increased by 1.6%, and their value rose by 13.0%. The average value of a single order processed in those systems was EUR 1.3 million and increased by 11.2% compared to 2022.

7.2. Policy measures and development of the payment system

7.2.1. Regulatory, standardisation and research activities

In 2023, as part of regulatory, standardisation and research activities relating to the payment system, NBP:

- modified reporting to extend the scope of data related to payment statistics transmitted to the central bank,³ and submitted to the ECB aggregates compiled on the basis of such data (for monitoring the changes in the functioning of the EU payment system),
- analysed proposed amendments to EU regulations, including their potential impact on the most important payment systems and the organisation of monetary settlements in Poland (these proposals related in particular to: access of non-bank entities to the so-called designated systems,⁴ instant credit transfers in euro⁵ and the rules of providing payment services),
- executed tasks related to assigning numbers to the banks and non-bank payment service providers which started operating or changed ownership in 2023,
- coordinated the implementation of collateral management standards in the Polish capital market in cooperation with the KDPW SA,
- monitored the experience of other central banks in designing and implementing digital central bank money, in particular regarding the digital euro project, and analysed the EU's regulatory proposals concerning the digital euro, including their potential impact on monetary settlements in Poland.

³ The changes introduced result from Regulation (EU) 2020/2011 of the European Central Bank of 1 December 2020 amending Regulation (EU) No. 1409/2013 on payments statistics (ECB/2013/43) (ECB/2020/59).

⁴ In Poland, the so-called designated payment systems include the payment systems operated by NBP, i.e. SORBNET2 and TARGET-NBP, as well as the Elixir and Euro Elixir systems operated by KIR SA. The list of these systems is available on the NBP website.

⁵ Draft Regulation of the European Parliament and of the Council amending Regulations (EU) No. 260/2012 and (EU) 2021/1230 as regards instant credit transfers in euro.

7.2.2. Development of domestic large-value payment systems

In 2023, the following activities were undertaken with the purpose of developing domestic large-value payment systems:

- The SORBNET3 project was carried out aimed at building a new RTGS system for payments in PLN compliant with the ISO 20022 standard. Among others, the functional specification for the new system was provided to the participants in 2023.
- Work was completed on the participation of NBP in the consolidation of the TARGET2 system with the T2S platform. On 20 March 2023, the new TARGET system was launched, including its Polish component, the TARGET-NBP system.
- The first domestic participant account for the settlement of instant payments in euro (TARGET Instant Payment Settlement service) was opened in the consolidated TARGET system.

7.2.3. SEPA scheme

Narodowy Bank Polski continued to provide intermediation services in accessing the EBA Clearing-run pan-European payment system STEP2-T for interested banks, enabling them to settle cross-border credit transfers in euro in the SEPA Credit Transfer scheme.⁶

7.2.4. Payment System Council activity

The Payment System Council, the advisory body to the NBP Management Board, deals with analysing and evaluating the Polish payment system on an on-going basis and promotes the development of this system.

In 2023, the Council primarily discussed the following issues:

- the results of ongoing analyses, including assessments of the functioning of the payment system in Poland prepared by NBP,
- the potential migration of the Elixir system operated by KIR SA to the new ISO 20022 message standard,
- supplying the market with cash under stable and volatile conditions,
- the status of implementation of the Cashless Trading Support Programme and financial education activities,
- the challenges related to introducing KDPW_CCP clearing services SA for the banking sector,
- plans to develop the BLIK and BLIK Euro payment system and payment scheme,
- the results of the work carried out by the Working Group for Payment Security on the applicability of behavioural analysis in reducing fraudulent transactions in cashless payments in Poland,
- banking sector activities in the area of cyber security.

⁶ At the end of 2023, 17 banks used these intermediation services.

7.3. Oversight of the payment system

Narodowy Bank Polski exercises oversight of the payment system. Relevant activities are carried out in accordance with the *Narodowy Bank Polski payment system oversight policy*. The document defines the objectives, scope and basis of the NBP's oversight and indicates the assessment criteria and supervisory tools used by NBP.⁷

In 2023, the activities were aimed at ensuring the efficiency and safety of the supervised financial market infrastructure⁸ and the compliance of its operations with the Polish law. Monitoring, analysis and assessments of the performance of the systems and the entities constituting this infrastructure were carried out and, where deficiencies were identified, action was taken to restore the status compliant with the applicable legislation. In 2023, the entities overseen operated in a sound manner, ensuring, among other things, the efficient and safe conduct of clearing and settlement.

The activities of NBP related to oversight in 2023 included, in particular:

- monitoring of incidents in the payment systems, payment schemes, as well as in the securities clearing and settlement systems – the violations identified did not affect the stability of the payment system operation in Poland,
- monitoring of the availability and performance indicators of the supervised payment system infrastructure – a high level of security and operational stability was demonstrated,
- issuance of 4 decisions by the Governor of NBP on the modification of the rules of operation of payment systems and 4 decisions by the Governor of NBP on the modification of the rules of operation of payment schemes,
- issuance of the opinion of the Governor of NBP on the approval of amendments to the regulations of KDPW,
- completion of 5 investigations into the planned provision of the acquiring service by domestic payment institutions,
- continuing assessment of the retail payment systems operated by KIR SA (Elixir, Express Elixir and Euro Elixir) for compliance with the CROE – *Cyber resilience oversight expectations for financial market infrastructures*,
- conducting the fourth ECB-coordinated survey on the cyber resilience of payment systems and the securities clearing and settlement systems.

7.4. NBP as the shareholder of domestic legal persons providing services for financial institutions

In 2023, NBP held shares and participating interests in the following domestic entities:⁹

- Krajowy Depozyt Papierów Wartościowych SA, with its registered office in Warsaw, which is the central institution responsible for operating the deposit and settlement system in the

⁷ The document is available on the NBP website.

⁸ Financial market infrastructure – the infrastructure over which the Governor of NBP has oversight, i.e. the payment systems, the payment schemes, the securities clearing systems, the securities settlement systems, the acquiring service provided by domestic payment institutions.

⁹ In accordance with Article 5(2) of the Act on Narodowy Bank Polski, NBP may hold shares or participating interests in other legal persons that provide services to financial institutions or the State Treasury or are relevant for NBP in terms of acting to sustain the stability of Poland's financial system.

- scope of financial instrument trading; KDWP SA holds 100% of the shares of KDPW_CCP SA which operates systems of clearing of transactions in financial instruments;
- Krajowa Izba Rozliczeniowa SA, with its registered office in Warsaw, which is the key institution on the domestic market of payments clearing;
 - Bazy i Systemy Bankowe sp. z o.o. (Bank Databases and Systems, Ltd), with its registered office in Bydgoszcz, which is the producer and integrator of IT solutions addressed mainly to financial sector institutions, in particular, banks and insurance institutions as well as public administration.

Table 7.1. Specification of shares and participating interests held by NBP in Polish commercial law companies, as at 31 December 2023

Name of entity	Share capital (PLN)	Number of shares/ participating interests held by NBP	NBP interest in share capital (%)
Krajowy Depozyt Papierów Wartościowych SA	21,000,000	7,000	33.33
Krajowa Izba Rozliczeniowa SA	5,445,000	3,750	34.44
Bazy i Systemy Bankowe sp. z o.o.	10,000,000	1,000	100.00

Source: NBP data.

Highlights in 2023:

- continued work on a new RTGS system in PLN (SORBNET3),
- the launch of TARGET-NBP, the Polish component of the pan-European RTGS system for the settlement of payments in euro,
- continued assessment of the retail payment systems operated by KIR SA in terms of compliance with the CROE requirements, as well as the survey on the cyber resilience of payment systems and securities clearing and settlement systems.

Chapter 8

Services to the State Treasury

Services to the State Treasury¹

Tasks performed by Narodowy Bank Polski as part of services to the State Treasury include operating accounts of the State Budget, handling international liabilities and claims of the State Budget, trading in Treasury securities and activities to manage public debt, in particular, the State Treasury debt.

8.1. Bank accounts operated by NBP

In 2023, NBP operated bank accounts referred to in Article 196 of the Public Finances Act, including, in particular, the central current account of the State Budget, as well as current and auxiliary accounts of budgetary entities and offices providing services to tax authorities, including so-called joint accounts for collecting certain types of tax and non-tax revenues of the state budget. Moreover, pursuant to Article 51(1)(4) of the Act on NBP, Narodowy Bank Polski operated accounts of other legal persons.

Narodowy Bank Polski operates accounts in PLN and foreign currencies, including accounts used to handle funds coming from the EU budget. NBP also maintains term deposit accounts in PLN and foreign currencies. As at 31 December 2023, NBP provided services for 2,924 customers (in 2022 – 2,922), for whom NBP regional branches operated 29,003 accounts (in 2022 – 27,849), of which 4,507 accounts were handled under the third party substitution cash service (in 2022–4,520).

8.1.1. Operating bank accounts

Narodowy Bank Polski performed operations on State Budget accounts – in non-cash form, mainly through the NBP electronic banking system and B2B cross-system interface, as well as in cash form. The B2B interface, which provides solutions adjusted to the account holder's needs (including micro-accounts and individual reports and ensures high security of transmitted data, was used in the handling of bank accounts of strategic importance for the State Budget (i.e. the central current account of the State Budget, the contribution payment account for the Social Insurance Institution, accounts for payments of taxes).

In 2023, the number of operations processed in the NBP IT system used for handling the State Budget's bank accounts stood at 148.6 million (138.0 million in 2022).

8.2. Handling international liabilities and claims of the State Budget

Pursuant to the agency agreement concluded with the Minister of Development and Finance on 18 November 2016, in 2023, Narodowy Bank Polski handled the State Budget liabilities and claims arising from:

- 44 loans granted by international financial institutions to the government of the Republic of Poland,

¹ Tasks in this area are performed pursuant to Article 3(2)(4) and Articles 49, 51 and 52 of the Act on Narodowy Bank Polski, the Public Finances Act of 27 August 2009 (Journal of Laws of 2023, item 1270, as amended) and the Act of 29 August 1997 – the Banking Law (Journal of Laws of 2023, item 2488, as amended).

- 79 foreign loans granted to domestic entities and guaranteed by the government of the Republic of Poland,
- Poland's contributions to 9 international financial institutions and receivables from shares in a foreign financial institution.

While acting as a depository for the World Bank Group, NBP administered 17 promissory notes issued by the government of the Republic of Poland in connection with Poland's membership in institutions of that financial group.

8.3. Organisation of trade in Treasury securities

8.3.1. Treasury securities auctions

Narodowy Bank Polski acts as the issuing agent for Treasury securities. Therefore, it organises sale and redemption auctions of Treasury bills, as well as sale, redemption and swap auctions of Treasury bonds. In 2023, the following auctions were organised:

- 16 Treasury bond sale auctions,
- 7 Treasury bond swap auctions.

In 2023, no Treasury bill sale or redemption auction was held, nor any redemption auction of Treasury bonds.

NBP plays the role of organiser of the auctions of bonds backed or guaranteed by the State Treasury. In this capacity, in 2023 NBP held 10 auctions for the sale of Bank Gospodarstwa Krajowego bonds issued for the COVID-19 Prevention Fund.

8.3.2. Treasury Securities Dealer System

As in previous years, NBP performed tasks associated with the Treasury Securities Dealer System (DSPW).² Under the agreement concluded with the Ministry of Finance, Narodowy Bank Polski:

- supplied the Ministry of Finance with data used for the preparation of assessments of the activities of the DSPW banks,
- acted as the organiser of Treasury securities fixing.³

² The Treasury Securities Dealer System (DSPW) was established in 2003 in order to ensure the security of financing of the State budget borrowing needs and improve the liquidity, transparency and effectiveness of the SPW market (SPW – *skarbowe papiery wartościowe*: Treasury securities). Polish banks and foreign entities that comply with the requirements set out in the Regulations on fulfilling the DSPW function may apply for the status of a DSPW, which gives them the privilege to purchase SPWs at auctions organised by the Ministry of Finance. More information on the functioning of the DSPW system can be found on the website of the Ministry of Finance.

³ Acting as an organiser of SPW fixing, NBP defines its rules, in agreement with the Minister of Finance (the issuer) and BondSpot SA (the proxy), and provides the general supervision of SPW fixing (para. 2 item 3 of the SPW fixing regulations).

8.4. Co-operation with the Ministry of Finance within the Public Debt Management Committee

In 2023, NBP co-operated with the Ministry of Finance within the Public Debt Management Committee. The objective of the co-operation is the exchange of the information used to harmonise the public debt management policy (of the Ministry of Finance) with NBP's monetary and foreign exchange policies.

Highlights of 2023:

- operating 29,003 accounts for 2,924 customers,
- organisation of a total of 23 Treasury securities sale and swap auctions and 10 auctions for the sale of Bank Gospodarstwa Krajowego bonds issued for the COVID-19 Prevention Fund.

Chapter 9

Analytical and research activities

Analytical and research activities¹

Actions of central banks aimed at ensuring macroeconomic and financial stability require knowledge of the developments occurring in the economy and its external environment. While performing these tasks, NBP analyses the current and expected economic situation in Poland and worldwide, relying on a broad range of data and analytical as well as prognostic tools. NBP also conducts scientific research whose findings support analytical activity and, among other things, verify the applied analytical tools. The findings of these analyses and research are used by the Management Board of NBP and the Monetary Policy Council in the decision-making process.

Below, we present the most important analytical and research works and activities performed in 2023 concerning macroeconomic stability,² including price stability, broken down into major thematic groups.

9.1. Analyses and research concerning monetary policy

- The monetary policy of other central banks was monitored and analysed.
- Analyses of the monetary policy transmission mechanism in Poland were conducted. The results of the research were published in the *Materials and Studies* and in the *NBP Working Papers* series.
- The impact of monetary policy on employment in Poland and on the endogenous productivity level of the economy was analysed.
- The disinflation process was studied taking into account household income and wealth inequality.
- A study aimed at estimating the level of the natural real interest rate for Poland and the euro area has been completed.

9.2. Analyses and studies of price-setting processes, prices and inflation

- The degree of internal sustainability of the Polish economy was analysed.
- Research and analytical work was carried out on the developments in inflation indices and price-setting processes, price stickiness, the use of online shop data for forecasting inflation, and on the impact of the COVID-19 pandemic, global supply chain disruptions, energy shocks and Russia's aggression against Ukraine on price formation in Poland.

¹ Tasks in this area are performed under, among others, Article 59 of the Act on Narodowy Bank Polski.

² Analytical and research activities concerning the stability and development of the financial system were presented in Chapters 3 and 7 of the Report.

- Changes in inflationary expectations of consumers, enterprises, financial sector analysts and experts outside the financial sector were monitored.

9.3. Macroeconomic forecasting and the development of prognostic models

- Economic situation in Poland was monitored and analysed with the use of a wide range of variables. Indicators and tools were developed to analyse and forecast business conditions amid the wearing off of the effects of a strong negative supply shock amplified by the effects of Russia's aggression against Ukraine (in particular, business cycle forecasting methods using high-frequency data).
- Regular inflation and GDP projections were drawn up, along with estimates of GDP and its components used for the assessment of macroeconomic stability and the stability of the financial sector. They took into account the external environment of the Polish economy and legislative changes.
- Forecasts of the consumer price index and its components were prepared.
- Four rounds of the NBP Survey of Professional Forecasters were completed.

9.4. Analyses and studies of the fiscal situation

- Forecasts were prepared concerning the following: the situation of the state budget and the general government sector, costs of fiscal measures mitigating the impact of high inflation on economic agents, the restrictiveness of fiscal policy and its impact on the economy.
- Analyses and forecasts were carried out concerning the use of funds from the European Union budget and their impact on the main macroeconomic aggregates.
- Research work on the macroeconomic and fiscal consequences of the ageing of the society in Poland was continued.

9.5. Analyses of the global economy and the impact of foreign countries on the Polish economy

- The Polish external trade was analysed on a regular basis, including trade links in global value added chains, and Poland's price and cost competitiveness.
- Analyses on the role of exports (final demand) in Poland's economic growth were conducted.
- The economic situation and economic policies of selected countries were analysed, including those of major world economies and countries of Central and Eastern Europe.
- The global economic situation during the recovery from the COVID-19 pandemic, the energy crisis and Russia's aggression against Ukraine was monitored, analysed and forecast on an on-going basis. The applied analytical and forecasting tools were further developed.

- The inflation developments and outlook for inflation in the world's major economies were analysed.

9.6. Analyses and studies on the labour market and the economic situation of households

- The labour market situation was monitored on an on-going basis and forecasts of basic economic indices describing changes in wages and employment in the economy were prepared.
- Forecasts of demographic change were prepared, with particular focus on migration flows.
- The current situation of immigrants on the labour market in Poland was analysed. In particular, changes in the professional activity of Ukrainian refugees were monitored.
- The impact of immigration on the development of labour supply and the rate of economic growth was studied.
- Analyses were carried out concerning medium- and long-term labour market trends.
- Changes in retail sales and in the condition of households based on the findings of consumer sentiment surveys were monitored.

9.7. Analysis and research of the economic and financial situation of enterprises

- Quarterly NBP Quick Monitoring Surveys were conducted, comprising detailed analyses and forecasts of economic conditions, including, among others, decisions on the size of output, employment, wages, investment, as well as the financial and pricing decisions of firms, and their impact on the economy.
- The NBP Annual Survey was carried out, concerning the development prospects (including competitiveness), price-setting processes and employment policies of the non-financial enterprise sector.
- Cooperation with the World Economic Forum on the development of the Global Competitiveness Report was continued.
- Analyses of the Polish economy were conducted, including: the progress in the implementation of automation, electromobility and the quality of exports.
- Analyses were carried out on the evolution of the share of wages in gross value added in the Polish economy.
- The analysis of the importance of corporate profits for price formation and productivity in the Polish economy was carried out.

- The economic effects of changes in energy commodity prices were analysed.

9.8. Research papers by NBP staff

The publication of the results of research conducted by NBP staff enables a scientific verification of its quality and methodological correctness by making them available for the assessment by national and foreign experts, and the peer review process these publications are subject to. Five academic publications by NBP staff were posted on the ISI Master Journal list in 2023.

The list of the most important publications by NBP staff is provided in the annex entitled *List of selected publications by NBP staff*.

9.9. Scientific conferences organised by NBP and cooperation with the scientific community

In 2023, NBP organised 4 international scientific conferences:

- 22–23 June 2023: “Economic Policies during Wartime and Post-War Recovery”. It was the seventh joint conference of NBP and the National Bank of Ukraine, organised in cooperation with the International Monetary Fund.
- 9 October 2023: “European Union in the light of proposed changes to Treaties. Legal and economic consequences for Poland”. The conference was organised in cooperation with the Nicolaus Copernicus Superior School and the Copernicus Academy.
- 20 October 2023: “Investment for Growth”. It was the 11th Conference on the Future of the European Economy (CoFEE).
- 29–30 November 2023: “Recent trends in the real estate market and its analysis”. It was the sixth edition of the biennial international conference on the real estate market. The event was once again organised in cooperation with the Warsaw School of Economics.

In 2023 the following international scientific events took place at NBP:

- 9–10 May 2023: a meeting of the Working Group on Financial Statement Analysis.
- 18–19 September 2023: a regular bilateral seminar of NBP with representatives of the Deutsche Bundesbank on the assessment of the current and forecast macroeconomic situation in Poland and Germany.

Moreover, in 2023 NBP representatives participated in numerous international and national scientific conferences, presenting the results of analytical and research work conducted at the Bank.

Highlights in 2023:

- conducting analyses concerning the economic situation in Poland and its external environment for the needs of the NBP Management Board and the Monetary Policy Council,
- improvement of forecasting tools and completion of numerous modelling and analytical-research tasks,
- organisation of four international scientific conferences and two other international scientific events.

Chapter 10

Statistics

Statistics¹

Narodowy Bank Polski is one of Poland's key institutions that conduct statistical research. NBP acquires data from entities in the financial sector (mainly banks) and from non-financial corporations. The Bank improves the methods of data acquisition, verification and publication, using state-of-the-art tools. The scope of research is systematically widened in order to capture the development of the financial market as fully as possible. In parallel, the Bank carries out work on the data processing methodology, its alignment with the applicable international standards as well as on improving the IT solutions used. NBP also receives data from other institutions, such as Statistics Poland, the Office of the Polish Financial Supervision Authority (UKNF), the Ministry of Finance, the National Securities Depository (KDPW SA) and the Polish Development Fund. NBP uses the information to implement monetary and macroprudential policy, to monitor risk in the financial sector and conduct financial stability studies and other analyses.

Narodowy Bank Polski makes statistical data available to external entities on a regular basis (in the form of reports and publications). It also provides selected information to domestic institutions (the Sejm of the Republic of Poland, the Council of Ministers, Statistics Poland, the Bank Guarantee Fund (BFG), the UKNF, the Association of Polish Banks and academic institutions) as well as international institutions, primarily the ECB, Eurostat and the BIS.

The compliance of the statistical research methodology with applicable standards enables international comparisons, including the analysis of Poland's position vis-à-vis other European countries.

10.1. Core tasks with respect to statistics

The core tasks of NBP concerning statistics include collection of data from reporting entities, data validation, processing, storage and making them available to the users. To achieve these objectives, adequate IT systems are developed and improved, while data verification and analysis tools are updated. In parallel, work continues on the data processing methodology as well as on aligning the scope of the data with the degree of development of financial institutions and financial market instruments as well as the current macroeconomic conditions. The changes introduced are compliant with international standards (of the ECB, the Eurostat, and the IMF).

In 2023, NBP continued the regular provision of statistical compilations, analytical materials and publications addressed to both internal recipients at the Bank and to external audiences. The most important of these include:

- quarterly reports on the balance of payments and the *International Investment Position of Poland* annual report,
- quarterly data on Poland's external debt and international investment position,
- monthly balance of payments (BoP) data,

¹ Tasks in this area are performed pursuant to Article 3(2)(7), Article 17(4)(13) and Article 23 of the Act on Narodowy Bank Polski and the Act of 29 June 1995 on Public Statistics (Journal of Laws of 2023, item 773, as amended).

- annual study concerning international trade in services,
- annual data and the annual report on inward direct investment in Poland and Polish outward direct investment,
- the monthly consolidated balance sheet of monetary financial institutions, including key monetary aggregates (M3 money supply and its counterparts),
- monthly data on the average interest rate on bank deposits and on loans,
- monthly financial data on the banking sector (assets, liabilities, profit and loss account),
- quarterly data on the banking sector capital adequacy,
- quarterly data on domestic investment funds,
- quarterly and annual financial accounts, by institutional sectors,
- reports on surveys concerning migration processes.

10.2. Statistical tasks resulting from NBP's participation in the European System of Central Banks and in other international institutions

As in previous years, NBP cooperated with international institutions in the area of statistics, above all with the ECB, the European Commission (Eurostat), the Committee on Monetary, Financial and Balance of Payments Statistics, the European Banking Authority, the European Systemic Risk Board (ESRB) and the OECD.

The cooperation involves the participation of NBP representatives in committees that establish statistical standards.

10.2.1. Monetary and financial statistics

In 2023, NBP continued to provide the ECB with harmonised monthly and quarterly data on the aggregated balance sheet of monetary financial institutions (MFIs), monthly interest rate statistics, monthly and quarterly data on the assets and liabilities of investment funds, annual data on the statistics of insurance institutions, quarterly data on pension funds as well as data required by the RIAD.²

In 2023, the methods of data verification were improved in order to enhance the quality of reporting by banks, particularly the NB300 report disclosing information about significant exposures of the bank to the customers.³

Narodowy Bank Polski participated in the work of the following ECB working groups:

² Register of Institutions and Affiliates Data (RIAD).

³ Significant exposures of the banks to the customers where the total exposure exceeds PLN 100,000 in the case of cooperative banks or PLN 500,000 in the case of commercial banks in regard to quarterly reporting; PLN 500,000 and PLN 2 million, as appropriate, in monthly reporting.

- the Working Group on Monetary and Financial Statistics. The work focused on amending ECB provisions on the investment fund statistics⁴ and analysing the quality of data provided under an amended Regulation on payment statistics,⁵
- the Working Group on Analytical Credit Datasets (AnaCredit). Analyses of the reporting population, the reconciliation of AnaCredit reporting data with other reports, updating the guidelines for reporting agents and instructions for data users were continued.

Narodowy Bank Polski participated, as an observer, in the work of the ESCB's Expert Group on Integrated Reporting Framework and Data Dictionary.⁶ Work continued, among other things, on the scope of data, business processes, an integrated metadata dictionary and a data model.

Narodowy Bank Polski also participated in the work of the RIAD Hub Network on information on investment funds in the context of the forthcoming amendment to Regulation on statistics of investment funds.⁷

10.2.2. Prudential statistics

In 2023, NBP continued to provide the UKNF with data used for the assessment of the financial and prudential situation of the banking sector. The UKNF then reported such data to the European Banking Authority.

The data were also shared with the BFG, the Ministry of Finance and Statistics Poland. Moreover, NBP submitted to the ECB reports on financial reporting, capital adequacy, liquidity and large exposures.

In 2023, as part of the reporting information system (SIS), Narodowy Bank Polski for the first time collected data from the banking sector for the purpose of remuneration benchmarking (REM BM),⁸ approved higher ratios (REM HR)⁹ and data on high earners (REM HE).¹⁰ The UKNF transferred the data to the European Banking Authority.

Reporting infrastructure aligned with the new EBA requirements concerning the benchmarking of internal methods for the calculation of the capital requirements (Benchmarking CR and Benchmarking IFRS9) was also prepared.¹¹

⁴ Regulation (EU) 1073/2013 of the European Central Bank of 18 October 2013 concerning statistics on the assets and liabilities of investment funds (recast) (ECB/2013/38).

⁵ Regulation (EU) 2020/2011 of the European Central Bank of 1 December 2020 amending Regulation (EU) No. 1409/2013 on payment statistics (ECB/2013/43) (ECB/2020/59).

⁶ NBP was also represented in the High Level Task Force on the ESCB's Integrated Reporting Framework (IReF), a group set up to advise the ECB Governing Council on the issue.

⁷ Regulation (EU) 1073/2013 of the European Central Bank of 18 October 2013 concerning statistics on the assets and liabilities of investment funds (recast) (ECB/2013/38).

⁸ Guidelines of 30 June 2023 on the benchmarking exercises on remuneration practices, the gender pay gap and approved higher ratios under Directive 2013/36/EU – EBA/GL/2023/06.

⁹ See footnote 8.

¹⁰ Guidelines of 30 June 2023 on the data collection exercises regarding high earners under Directive 2013/36/EU and Directive (EU) 2019/2034 – EBA/GL/2023/08.

¹¹ Commission Implementing Regulation (EU) 2016/2070 of 14 September 2016 laying down implementing technical standards for templates, definitions and IT-solutions to be used by institutions when reporting to the European Banking Authority and to competent authorities in accordance with Article 78(2) of Directive 2013/36/EU of the European Parliament and of the Council.

NBP representatives also participated in the work of the ECB and EBA working groups which deal with the issues of supervisory statistics, including data quality, liquidity and reporting.

10.2.3. Statistics of the balance of payments, the international investment position and direct investment

In 2023, as in previous years, NBP provided the ECB with harmonised monthly and quarterly data on the balance of payments, the international investment position, official reserve assets, liquid assets and liabilities denominated in foreign currency and external debt. Moreover, the Bank provided Eurostat with annual data on international trade in services and foreign direct investment.

Narodowy Bank Polski continued to carry out analytical work on migration processes. In the second quarter of 2023, NBP regional branches conducted another study among Ukrainian citizens staying in Poland. This was a follow-up on the research conducted in 2023 in connection with Russia's aggression against Ukraine. The aim of the research was to evaluate the current economic condition of the war refugees and pre-war economic migrants staying in Poland. Two survey reports were published,¹² and seminars on the research were organized for NBP employees and external institutions.

Narodowy Bank Polski participated in the work of international working groups dealing with the following issues: external relations statistics (at the ECB), BoP statistics and direct investment statistics (at Eurostat) and foreign investment statistics (at the OECD). The Bank also took part in the work on updating manuals for international statistics (national accounts, balance of payments and the international investment position, as well as foreign direct investment).

10.2.4. Other statistics and other activities

- Financial accounts statistics. NBP submitted quarterly and annual financial accounts to the ECB and Eurostat, respectively; participated in the work of, among others, the ECB Working Group on Financial Accounts¹³ and cooperated with EU institutions to ensure the proper quality of data used in the Macroeconomic Imbalance Procedure in the EU.
- General government sector statistics. In 2023, NBP submitted to the ECB annual data on the statistics of the sector. It also participated in the work of working teams on this area of statistics, both domestically and at the ECB.¹⁴

¹² I. Chmielewska-Kalińska, B. Dudek, P. Strzelecki, *Poles working abroad in 2023. Report of the questionnaire survey*; I. Chmielewska-Kalińska, B. Dudek, P. Strzelecki, *The living and economic situation of Ukrainian migrants in Poland – the impact of the pandemic and the war on the nature of migration in Poland. Report of the questionnaire survey*.

¹³ Working Group on Financial Accounts and Government Finance Statistics.

¹⁴ General Government Statistics Working Group established by the President of Statistics Poland and Working Group on Financial Accounts and Government Finance Statistics.

- Real sector statistics. Acting as part of the BACH (Bank for the Accounts of Companies Harmonised)¹⁵ working group, NBP participated in a study of the impact of the changes in energy costs on the financial position of enterprises, internationally.¹⁶ As part of the work of the Risk Assessment Working Group operating within the European Commission,¹⁷ a study was conducted to identify links between environmental, social and governance (ESG) factors and the financial performance of non-financial enterprises.
- Statistics on securities investments. NBP developed tools for managing the quality of data on securities and participated in the work of the ECB Working Group on Securities Statistics.

Also in 2023, NBP:

- launched the Erydan internal economic database and upgraded the Statistical Hub (a new user interface),
- prepared and published a resolution on the procedure and specific rules for the reporting by banks of data to Narodowy Bank Polski for the formulation of monetary policy and periodic evaluation of the financial standing of the state, and the financial standing of banks as well as the banking sector risk¹⁸ (the resolution superseded the 2016 resolution, which had been amended numerous times),
- participated in the ECB work on the development of data analysis tools,¹⁹ including the employment of machine learning for that purpose.

Highlights in 2023:

- adaptation of the reporting infrastructure to the new EBA reporting standards for prudential reporting,
- continuation of research into migration processes, including an evaluation of the financial standing of Ukrainian refugees staying in Poland, followed by the publication of two reports,
- development of the Erydan database and the Statistical Hub.

¹⁵ BACH Working Group acts as part of the European Committee of Central Balance Sheet Data Offices (ECCBSO).

¹⁶ <https://www.bach.banque-france.fr/#/documents/Outlook12.pdf>.

¹⁷ The Risk Assessment Working Group acts as part of the European Committee of Central Balance Sheet Data Offices (ECCBSO).

¹⁸ Resolution 38/2023 of the Management Board of NBP of 4 July 2023 on the procedure and specific rules for the reporting by banks of data to Narodowy Bank Polski for the formulation of monetary policy and periodic evaluation of the financial standing of the state, and the financial standing of banks as well as the banking sector risk.

¹⁹ Network of Experts on Machine Learning.

Chapter 11

Education and information

Education and information

The educational activity of NBP relates to the tasks specified in Article 59 of the Act on Narodowy Bank Polski, according to which the central bank carries out publishing and promotional activities. As part of this activity, the bank runs numerous educational, communication and promotional projects which aim to communicate NBP activity and to raise public awareness about the operating principles of the central bank, the banking system and the market economy.

11.1. Education

11.1.1. Economic Education Programme

As part of its educational activity, NBP implements and supports projects which aim to popularise the operating principles of the financial market, develop attitudes that are conducive to its stability and growth, enhance knowledge of economic issues, including the knowledge of the role and mission of the central bank and the Polish currency. NBP also aims to promote entrepreneurship, counteract financial exclusion and popularise knowledge about economic heritage, the history of money and new trends in economics. Central bank educational activities are implemented in two forms. The first one is based on own economic education activities, the second one on sponsoring external projects on the subject.

In 2023, NBP:

- Completed the third edition of the nationwide educational programme *NBP Gold Schools*, addressed to primary and secondary school students. The programme prepares young people to navigate the world of finance safely and creates a network of schools involved in expanding economic education. The theme of the third edition of the programme was *Learn about the central bank*. Over 173,000 students took part (lessons on economics, school debates and workshops) and the title of NBP Gold School was awarded to 267 schools. During the three editions of the programme, over 15,000 tasks have been completed, involving 430,000 participants, and 546 schools have won the title of NBP Gold School. November 2023 marked the beginning of the fourth edition of the programme, whose theme is *100 Years of the Circulation of the Polish Zloty: NBP and its Issuing Function*.
- Organised: the 21st Best Essay Competition for primary and secondary schools (over 600 essays were submitted);¹ the 15th NBP Governor Award competition for the best MA thesis in economic sciences (47 entries were submitted) and the 8th NBP Governor Award competition for the best doctoral and post-doctoral dissertation in economic sciences (32 doctoral and 6 post-doctoral dissertations were submitted).

¹ The topic of essays for competition for 7th and 8th-formers was: *Do you think Nicholas Copernicus would stand a chance of winning a prize in economics? (...)*. Secondary school students wrote essays on the topic *Which of Nicholas Copernicus' scientific achievements in economics is known best? Is it visible and present in other spheres of human activity (culture, science, entertainment, technological progress)?*

- Developed educational materials on the subject of the function of the central bank and the role of monetary policy and regularly supplied educational institutions with educational games and teaching aids. Electronic versions of such materials were made available to download on NBP's website.
- Subsidised 92 economic education projects implemented all over Poland (20 projects endorsed by the Council for Economic Education and 72 projects endorsed by the NBP Commission for the Support of Social Educational Initiatives). The decisions to provide funding were preceded by a multi-stage verification process. Projects with a value exceeding PLN 30,000 were assessed by the Council for Economic Education, which is an opinion-providing and advisory body attached to the Management Board of NBP.² Projects with a value below PLN 30,000 were evaluated by the NBP Commission for the Support of Social Educational Initiatives. Conclusions drawn and recommendations given by these bodies are part of the evaluation of the projects.

In 2023, NBP's educational activities involved various target audiences, including nearly 220,000 students and over 3,500 teachers.

NBP's educational activities were evaluated by NBP staff, the Council for Economic Education, the Commission for the Support of Social Educational Initiatives and by external research agencies selected under a tender procedure. These activities and regular surveys of financial literacy of various social groups³ are taken into account in the planning of NBP's educational activities for the coming years.

The educational activity of NBP enjoys the interest and recognition of entities operating in this field. A lot of beneficiaries – especially schools – publish information about the benefits of cooperation with NBP on their websites.

11.1.2. Sławomir S. Skrzypek NBP Money Centre

The activity of the exhibition and educational facility, the Sławomir S. Skrzypek NBP Money Centre, aims to bring the history of money closer to the public, along with its role in the social and economic history of Poland and the world. Visiting the exposition and participating in the educational activity of the NBP Money Centre is free of charge.

In 2023, the exposition was seen by more than 420 visitors a day on average or a total of 125,309 visitors. It was the highest number since 2016, when the centre was first opened. The exposition is appreciated by the visitors – its Google rating is 4.7 (out of 5).

In 2023, the activity of the NBP Money Centre included, among others:

² It comprises representatives of social and professional communities associated with the educational and research activity, social communication and financial policy.

³ E.g. a survey of adult Poles conducted in 2023 as part of the international OECD/INFE project.

- An expansion of the educational offering: new activities were added⁴ and the scenarios of the existing ones were enhanced.⁵ The interactive materials offered were expanded. Audio guides have been expanded to include a tour in Ukrainian. Also a new, user-friendly online booking system for school groups was launched.
- Seven exposition rooms were modernised (the contents and graphics were updated). The collection was expanded by a set of documents by Edward Baranowski, who worked for Bank Polski SA and then Narodowy Bank Polski from 1939 to 1951.
- The 550th anniversary of the birth of Nicholas Copernicus was celebrated. On this occasion, an exhibition titled “The History of the Polish Zloty” was presented at the World Copernican Congress in Toruń (19–21 February 2023),⁶ a number of publications were prepared (a compilation titled *The Great Polish Economists. The Main Trends in Polish Economic Thought*, an educational brochure titled *Nicholas Copernicus*) and part of the outdoor exhibition shown during the European Night of Museums in Brussels (“Nicholas Copernicus, the Great Polish Economist”).
- A temporary exhibition “Polymer Banknotes of the World” was prepared, showing 160 polymer banknotes issued by 64 countries.
- A mobile educational exhibition on the history of the establishment of Bank Polski SA and the first issues of the zloty in the 1920s and 1930s was prepared in connection with the 100th anniversary of the establishment of Bank Polski SA (falling in 2024).
- Continuation of the exhibition of banknotes from the time of the Polish People’s Republic: the E-71 series of banknotes prepared in case of a potential armed conflict during the cold war and banknotes from the Polish Cities series (designed by Andrzej Heidrich), which was never put into circulation.
- The following events were organised: “Winter in the City 2023” (during which talks were given on the history of wallets and purses and on currencies in Poland and selected countries) and “Summer in the City 2023” (focusing on ways of storing valuables and the most precious exhibits held by NBP), Children’s Day and St. Nicholas Day.

⁴ Two workshops for families with children aged 8–12 (*Let me check that! Laboratory of authenticity of banknotes and Creator of Money and Money Production*), as well as two lessons on the premises of the money centre (*Young coin experts for primary school pupils and Food stamps, queues and empty shelves, or shopping in the Polish People’s Republic* for secondary school students).

⁵ Modifications were made in the History of the Polish Zloty lesson and the family workshops titled *To want and to have – that is a task* and *Creator of Money and Money Production*.

⁶ The organisers of the Congress included: the Nicholas Copernicus University in Toruń, the Jagiellonian University in Krakow, the University of Warmia and Mazury in Olsztyn and the Institute of Science History of the Polish Academy of Sciences.

- The third round of the NBP Money Centre Prize Competition for the best Master's thesis on social and economic history.⁷

11.2. Communication activities

11.2.1. Communication campaigns and other promotion activities

In 2023, NBP continued its communication activities with the aim of informing the public about the central bank tasks, including those related to monetary policy.

Among other things, NBP informed the public about NBP's educational projects, prizes awarded to NBP, issues of collector items, the fight against inflation in Poland, NBP's publications, the offering of the NBP Academy as well as the 21st Władysław Grabski Competition.

11.2.2. Presentation of NBP's activity on the Internet

In 2023,⁸ NBP continued communicating with external recipients on the Internet, as a result of which:

- NBP websites recorded a total of over 133 million views.
- 183 video materials were uploaded on YouTube (including 24 live transmissions), which had a total of 14.2 million viewings. NBP's YouTube channels had over 24,800 subscribers. At the end of 2023, the total number of viewings since the channel's inception exceeded 29.5 million.
- Live broadcasts were provided of press conferences, international conferences, award ceremonies for the winners of NBP competitions, as well as other events.
- NBP's Facebook profile was followed by 187,500 people, its official X profile was followed by over 58,200 people, the LinkedIn profile by 29,900 and Instagram profile by more than 2,400 people.

In addition, a new version of the nbp.pl website was launched in 2023.

⁷ The first prize was awarded for the Master's thesis titled *From Carta Mercatoria to Kenilworth Statutes. The legal and institutional conditions underlying the German Hansa's trade in the Kingdom of England in 1303–1326*, the second one for the Master's thesis *Agricultural reform in Poland and Czechoslovakia in 1944–1948*, an equal second prize was awarded for the Master's thesis titled *Social and financial inequities of the Polish gentry in the second half of the 16th century as exemplified by the Podlaskie Voivodeship's tax registers*, an honourable mention for the Master's thesis *The black market and the Money Exchange in Warsaw's economic life in 1941–1944*, and an honourable mention for the Master's thesis *They finally got round to setting things right. The 'Order' campaign in the Polish People's Republic (1971–1972)*.

⁸ Data as at 31 December 2023.

11.2.3. Liaising with the media and market analysts

While liaising with the media and market analysts in 2023, NBP:

- informed the public of its reports and analyses, including reports on monetary policy, the financial system (macroprudential supervision, in particular), the payment system and on the macroeconomic situation,
- presented the current activity of the central bank, among others, monetary policy implementation, issuance of the currency (including collector coins and banknotes) and educational activities,
- organised meetings with the media, interviews and press conferences (among other things concerning the evaluation of the current economic situation in Poland and the *Inflation Report*), as well as communicating with the media.

11.3. Publishing and Library

NBP's publishing activity involves issuing documents related to central bank tasks, research, statistical and analytical papers, and documents aimed at spreading knowledge about economics and finance.

In 2023, several dozen publications were released, including among others: *Annual Report, Plan of Activity, Report on NBP Operations, Monetary Policy Guidelines, Report on Monetary Policy Implementation*; analytical reports: *Balance of Payments of the Republic of Poland, Inflation Report, Financial System in Poland, Financial Stability Report, Report on Banking Sector Liquidity and Monetary Policy Instruments, Information on Home Prices and the Situation in the Housing and Commercial Real Estate Market in Poland, International Investment Position, Report on Systemic Oversight of the Polish Payment System, Assessment of the Polish Payment System Functioning, Foreign Direct Investment in Poland and Polish Direct Investment Abroad, Report on Cash Circulation in Poland, The Situation in Local Residential Real Estate Markets in Poland*, survey reports: *Poles Working Abroad in 2022* and *The Living and Economic Situation of Ukrainian Migrants in Poland – The Impact of the Pandemic and the War on the Nature of Migration in Poland, Review of European Issues*; quarterly summaries of the *ECB Economic Bulletin* in Polish; scientific publications: *Bank i Kredyt* (*Bank and Credit*, a scientific journal), *Materiały i Studia* (published in Polish), *NBP Working Papers* (published in English).⁹ A separate group of publications were educational publications, including the album *The Great Polish Economists. The Main Trends in Polish Economic Thought* and supporting materials for the educational programmes, classes and exhibitions.

There were certain changes in publications in 2023. The *Obserwator Finansowy* monthly (part of the internet economic portal Obserwatorfinansowy.pl) was transformed into a quarterly magazine distributed all over Poland. Also, the publication of the *Information Bulletin* statistical monthly was discontinued owing to a change in the form of data presentation.

NBP runs the Central Library, which is a scientific library, in its Head Office building. It houses one of the biggest collections of publications in Poland relating to economic sciences, specifically banking, finance and management. In 2023, the NBP Central Library was visited

⁹ A detailed list of publications of *Materiały i Studia* and *NBP Working Papers* series is presented in the Appendix entitled *List of selected academic publications of NBP*.

by over 4,700 readers. The collection of the NBP Central Library comprises over 157,400 volumes (one thousand more than in 2022) as well as 174 press titles and special magazines. The facility provides tools for effective searching of electronic sources, including access to 22 licenced databases of electronic books and magazines. The NBP Central Library cooperates with 58 other libraries in lending and exchanging publications. The library is adapted to the needs of people with disabilities (a computer station for visually impaired people, a platform for people with reduced mobility). The most valuable library materials are restored and saved in digital form.

11.4. Petitions, complaints, requests and letters

In 2023, NBP handled a total of 2,218 queries (2,025 in 2022), including 2,029 letters, 91 complaints and requests, 97 requests for public information and one petition.

Matters addressed to NBP referred to, among others, the statutory tasks of the central bank. The subject of the correspondence depended on the current macroeconomic situation, including inflationary processes, the financial situation of businesses and households as well as the situation in the labour, real estate, financial, credit and foreign exchange markets.

The information and queries concerned in particular:

- the issue of collector items and commemorative coins,
- the rules of exchanging money, including protection against counterfeiting,
- the availability of coin exchange self-service equipment,
- problems with the purchase and exchange of damaged or withdrawn foreign money,
- monetary policy instruments,
- the register of bureaux de change,
- information about NBP's reserve assets,
- identification of the legal successors of liquidated banks or other financial institutions,
- current and historical foreign exchange rates,
- the activities of the NBP regional branches, including the handling of international payments and the status of payments in the accounts held with NBP,
- statistical data,
- the educational programmes run by NBP,
- the use of images of banknotes, establishment of cooperation and the patronage of NBP.

NBP also received queries about the activity of commercial and cooperative banks, particularly the housing and consumer finance markets as well as numerous reports of incidents of attempted fraud, including identity theft, phishing and financial fraud. Correspondence that did not relate to NBP activities was referred to other entities in accordance with their remit or the senders were informed of the authorities or institutions competent to handle the case.

Highlights in 2023:

- the third edition of the NBP Gold Schools nationwide education programme,
- subsidising 92 economic education projects carried out all over the country,
- expansion of the educational offer and exhibits of the NBP Money Centre.

Chapter 12

Legislative activity

Legislative activity¹

12.1. Legislation by the NBP governing bodies

In 2023, the governing bodies of NBP issued 143 legal acts, of which 38 were issued by the Governor of NBP, 9 by the Monetary Policy Council, and 96 by the Management Board of NBP.

Out of the legal acts issued by the governing bodies of NBP² in 2023, 31 were promulgated in Monitor Polski (the Official Gazette of the Republic of Poland) and 18 in the Official Journal of Narodowy Bank Polski.

12.2. NBP contribution to legislative activity by state authorities with respect to draft normative acts

Pursuant to the Act on Narodowy Bank Polski, NBP cooperated with the state authorities by issuing opinions on draft normative acts regarding economic policy and with relevance to the banking system. Through these activities NBP sought, among others, to ensure the stability of the financial system and the safety and development of the banking system.

In 2023, NBP received:

- 913 documents sent as part of the work of the Standing Committee of the Council of Ministers, including 149 bills, for which six opinions (NBP positions) were drawn up,
- 21 draft legislative acts as part of the work of the Committee for European Affairs,
- 80 draft legal acts sent as part of inter-ministerial consultations, including 15 bills and 65 draft regulations, for which 40 opinions (NBP positions) were drawn up,
- 54 bills from the Chancellery of the Sejm, the Chancellery of the Senate and the Chancellery of the President of the Republic of Poland, for which NBP positions were drawn up.

In 2023, NBP representatives participated in three consultative conferences, two sessions of legal committees as well as in five meetings of Sejm and Senate committees and subcommittees.

In 2023, NBP participated in the work of the Committee for European Affairs, mostly by analysing national draft legislation, including the bill on amending the Act on Accounting and certain other acts.

¹ Tasks in this field are performed, among others, pursuant to Article 7, Article 12, Article 16(3), Article 17(3) (2) and 17(4), and Article 21 para. 3 and para. 4 of the Act on Narodowy Bank Polski and pursuant to the provisions of other acts in compliance with delegations included therein for the governing bodies of NBP to adopt legal acts.

² Two ordinances promulgated in 2023 in Monitor Polski were signed by the Governor of Narodowy Bank Polski in 2022: Ordinance No. 32/2022 of the Governor of Narodowy Bank Polski of 29 December 2022 on the determination of the design, fineness, weight and mintage of coins with face values of 20 złoty and 200 złoty commemorating the 160th Anniversary of the January Uprising (Monitor Polski of 2023, item 6) and Ordinance No. 33/2023 of the Governor of Narodowy Bank Polski of 29 December 2022 on the determination of the design, fineness, weight and mintage of coins with face values of 50 złoty and 500 złoty of the series “Treasures of Stanisław August” – Stanisław Leszczyński (Monitor Polski of 2023, item 12).

Narodowy Bank Polski also contributed to developing solutions in the major areas of the functioning of the state, in particular, by participating in the activities of the following bodies:

- the Council of the Bank Guarantee Fund,
- the Polish Financial Supervision Authority,
- the Financial Stability Committee,
- the Polish Accounting Standards Committee,
- the Export Insurance Policy Committee,³
- the Financial Market Development Council,
- the Social Dialogue Council.

12.2.1. Draft legislation related to the operation of the banking system

The most important draft legal acts related to the operation of the banking sector that NBP issued its opinion on in 2023 included:

- bills which subsequently became:
 - the Act of 14 April 2023 Amending the Act on Investment Funds and the Management of Alternative Investment Funds, the Bonds Act, the Act on the Bank Guarantee Fund, the Deposit Guarantee Scheme and Compulsory Resolution, and Certain Other Acts (Journal of Laws, item 825),
 - the Act of 14 April 2023 Amending the Act on Goods and Services Tax, and Certain Other Acts (Journal of Laws, item 996),
- bills:
 - the government bill amending the Act on Macroprudential Supervision of the Financial System and Crisis Management in the Financial System,
 - the government bill amending the Act on the National Cybersecurity System and certain other acts.

12.2.2. Other bills

In 2023, Narodowy Bank Polski participated in issuing opinions on draft legal acts not related directly to the banking sector. The most important draft legal acts were:

- bills which subsequently became:
 - the Act of 9 March 2023 Amending the Act on Digital Availability of Internet Sites and Mobile Applications of Public Entities and the Act – Tax Ordinance (Journal of Laws, item 511),
 - the Act of 14 April 2023 on Consumer Pawn Loans (Journal of Laws, item 1285),
 - the Act of 13 July 2023 Amending the Act on Public Finance and Certain Other Acts (Journal of Laws, item 1641),

³ On 28 September 2023, due to the amendment to the Act on Export Insurance Guaranteed by the Treasury and to certain other acts (Journal of Laws of 2023, item 1859), the Export Insurance Policy Committee was transformed into the Treasury Guaranteed Insurance Policy Committee. At the same time, the membership of the Governor of NBP's representative in the new Committee ceased on the same day.

- the Act of 28 July 2023 on Counteracting Abuse in Electronic Communications (Journal of Laws, item 1703),
- the Act of 16 August 2023 Amending Certain Acts in Connection with Ensuring the Development of the Financial Market and Protecting Investors in this Market (Journal of Laws, item 1723),
- bills:
 - the government bill amending certain acts in connection with the development of e-administration (the bill was withdrawn on 11 September 2023),
 - the government bill amending the Act on Crowdfunding for Business Ventures and Support for Borrowers.

Apart from the aforementioned bills, NBP issued opinions on draft regulations of significance to its activity, i.e.:

- the regulation of the Minister of Finance of 23 June 2023 amending the regulation on the transfer to Narodowy Bank Polski of data necessary for the drafting of the balance of payments and the international investment position (Journal of Laws, item 1279), introducing changes in the reporting of foreign means of payment (banknotes and coins) in bureaux de change,
- the regulation of the Minister of the Interior and Administration of 17 October 2023 amending the regulation on internal security services (Journal of Laws, item 2401) concerning NBP's Bank Guards,
- the regulation of the Minister of the Interior and Administration of 12 December 2023 concerning the amendment to the regulation amending the regulation on the requirements to be fulfilled by the protection of cash stored and transported by entrepreneurs and other organisational units (Journal of Laws, item 2762) relating to the cash-in-transit vehicles used by NBP.

12.3. Consulting the European Central Bank's draft opinions to draft Community laws and draft national legislation of the EU Member States by NBP

In 2023, NBP participated in the consultation process of 47 proposals for legislative acts (Community laws and national legislation of the EU Member States) on which the ECB issued opinions.⁴ The ECB opinions on draft Community laws related, among others, to the regulations on:

- instant credit transfers in euro,
- Community markets for clearing services,
- the reform of the bank crisis management and deposit insurance framework,
- a digital euro,
- due diligence of enterprises in the area of sustainable development.

⁴ According to the provisions of the Treaty on the Functioning of the European Union and the Statutes of the ESCB and the ECB, the ECB is entrusted with the task of issuing opinions on Member State and Community level draft legislative acts concerning the issue of currency, legal tenders, the status and activities of national central banks, the monetary statistics, payment systems and financial institutions.

The consultations also concerned numerous draft opinions of the ECB on draft legislation of the EU Member States, including the Polish bill on crowdfunding for business ventures and support for borrowers in relation to credit holidays. The opinions concerned, among others, the strengthening of financial stability, exercising financial supervision, banking services and products, payment systems, cash payment principles, central bank reserves, the responsibility and competences of central banks, their governing bodies and employees, as well as the integration of the central bank of Bulgaria into the Eurosystem.

Highlights in 2023:

- participation in the work of the state authorities on draft legal acts with relevance to the banking system and the economy,
- participation in issuing the ECB opinions on draft Community laws and draft legislative acts of the EU Member States, concerning – among others – financial and banking issues, including those related to clearing services, financial supervision, financial stability, crisis management and deposit insurance, payment systems, cash payments, the digital euro and sustainable development.

Chapter 13

International activity

International activity¹

13.1. Duties resulting from Poland's membership of the European Union

NBP representatives participated in the activities of the EU bodies, including: the General Council of the ECB, the General Council of the ESRB, committees and working groups of the ESCB and ESRB, the Council of ECOFIN (as part of informal meetings), and committees and working groups of the Council of the European Union and expert groups of the European Commission.

In 2023, NBP continued to contribute to the final versions of the draft EU legislation. These included amendments to the Capital Requirements Directive and Regulation (CRD VI and CRR III) and the draft regulation on euro credit transfers, as well as the legislative packages on the union of capital markets, EU insurance regulations and EU markets for clearing services.

Narodowy Bank Polski was also involved in activities related to new draft acts of EU legislation. The most important draft legal acts were:

- draft legislation on the crisis management and deposit insurance (CMDI), related to the completion of building the banking union,
- a package of draft legislation on the revision of EU rules in the area of payment services in the internal market (PSD3 and PSR),
- amendment of the regulation on indices used as benchmarks (BMR),
- a legislative package on retail client investments,
- draft regulation on access to financial data (FIDA),
- a legislative package related to the introduction of the digital euro,
- draft regulation on transparency and reliability of environmental, social and corporate governance (ESG) rating activities.

13.1.1. Cooperation within the European System of Central Banks

NBP representatives participated in the work of the ESCB to the extent resulting from the status of the central bank of a Member State which remains outside the euro area. In particular, they took part in the meetings of the ECB General Council (one of the ECB's decision-making bodies) and in the work of the ESCB committees.

The sessions of the ECB General Council focused primarily on the current and forecast macroeconomic and financial market developments in the euro area countries as well as in the other EU Member States. Discussions focused mainly on the economic activity, labour market developments, inflation, exchange rates fluctuations, the balance of payments, lending conditions and monetary policy. Moreover, the General Council continued to

¹ Tasks in this field are performed, among others, pursuant to Article 5, Article 11(2) and (3), Article 23(7) of the Act on NBP and the Statutes of the ECB and the ESCB.

monitor the activities of central banks with regard to the prohibition on monetary financing² of the public sector with central bank funds and the prohibition of privileged access.³

During the meetings of the ESCB committees as well as the ESCB working groups and task forces the following issues were discussed, among others:

- risk factors for the stability of the EU financial system,
- analyses and research conducted at NBP,
- draft regulations on payment services, i.e. the draft Payment Services and Electronic Money Services Directive (PSD3) and the draft Payment Services Regulation (PSR),
- updating the ECB capital subscription key,
- draft regulation on instant payments in euro,
- the banks' Integrated Reporting Framework (IReF), which consolidates the existing statistical reporting requirements of banks for the ESCB.

13.1.2. Collaboration with other EU bodies

In 2023, NBP representatives participated, directly or indirectly, in the activities of the following EU bodies:

- the Economic and Financial Committee (EFC) of the Council of the EU,
- working groups of the Council of the EU and expert groups of the European Commission.

13.2. Collaboration with international economic and financial institutions

13.2.1. The World Bank Group (WBG)

As part of cooperation with the World Bank Group, representatives of NBP participated in:

- the Spring and Annual Meetings of the Boards of Governors of the World Bank and the International Monetary Fund,
- two special donor meetings of the International Development Association (IDA).⁴

In 2023, NBP – in cooperation with the public administration – continued to support the activities of the Polish executive director⁵ representing the member states of our constituency in the WBG,⁶ preparing positions on key issues considered by the Boards of Governors. Moreover, NBP organised a scientific seminar on migrant remittances and changing labour markets in the face of the war in Ukraine and technological change.

² This follows from Article 123 of the Treaty on the Functioning of the European Union.

³ This follows from Article 124 of the Treaty on the Functioning of the European Union.

⁴ IDA is a unit of the WBG specialising in providing development assistance to the world's poorest countries.

⁵ The representative of Poland currently serves as the Deputy Executive Director.

⁶ The group of Member States, which includes: Poland, Azerbaijan, Kazakhstan, Kyrgyzstan, Serbia, Switzerland, Tajikistan, Turkmenistan and Uzbekistan.

13.2.2. The European Bank for Reconstruction and Development (EBRD)

In 2023:

- NBP representatives participated in the 32nd Annual Meeting of the EBRD Board of Governors,
- NBP hosted visits of the EBRD President and the First Vice President,
- NBP – in cooperation with the public administration – participated in consultations concerning investment documents and projects considered at the meetings of the EBRD Board of Directors (in particular, projects of investments planned in Poland, the EBRD's initiatives aimed at raising the equity of that bank and funding projects in Ukraine).

13.2.3. The Bank for International Settlements (BIS)

NBP representatives participated in six meetings of the Governors of the BIS. In June, the General Meeting of Shareholders of BIS was held which passed the 93rd Annual Report, approved the BIS balance sheet as at 31 March 2023 (including net profit in the amount of SDR 678.7 million) and resolved to pay the dividend for the financial year 2022/2023.

Narodowy Bank Polski received a dividend of over USD 3 million, i.e. the equivalent of SDR 2.28 million.

13.2.4. The International Monetary Fund (IMF)

In 2023, the cooperation with the International Monetary Fund included the participation of NBP in meetings with IMF representatives under Article IV of the IMF Agreement and providing the professional support to the Polish representatives at the Fund.⁷

Narodowy Bank Polski also continued to participate in the temporary increase in IMF financial resources. It remained ready to extend to the IMF an interest-bearing loan up to the amount corresponding to SDR 2.57 billion – as a member of New Arrangements to Borrow (NAB). Moreover, it acted as a signatory of the bilateral loan agreement with the IMF for the amount of up to EUR 2.7 billion.

The funds made available by Narodowy Bank Polski to the IMF both under NAB and under the bilateral loan agreement will retain their status as foreign currency reserves. So far, the IMF has not used the funds made available under the bilateral loan, whereas under NAB, as at the end of 2023, the IMF had used the amount corresponding to approximately SDR 2.6 million.

13.2.5. The Organisation for Economic Co-operation and Development (OECD)

In 2023, NBP representatives participated in meetings of thematic committees and working groups of the OECD and in the activities under the OECD International Network on Financial Education.

⁷ The Minister of Finance acts in the capacity of the Governor of the Republic of Poland at the IMF, and the NBP representative is the Alternate Governor.

13.2.6. The Asian Infrastructure Investment Banks (AIIB)

Representatives of NBP and the Ministry of Finance participated in the Annual Meeting of the AIIB Board of Governors. The discussions mainly focused on the role of multilateral development banks, including the AIIB, in development investment, reducing rising debt levels and supporting a fair and efficient energy transition.

13.2.7. Other activities on the international arena

In 2023, NBP organised or co-organised – in cooperation with other international and domestic financial institutions – the following international conferences and meetings (in addition to scientific conferences and other scientific events described in Chapter 9):

- 21 March 2023: international conference summarising the twinning project carried out by NBP in 2020–2023, entitled “Strengthening the institutional and regulatory capacity of the National Bank of Ukraine to implement EU-Ukraine Association Agreement”;
- 23–25 April 2023: meeting of the IWG-MPPG – Instruments Working Group and Macroprudential Policy Group operating as part of the European Systemic Risk Board (ESRB);
- 15 September 2023: fifth joint international conference organised by NBP and the Magyar Nemzeti Bank in cooperation with the Official Monetary and Financial Institutions Forum entitled “Growth Perspectives in Times of Technological Changes and Booming AI”.

A total of 1,817 persons participated in international events organised by NBP in 2023.

Narodowy Bank Polski, as other European central banks, provides technical assistance to central banks from non-EU countries in economic transition. In 2023, NBP implemented 78 projects, including:

- 1 seminar,
- 13 study visits (including 6 online),
- 1 expert visit,
- 41 remote expert missions and 22 on-site missions as part of a twinning project for the NBU.

A total of 109 individuals from 10 central banks benefited from the NBP’s technical cooperation programme in 2023.

In 2023, the assistance provided to the National Bank of Ukraine was most significant. Due to the war, assistance activities were mainly organised online. Narodowy Bank Polski also hosted working meetings of NBU representatives which focused, among others, on ICT systems, accounting principles, security of transport of banknotes and coins as well as payment systems. In addition to the expert-level meetings, a meeting between the vice-governors of NBP and NBU was also held in 2023.

Highlights in 2023:

- participation in the work of EU bodies on legislation regulating the functioning of the financial system, including regulatory changes on: capital requirements, EU markets for clearing services, payment services in the internal market (PSD3 and PSR), euro instant transfers, as well as work on deepening the capital markets union and completing the banking union and introducing the digital euro,
- continuation of Poland's participation in a temporary increase of the IMF's financial resources under NAB and a bilateral loan,
- continuation of assistance provided to the National Bank of Ukraine.

Chapter 14

Internal development of NBP

Internal development of NBP

14.1. Human resources management

14.1.1. NBP headcount

In 2023, the average headcount at NBP amounted to 3,289 full-time posts and was 55 posts lower than in 2022. The headcount reduction was a consequence of the implementation of a voluntary layoff programme at Narodowy Bank Polski, lasting from 1 January to 31 March 2023. Expenses related to the remuneration of employees, along with the related social contributions, were 11.5% higher in 2023 than in 2022 and, including provisions for future liabilities to employees, they went up by 15.1%.

The change in the NBP average headcount in 2020–2023 is presented in Table 14.1.

Table 14.1. Change in the NBP average headcount in 2020–2023

Specification	2020	2021	2022	2023	2023–2022
Total	3 355	3 360	3 344	3 289	-55
Head Office	2 008	2 025	2 024	1 990	-34
Regional branches	1 347	1 335	1 320	1 299	-21

Source: NBP data.

14.1.2. Developing NBP staff qualifications

The purpose of the NBP training activity is to ensure the competence and reliability of the staff.

In 2023, every employee participated, on average, in 5.77 training events (3 in 2022). The training activities focused on the development of professional expertise of employees, with special emphasis on cybersecurity.

A considerable number of training events were mandatory – following the lifting of the state of pandemic, such training once again became mandatory.

14.1.3 NBP Code of Ethics

The promotion of standards included in the *Code of Ethics for Employees of Narodowy Bank Polski* was continued.

14.2. Organisational changes

As of 1 February 2023, the Financial Stability Department took over the responsibility of the Payment System Department for exercising systemic oversight of the payment systems, the payment schemes, the settlement systems and the securities clearing systems, and for the provision of acquiring services by domestic payment institutions.

14.3. Operational risk management

In 2023, NBP took measures aimed at minimising the probability of the materialisation of events disrupting the implementation of the Bank's tasks, resulting in financial losses or adversely affecting NBP's reputation. Current and future threats to the Bank were monitored and identified. Training courses were conducted in operational risk and related threats.

14.4. Investment activity

In 2023, expenditure on investment purchases of NBP amounted to PLN 45.9 million (PLN 70.7 million in 2022). The main areas of investment activities in NBP included ICT, construction infrastructure and the purchase of fittings.

The ICT investment involved the technological exchange and upgrading of the network and server infrastructure, the purchase of hardware, the expansion of monitoring and cybersecurity systems and the implementation of new systems and applications. The construction investments mainly focused on the modernisation and reconstruction of infrastructure at the NBP Head Office and Regional Branches. The purchase of fittings concerned in the main the cash and treasury operations.

14.5. IT support for the banking system and NBP

The most important activities related to IT systems performed in 2023 included:

- the launch, on 20 March 2023, of the TARGET system, its Polish component TARGET-NBP and the related internal application in NBP,
- continuation of the development of SORBNET3 – a new RTGS system in Polish zloty,
- the launch of a project concerning reorganisation of the management of monetary policy instruments and accounting for such instruments at NBP,
- extension and modification of the payment statistics reporting system and data warehouse,
- the launch of the handling of non-cash orders in the system for the regional branches,
- a change of the message format in the integrated accounting system (the text (MT) format in SWIFT messages was replaced by the XML (MX) format consistent with the ISO20022 standard).

Other changes and improvements were made:

- the internal operations accounting system with the electronic document circulation module were made ready for integration with the National e-Invoice System to be launched by the Ministry of Finance,
- the latest versions of the key critical systems were installed,

- the ICT network management and monitoring software was upgraded,
- a pilot use of artificial intelligence models for bank data analytics was started.

Changes in IT support at NBP were made. They included specifically: the launch of a new, upgraded website of Narodowy Bank Polski (nbp.pl) and the launch of a system for automatic and safe publication of press releases by the Monetary Policy Council on the nbp.pl website and via the interface to press agencies.

14.6. Internal audit

In 2023, 31 audits were conducted. The audits covered, in particular, issues related to IT activity, issuing activity, security, international cooperation, accounting and administration. Audits also covered foreign exchange dealings, activities for the payment system, legal service, human resources, monetary policy, organisation and planning, as well as communication and promotional activities.

The audits covered 14 departments of the NBP Head Office and 10 NBP regional branches. They resulted in 51 instructions and 63 recommendations aimed at eliminating the irregularities found, implementing appropriate controls and increasing the efficiency of operations.

In 2023, representatives of NBP participated in the work of the ESBC's Internal Audit Committee. As part of this cooperation, 3 audits were conducted, including 2 in the area of security and one in the area of activities for the payment system.

14.7. Activity of NBP Regional Branches

Narodowy Bank Polski carries out its activity in the field through 16 regional branches located in each voivodeship. In 2023, the regional branches:

- in the framework of banking services provided to the State Budget – participated in efforts aimed at optimising the servicing of account holders;
- in the cash and treasury area – performed activities connected with the issuing function of NBP, continued the implementation of barcodes in the GS1 standard and provided the service of exchanging coins for banknotes or coins of higher denominations using self-service devices;
- in the area of statistics and foreign exchange – performed analyses and evaluation of the general economic and financial situation within their remit, participated in the surveys of companies, and conducted inspections within the scope specified in the Foreign Exchange Law and the Anti-Money Laundering and Anti-Terrorist Financing Law.

As in previous years, the regional branches also carried out tasks related to promotional and educational activities of NBP.

14.8. Safety and security

In 2023, activities aimed at ensuring and maintaining an adequate level of security at NBP were carried out, including:

- the launch of a system for automatic and safe publication of press releases by the Monetary Policy Council (see Section 14.5),
- continuation of the extension and modification of technical safeguards and modification of the rules of access to the NBP Head Office buildings in connection with the raised alert states,
- modernisation of the fleet of armoured vehicles.

At the same time, as threats continued to increase, NBP took measures to enhance the cyber resilience of its ICT systems, and in this regard:

- prepared and implemented an NBP Cybersecurity Strategy 2023–2026, based on CROE¹ guidance and compliant with the NIST² and ISO 27001 standards,
- exchanged information with other institutions in Poland and with central banks,
- ensured cybersecurity on an on-going basis, in terms of: technology (planned and implemented new security systems), processes (ensured passive security and system updates, regularly conducted system security analyses) and organisation (monitored possible disruptions in the operation of systems, work of employees and technology),
- provided training, informed about threats and ways to prevent them.

Highlights in 2023:

- launch of new ICT systems,
- expansion of cybersecurity systems,
- participation of NBP regional branches in the provision of banking services to the State Budget as well as cash and treasury services.

¹ *Guidance on cyber resilience for financial market infrastructures.*

² NIST – National Institute of Standards and Technology, a US federal agency.

Chapter 15

Financial and equity position and financial result of NBP for 2023

Financial and equity position and financial result of NBP for 2023

15.1. Introduction

The aim of this chapter is to present summarised information on financial and equity position and financial result of NBP for 2023.¹ It describes, from the financial perspective, the areas of activity of the central bank, primarily the management of foreign exchange reserves, the conduct of monetary policy, the issuing activity as well as operating expenses and depreciation and amortisation expenses.

The chapter includes in particular information clarifying changes in individual items of the Balance Sheet and the Profit and Loss Account in 2023 compared to the previous year. Among other things, the Balance Sheet presents the following: a change in the balance sheet total, a change in the structure of assets and liabilities as well as major items of assets and liabilities broken down by foreign currencies and domestic currency. In the Profit and Loss Account, items comprising the net result are presented (e.g. net result on interest, net result on financial operations, net result on commissions and fees), as well as income and expenses broken down by the main areas of the Bank's activity (net result on the management of foreign exchange reserves, net result on foreign exchange gains/losses, net result on monetary policy, operating expenses and depreciation and amortisation expenses).

In addition to financial data for 2023 and 2022, in order to show the information presented over a broader time horizon, historical data are also included, i.e. the developments in the NBP financial and equity position on a five-year basis (2019–2023).

The information contained in this chapter is complementary to the *Financial Statements of Narodowy Bank Polski as at 31 December 2023*, available on the NBP website together with the *Independent Auditor's Report*.

¹ All data included in this chapter are NBP data, including the data from the accounting books of NBP. The figures may not add up to totals due to rounding.

NBP Balance Sheet

As at the end of 2023, the NBP balance sheet total amounted to PLN 903.6 billion.

The increase in the balance sheet total in 2023 by PLN 27.4 billion (3.1%) was mainly driven by transactions of account holders with NBP, the net result on the management of foreign exchange reserves and increased exposure to simultaneous reverse repo and repo transactions amid changes in currency exchange rates and a decline in the balance of debt securities denominated in zloty, purchased in 2020–2021 for monetary policy purposes.

The main changes in assets were related to:

- gold and gold receivables – an increase of PLN 34.9 billion (59.6%),
- claims denominated in foreign currency – a total decrease of PLN 5.7 billion (0.8%),
- debt securities denominated in domestic currency – a decrease of PLN 1.8 billion (1.3%).

The major changes in liabilities involved:

- liabilities related to monetary policy – a total increase of PLN 70.2 billion (22.8%),
- banknotes and coins in circulation – an increase of PLN 8.9 billion (2.4%),
- equity of NBP – a decrease of PLN 50.9 billion (129.8%).

NBP Profit and Loss Account

Narodowy Bank Polski recorded a loss of PLN -20.8 billion for 2023. The main elements of the financial result of NBP were:

- a negative net result on foreign exchange gains/losses of PLN -31.0 billion, including PLN -2.7 billion from realised foreign exchange gains/losses and PLN -28.2 billion on unrealised currency revaluation losses as at 31 December 2023 (see Chapter 15.3.2); the FX risk provision of PLN 15.1 billion was fully released to cover these losses,
- a negative net result on monetary policy in the amount of PLN -20.6 billion,
- a positive net result on the management of foreign exchange reserves (in the currency of an instrument) in the amount of PLN 18.9 billion (see Chapter 15.3.1).

Operating expenses and depreciation and amortisation expenses amounted to PLN -1.8 billion.

Figure 15.1. Overview of changes in the NBP Balance Sheet in 2019–2023 (as at 31 December of the financial year)

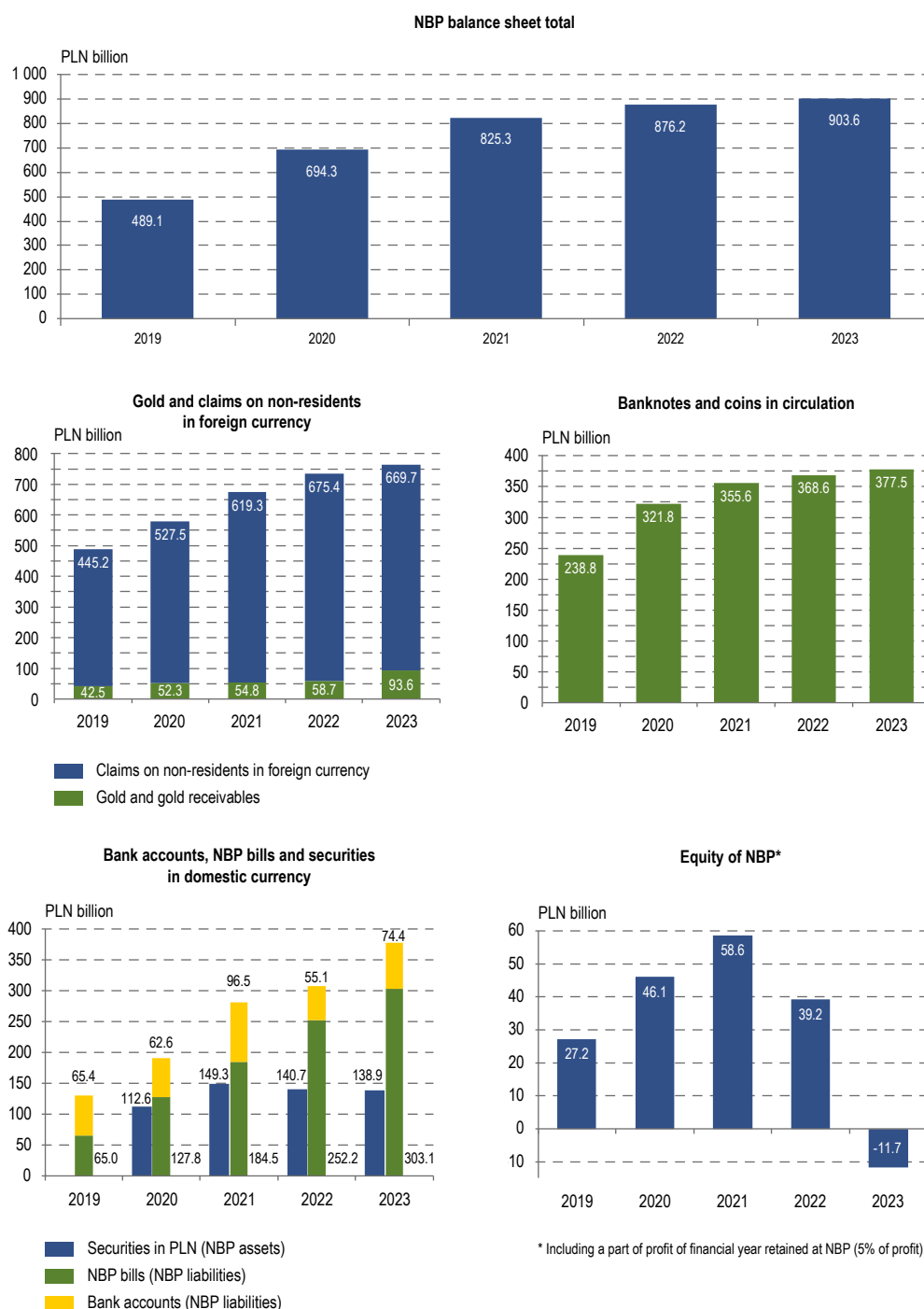
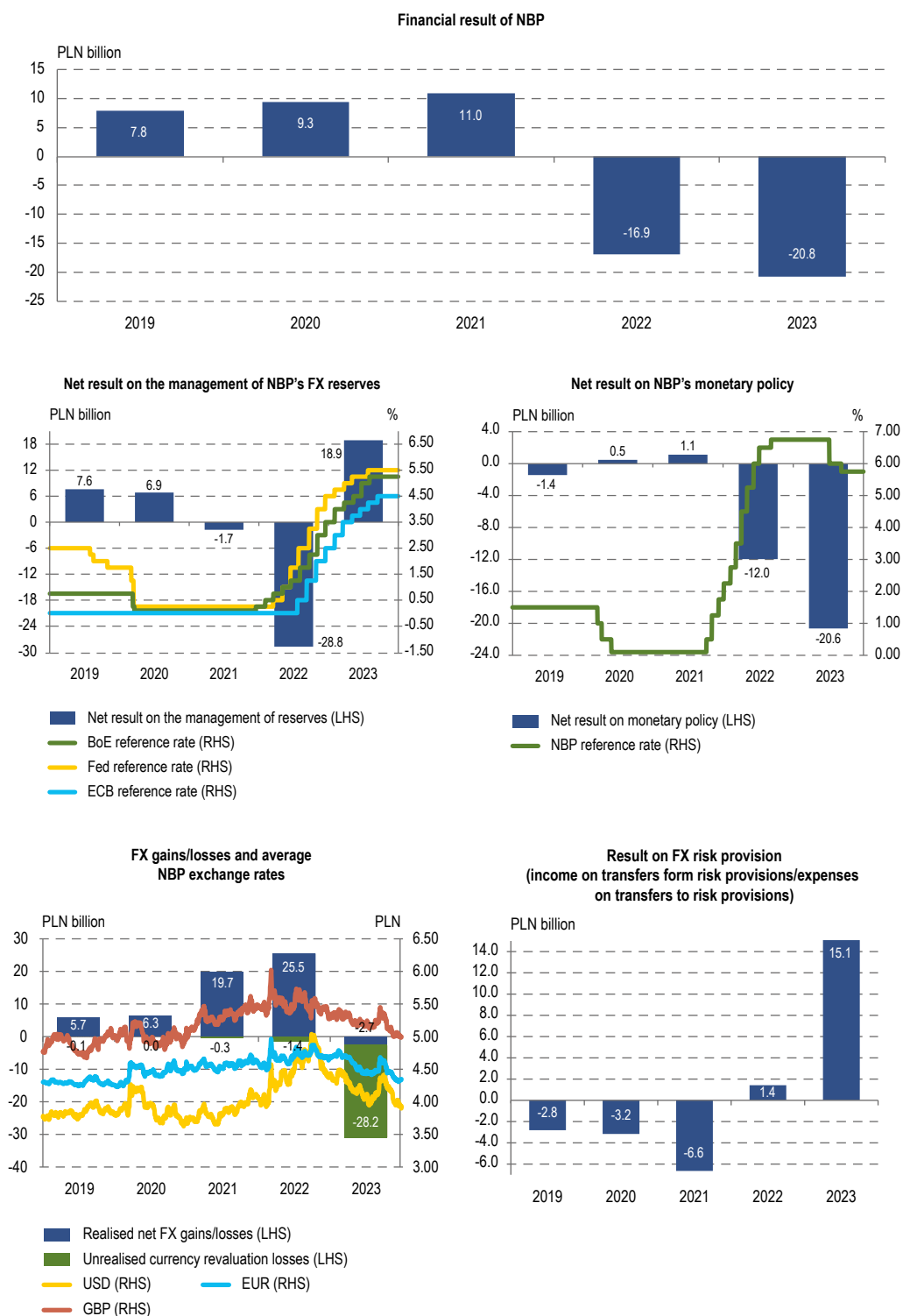


Figure 15.2. Overview of changes in the NBP Profit and Loss Account in 2019–2023 (for the relevant financial year)



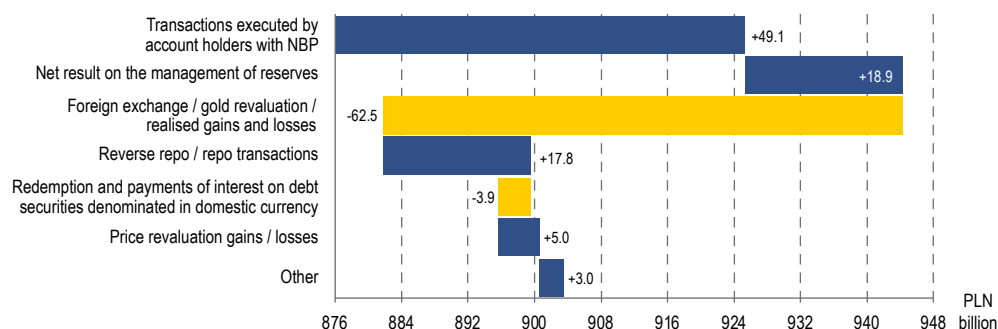
15.2. Characteristics of the NBP Balance Sheet

As at the end of 2023, NBP recorded an increase in the balance sheet total of PLN 27.4 billion. The increase mainly resulted from a net inflow of foreign funds in the amount of PLN 49.1 billion due to transactions of holders of accounts with NBP. The increase was also driven by a positive net result on the management of foreign exchange reserves (PLN 18.9 billion, calculated in the currency of the instruments, i.e. excluding FX gains/losses) and an increase in exposure to simultaneous repo and reverse repo transactions used in the management of foreign exchange reserves (PLN 18.0 billion). On the other hand, changes in foreign exchange rates and the price of gold (PLN -62.5 billion) and settlements on account of interest payments and redemption of debt securities denominated in domestic currency at maturity (PLN -1.8 billion) led to a decrease in the NBP balance sheet total.

Table 15.1. NBP assets and liabilities at the end of 2023 and 2022 (PLN billion)

Assets	2023	2022	Change
A.1. Gold and gold receivables	93.6	58.7	34.9
A.2. Claims on non-residents denominated in foreign currency	669.7	675.4	-5.7
2.1. Receivables from the IMF	28.5	31.4	-2.9
2.2. Balances with foreign institutions, debt securities, loans granted, other foreign assets	641.2	644.0	-2.8
A.7. Debt securities of residents denominated in domestic currency	138.9	140.7	-1.8
A.10. Other assets	1.5	1.5	0.0
Total assets	903.6	876.2	27.4
Liabilities	2023	2022	Change
L.1. Banknotes and coins in circulation	377.5	368.6	8.9
L.2. Liabilities to credit institutions related to monetary policy operations denominated in domestic currency	74.4	55.1	19.3
L.3. Other liabilities to credit institutions denominated in domestic currency	2.6	0.9	1.6
L.4. Liabilities due to issued debt securities denominated in domestic currency	303.1	252.2	50.9
L.5. Liabilities to other residents denominated in domestic currency	11.9	11.9	0.1
L.6. Liabilities to non-residents denominated in domestic currency	4.1	4.1	0.0
L.7. Liabilities to non-residents denominated in foreign currency	45.6	59.0	-13.4
L.8. Liabilities to non-residents denominated in foreign currency	67.5	53.6	13.9
L.9. SDR allocation	27.9	30.9	-3.0
L.11. Other liabilities	0.5	0.4	0.0
L.12. Provisions	0.2	15.3	-15.1
L.13. Revaluation accounts	35.0	50.1	-15.0
L.14. Capital	1.5	1.5	0.0
L.15. Financial result	-48.2	-27.4	-20.8
15.1. Financial result for the financial year	-20.8	-16.9	-3.9
15.2. Loss of previous years	-27.4	-10.5	-16.9
Total liabilities	903.6	876.2	27.4

Note: in the NBP Balance Sheet, items unused or showing a zero balance in both periods presented are omitted.

Figure 15.3. Main factors contributing to a change in the NBP balance sheet total in 2023 compared to 2022


Changes in the structure of assets in the balance sheet in 2023, compared to the previous year, were associated with an increase in the share of gold and gold receivables amid a decrease in claims on non-residents denominated in foreign currency. At the same time, the share of assets denominated in domestic currency has slightly decreased – primarily on the back of the issuer’s redemption of a portion of Treasury securities at maturity. On the liabilities side, liabilities denominated in domestic currency increased (primarily liabilities related to monetary policy), whereas liabilities denominated in foreign currency decreased – mainly in connection with the lower balances on the foreign currency accounts of residents (including on the accounts of the State budget and on bank accounts for settlements in TARGET) with increased exposure to simultaneous repo and reverse repo transactions. The equity of NBP also diminished, mainly due to the appreciation of the zloty against foreign currencies, which translated into a decrease in unrealised currency revaluation gains and a simultaneous increase in unrealised currency revaluation losses.

Foreign currency flows to NBP due to transactions carried out by account holders are mostly exchanged into domestic currency and increase NBP’s liabilities denominated in domestic currency. As a consequence, the NBP balance sheet is characterised by currency asymmetry. This means that assets denominated in foreign currency and gold form the prevailing part of assets, while liabilities denominated in domestic currency (related to monetary policy, issue of banknotes and coins) prevail on the liabilities side. This asymmetry results in an open FX position of NBP, i.e. a surplus of assets over liabilities denominated in foreign currency, which exposes the Bank to FX risk.

Figure 15.4. Structure of assets

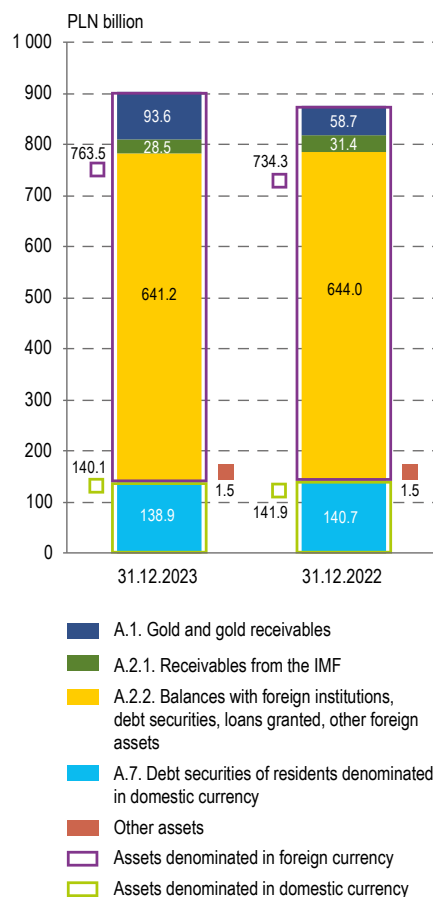
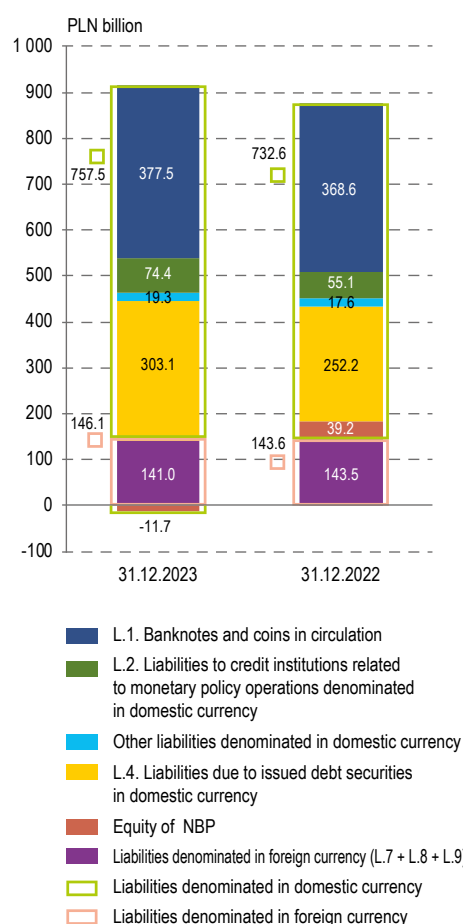


Figure 15.5. Structure of liabilities



15.2.1. Assets and liabilities in foreign currency and in gold

The items of NBP assets and liabilities in foreign currency and in gold are primarily related to the accumulation and management of foreign exchange reserves (see Chapter 5), the Bank's role of an agent of the government of the Republic of Poland in relations with the IMF (see Chapter 13.2.4), and NBP acting as an operator of the TARGET-NBP system, the Polish component of the pan-European settlement system for euro-denominated payments (see Chapter 7).² In addition, NBP operates bank accounts in foreign currencies as part of its services provided to the State budget (see Chapter 8).

² Under the TARGET system, Narodowy Bank Polski operates the accounts in euro of participants of this system, mainly domestic banks (presented under liabilities of the Balance Sheet) and also maintains the balance on the current account with the ECB (presented under assets of the Balance Sheet).

Table 15.2. NBP assets and liabilities in gold and in foreign currency and in gold by selected areas of activity at the end of 2023 and 2022 (PLN billion)

	Management of foreign exchange reserves		IMF		Settlements in TARGET		Services to government sector		Other		Total		
	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	Change
A.1. Gold and gold receivables	66.2*	31.8*							27.4**	26.9**	93.6	58.7	34.9
A.2. Claims on non-residents denominated in foreign currency	638.0	628.6	28.5	31.4	2.9	15.0			0.3	0.3	669.7	675.4	-5.7
A.10. Other assets									0.2	0.2	0.2	0.2	0.0
Total assets	704.2	660.4	28.5	31.4	2.9	15.0	0.0	0.0	27.9	27.5	763.5	734.3	29.2
P.7. Liabilities to residents denominated in foreign currency					2.9	15.0	42.3	43.7	0.4	0.4	45.6	59.0	-13.4
P.8. Liabilities to non-residents denominated in foreign currency	66.8	53.5							0.7	0.1	67.5	53.6	13.9
P.9. SDR allocation			27.9	30.9							27.9	30.9	-3.0
P.11. Other liabilities									0.1	0.0	0.1	0.0	0.1
P.13. Revaluation accounts									5.1	0.0	5.1	0.0	5.0
Total liabilities	66.8	53.5	27.9	30.9	2.9	15.0	42.3	43.7	6.3	0.5	146.1	143.6	2.5
Net balance sheet item	637.4	606.9	0.6	0.5	0.0	0.0	-42.3	-43.7	21.6	26.9	617.3	590.7	26.7

* Gold on current accounts and term deposits.

** Gold in NBP vaults.

The differences between assets and liabilities in foreign currency and in gold represented foreign currency holdings and gold holdings. In addition to its gold holding, NBP maintained foreign currency reserves – denominated in the US dollar (USD), the euro (EUR), the British pound (GBP), the Canadian dollar (CAD), the Australian dollar (AUD), the Norwegian krone (NOK) and the New Zealand dollar (NZD). Moreover, NBP had a holding of IMF's special drawing rights (SDRs).

Table 15.3. Holdings of gold and main foreign currencies at the end of 2023 and 2022 (PLN billion)

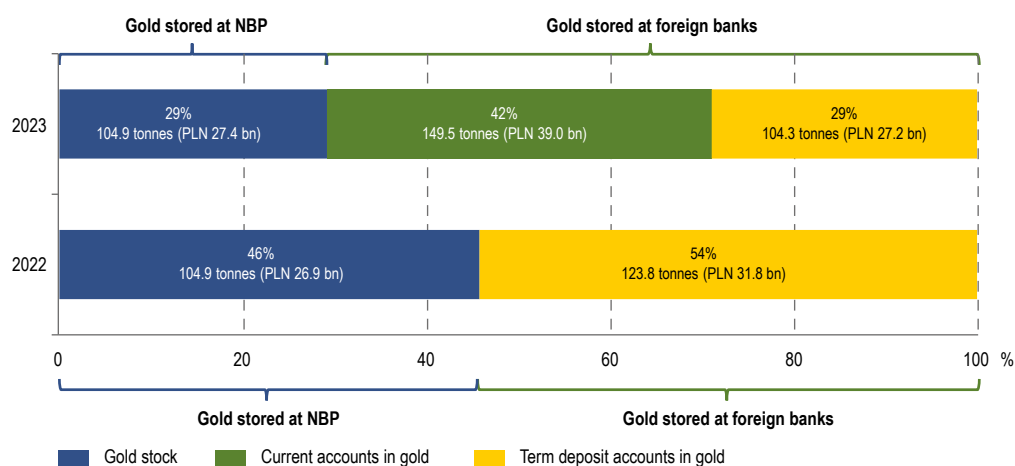
	2023			2022		
	Holdings at the average cost of holding	Holdings at the average NBP exchange rate	Unrealised gains (+) / losses (-)	Holdings at the average cost of holding	Holdings at the average NBP exchange rate	Unrealised gains (+) / losses (-)
Gold	65.3	93.6	28.3	31.1	58.7	27.5
USD	224.7	216.8	-7.9	203.7	222.6	18.9
EUR	109.3	103.6	-5.6	103.0	104.6	1.5
GBP	65.5	62.1	-3.4	63.2	63.3	0.0
CAD	57.0	52.9	-4.2	54.2	53.2	-1.0
AUD	47.2	43.6	-3.6	43.2	43.5	0.3
NOK	31.9	29.3	-2.6	29.7	29.4	-0.3
NZD	15.6	14.7	-0.9	14.9	14.8	-0.1
IMF (SDR)	0.7	0.7	0.0	0.6	0.6	0.0
Unrealised gains (balance sheet)			28.3			48.4
Unrealised losses (financial result)			-28.2			-1.4

The difference between the value of foreign currency holdings and gold holdings at the average NBP exchange rate and the value of these holdings at the average cost of the holding (i.e. the averaged purchase price) represents unrealised currency/gold revaluation gains or losses. Unrealised gains increase liabilities in the balance sheet (as part of the equity of NBP under the item of revaluation accounts – see Table 15.8), while unrealised losses reduce the financial result (net result on financial operations, see Table 15.12).

15.2.1.1. Gold

Narodowy Bank Polski holds gold conforming to international standards of purity, stored at foreign banks (on current accounts or on term deposit accounts) and in NBP vaults. In 2023, the Bank purchased 130 tonnes of gold. As at 31 December 2022, the gold holding of NBP amounted to 358.7 tonnes (PLN 93.6 billion), representing 10.4% of NBP's assets (228.7 tonnes and 6.7% at the end of 2022).

Figure 15.6. Gold and gold receivables as at the end of 2023 and 2022



15.2.1.2. Management of foreign exchange reserves (other than gold)

Investment instruments used to manage foreign exchange reserves account for the largest share of NBP assets. They primarily include debt securities issued by governments, government agencies and international institutions and, to a lesser extent, term deposits and bonds of non-financial corporations. A part (around 1.1%) of debt securities held by NBP is classified as green bonds and sustainable bonds.³ In 2023, NBP started investing in investment fund participation units (in exchange traded funds, ETFs). In addition, a minor part of foreign currency reserves is held in current accounts, mainly with foreign central banks. In order to gain additional income, NBP concludes reverse repo transactions (presented under assets of

³ Green bonds or sustainable bonds are issues whose proceeds are used to finance or re-finance green projects or social projects (in the case of sustainable bonds). These may include projects linked to energy efficiency, renewable energy, prevention of environmental pollution, sustainable management of natural resources, biodiversity, provision of essential infrastructure and services or food security, and support for socio-economic progress.

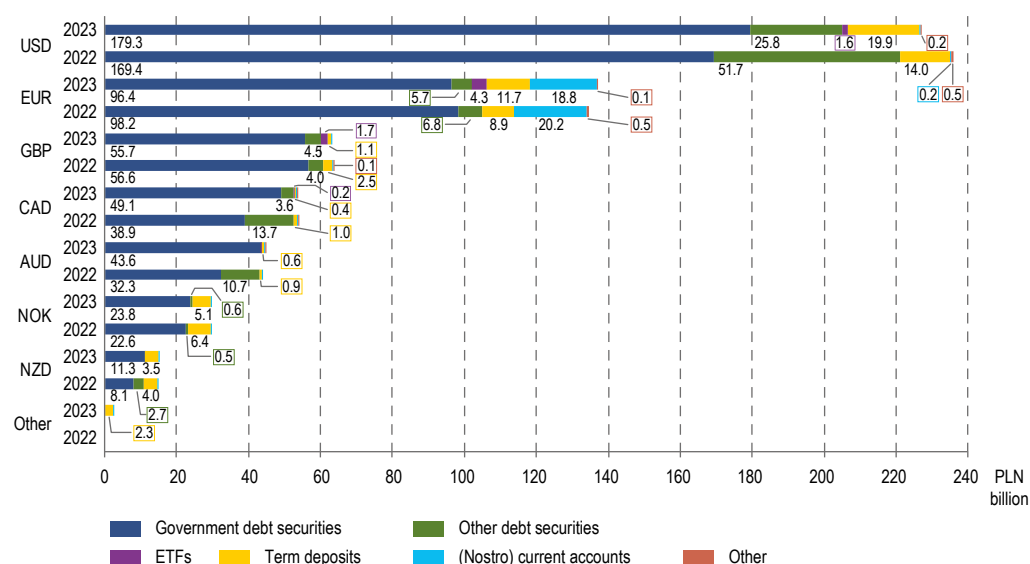
the balance sheet), usually simultaneously to repo transactions (presented under liabilities of the balance sheet) and invests in futures contracts (including equity index futures). The NBP holds a portfolio of debt securities denominated in USD, held to maturity (HTM).

The volume of foreign exchange reserves (other than gold) under management was mainly affected by the inflow of foreign currencies to holders of accounts with NBP and the purchase of gold as well as the currency revaluation and the price revaluation of debt securities held.

Table 15.4. Main investment instruments of foreign exchange reserves at the end of 2023 and 2022; assets “+”, liabilities “-” (PLN billion)

	2023	2022	Change
A.2.2. (Nostro) current accounts	19.0	20.3	-1.4
A.2.2. Term deposits	44.8	37.6	7.2
A.2.2. Reverse repo transactions	66.8	53.6	13.3
L.8. Repo transactions	-66.8	-53.5	-13.3
A.2.2. Debt securities	499.3	516.1	-16.8
A.2.2. ETFs	7.9	-	7.9
A.2.2. Other	0.3	1.1	-0.8
Total	571.2	575.1	-3.9

Figure 15.7. Currency composition of foreign exchange reserves (excluding gold) as at the end of 2023 and 2022



15.2.1.3. Receivables from and liabilities to the IMF

Narodowy Bank Polski presents in its balance sheet receivables and liabilities related to Poland's participation in the IMF. Items recognised in assets include the member quota in the IMF paid in foreign currency (the so-called reserve tranche), the current account in SDR for settlements with the IMF and loans extended to the IMF. On the other hand, liabilities due to the SDR allocation granted to Poland are presented under liabilities.

Table 15.5. Receivables “+” from and liabilities “-” to the IMF denominated in SDR as at the end of 2023 and 2022 (PLN billion)

	2023	2022	Change
A.2.1. Reserve tranche	5.8	6.3	-0.5
A.2.1. Current account with the IMF	22.6	25.0	-2.4
A.2.1. Term deposit with the IMF	0.0	0.0	0.0
A.2.1. Loans extended to the IMF	0.0	0.1	-0.1
L.9. SDR allocation	-27.9	-30.9	3.0
Total	0.6	0.5	0.1

The FX position in SDR⁴ of NBP is mainly the result of operations conducted with the IMF on the basis of concluded loan agreements and borrowing arrangements. The change in the FX position in SDR was mainly affected by funds transferred by NBP to IMF borrowers, related to meeting the IMF's borrowing needs (increasing the reserve tranche), and repayments to NBP by IMF borrowers (decreasing loans extended to the IMF). The value of receivables from and liabilities to the IMF in zloty was also affected by SDR currency revaluation.

15.2.2. Assets and liabilities denominated in domestic currency

Assets and liabilities denominated in domestic currency are primarily linked to the issuance of cash by NBP, the conduct of monetary policy and the maintenance of bank accounts for the government sector, including the State budget. As most of the financial instruments used for the performance of these functions are liabilities, there is a surplus of liabilities over assets denominated in domestic currency. The increase in this surplus in 2023 mainly resulted from the conversion into the zloty of foreign currencies transferred for the benefit of account holders with NBP.

⁴ NBP also holds SDR-denominated shares in the Bank for International Settlements (PLN 52.9 million as at the end of 2023).

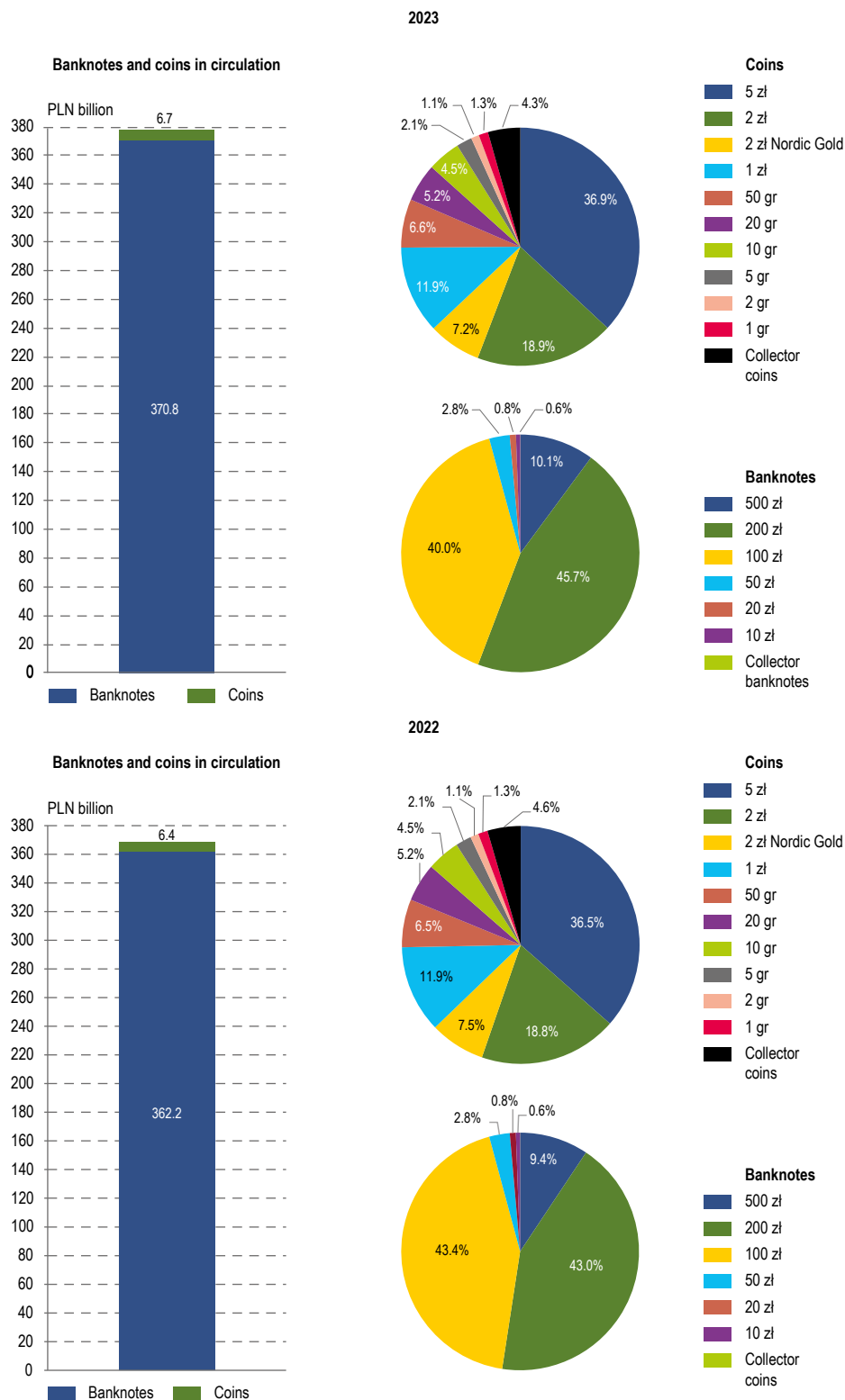
Table 15.6. NBP assets and liabilities in domestic currency by selected areas of activity at the end of 2023 and 2022 (PLN billion)

	Issue of banknotes and coins		Monetary policy		Services to government sector		Other		Total		
	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	Change
A.6. Other claims on credit institutions denominated in domestic currency							0.0	0.0	0.0	0.0	0.0
A.7. Debt securities of residents denominated in domestic currency			138.9	140.7					138.9	140.7	-1.8
A.10. Other assets							1.3	1.3	1.3	1.3	0.0
Total assets	0.0	0.0	138.9	140.7	0.0	0.0	1.3	1.3	140.1	141.9	-1.8
L.1. Banknotes and coins in circulation	377.5	368.6							377.5	368.6	8.9
L.2. Liabilities to credit institutions related to monetary policy operations denominated in domestic currency			74.4	55.1					74.4	55.1	19.3
L.3. Other liabilities to credit institutions denominated in domestic currency							2.6	0.9	2.6	0.9	1.6
L.4. Liabilities due to issued debt securities in domestic currency			303.1	252.2					303.1	252.2	50.9
L.5. Liabilities to other residents denominated in domestic currency					10.3	10.3	1.6	1.1	11.9	11.9	0.1
L.6. Liabilities to non-residents denominated in domestic currency							4.1	4.1	4.1	4.1	0.0
L.11. Other liabilities							0.5	0.4	0.5	0.4	0.1
L.12. Provisions							0.2	15.3	0.2	15.3	-15.1
L.13. Revaluation accounts							29.9	50.0	29.9	50.0	-20.1
L.14. Capital							1.5	1.5	1.5	1.5	0.0
L.15. Financial result							-48.2	-27.4	-48.2	-27.4	-20.8
Total liabilities	377.5	368.6	377.5	307.3	10.3	10.3	-7.9	45.9	757.5	732.6	24.9
Net balance sheet item	-377.5	-368.6	-238.6	-166.6	-10.3	-10.3	9.1	-44.7	-617.3	-590.7	-26.7

15.2.2.1. The issue of currency

The issue of currency is based on the exercise by NBP of its constitutional right to issue currency of the Republic of Poland. NBP issues banknotes and coins of general circulation as well as collector banknotes and coins of various denominations (see Chapter 4). They represent, together with liabilities related to monetary policy, the most significant liability item of the Balance Sheet of NBP. The volume of money issue depends on exogenous factors, in particular on the development of the demand for cash in the economy. As at the end of 2023, the increase in cash value compared to the previous year was PLN 8.9 billion (2.4%).

Figure 15.8. The denomination breakdown of currency in circulation as at the end of 2023 and 2022



15.2.2.2. Monetary policy

Narodowy Bank Polski implements its monetary policy using a set of instruments adopted by the Monetary Policy Council (see Chapter 2). In 2023, the monetary policy was conducted amid a liquidity surplus prevailing in the banking sector. In order to implement the operational objective of the monetary policy, NBP used selected instruments, in particular open market operations based on the issue of NBP bills (presented under liabilities). The reserve requirement was also a monetary policy instrument of NBP. The obligation to maintain the required minimum reserve (presented under liabilities) limits the scale of open market operations performed to absorb the excess liquidity from the banking sector. NBP provided standing facilities to domestic banks and enabled them to place liquidity surpluses in NBP in the form of deposit facility (presented under liabilities) or to supplement liquidity deficits with the use of lombard credit (presented under assets). The debt securities presented under the assets of NBP include Treasury bonds and debt securities guaranteed by the Treasury, purchased in 2020–2021 as part of structural open market operations carried out in the secondary market in order to mitigate the negative effects of the COVID-19 pandemic. Funds gained from their redemption at maturity are not reinvested.

Table 15.7. Assets “+” and liabilities “-” related to monetary policy as at the end of 2023 and 2022 (PLN billion)

	2023	2022	Change
A.7. Debt securities denominated in domestic currency	138.9	140.7	-1.8
L.2. Current accounts (including reserve requirement accounts)	-48.9	-34.9	-14.0
L.2. Deposit facilities	-25.5	-20.2	-5.3
L.4. NBP bills	-303.1	-252.2	-50.9
Total	-238.6	-166.6	-72.0

In 2023, the increase in net liabilities to the banking sector was mainly affected by: the purchase of foreign currency incoming to NBP due to transactions by holders of accounts with NBP and cash flows related to NBP’s result on monetary policy (see Chapter 15.3.3). The factor contributing to the decrease in banknotes and coins was an increase in banknotes and coins in circulation (see Chapter 4) and the issuer’s redemption of debt securities at maturity. Excess liquidity in the banking sector was absorbed through the issue of NBP bills. Moreover, banks left part of the funds in current accounts as an overnight deposit facility.

15.2.2.3. Equity of NBP

As the central bank of the state, NBP is not subject to the capital adequacy regulations applicable to the banking sector. In accordance with the practice adopted among ESCB central banks, in addition to (statutory and reserve) funds, NBP recognises the following

items as components of equity: the FX risk provision,⁵ gold revaluation account, gold holding revaluation gains, currency and debt securities revaluation gains, a balance sheet loss (of previous years and for the current financial year) and a portion of profit for the financial year retained at NBP (5%), which is allocated to increase the reserve fund.

Table 15.8. Equity of NBP as at the end of 2023 and 2022 (PLN billion and %)

	2023	2022	Change
L.12. FX risk provision	0.0	15.1	-15.1
L.14. Statutory fund	1.5	1.5	0.0
L.14. Reserve fund	0.0	0.0	0.0
L.13. Gold revaluation account	1.6	1.6	0.0
L.13. Gold holding revaluation gains	28.3	27.5	0.8
L.13. Currency revaluation gains	0.0	20.9	-20.9
L.13. Price revaluation gains	5.1	0.0	5.0
L.15. Loss of previous years	-27.4	-10.5	-16.9
L.15. Financial result for the financial year at NBP*	-20.8	-16.9	-3.9
Total	-11.7	39.2	-50.9
% of NBP balance sheet total	-1.3%	4.5%	-5.8 p.p.
Sensitivity of the equity of NBP to:			
– appreciation of the zloty exchange rate against foreign currencies by 1%**	-5.2	-5.3	0.1
– increase in interest rates by 100 basis points***	-14.7	-14.1	-0.6

* A negative financial result for the financial year is accumulated under the item: Loss of previous years.

** The figures represent the total decrease in unrealised currency revaluation gains or increase in unrealised currency revaluation losses in the case of an even 1% decrease in the average NBP exchange rates of the main reserve currencies as at the balance sheet date.

*** For foreign currencies – based on the modified duration ratio, the cumulative decrease in unrealised price revaluation gains or increase in unrealised price revaluation losses in the case of an even increase in yield curves of 100 basis points as at the balance sheet date.

The decline in the equity of NBP was mainly due to the appreciation of the zloty against foreign currencies, manifested by a decrease in positive unrealised foreign exchange gains/losses and unrealised currency revaluation losses and negative realised foreign exchange gains/losses (see Chapter 15.3.2). It should be noted that negative equity does not negatively affect the NBP's primary objective of maintaining price stability or the fulfilment of the NBP's other tasks. Therefore, it is not a limiting factor for central bank's independence.

⁵ In order to counteract the negative impact of volatility in the zloty exchange rate on the NBP financial result, the Act on NBP requires the Bank to create a provision against the foreign exchange rate risk of the zloty (referred to as the FX risk provision). The principles for creating and releasing the FX risk provision are determined by the Monetary Policy Council (Resolution No. 6/2019 of the Monetary Policy Council of 5 November 2019 on the principles for creating and releasing the provision against the foreign exchange rate risk of the zloty at Narodowy Bank Polski (NBP Official Journal, item 14).

The most volatile components of the equity of NBP include currency revaluation gains, price revaluation gains on debt securities (unrealised gains) and the FX risk provision. Changes in revaluation gains/losses are mainly affected by the trends in market exchange rates and prices of securities.

The aforementioned currency asymmetry generates the risk of a loss arising from exchange rate volatility, while the probability of its occurrence increases parallel to the magnitude of appreciation of the zloty against foreign currencies. The creation of the FX risk provision decreases the financial result of NBP, and simultaneously protects against potential future losses. The release of the provision increases the financial result of NBP, thereby limiting a potential loss resulting from currency revaluation.

In 2023, as a result of the appreciation of the zloty, NBP fully released the provision of PLN 15.1 billion to cover unrealised foreign exchange losses.

15.2.3. NBP Balance Sheet – five-year statement

Changes in the NBP balance sheet total are mainly the result of external foreign currency flows stemming from the transactions of account holders with NBP, fluctuations in the revaluation of financial instruments denominated in foreign currency and in gold, exposure to simultaneous repo and reverse repo transactions as well as one-off operations (such as the SDR allocation carried out in 2021). In addition, in the years 2020–2021, the level of the NBP balance sheet total was affected by NBP's purchase of debt securities in domestic currency. This operation also had an influence on the change in the structure of the NBP balance sheet, increasing the share of domestic currency in NBP assets, previously dominated by foreign currencies and gold. In 2023, NBP purchased 130 tonnes of gold, resulting in an increase in the ratio of gold to foreign currencies in assets.

Table 15.9. NBP Balance Sheet in 2019–2023 as at the balance sheet date (PLN billion)

Assets	2023	2022	2021	2020	2019
A.1. Gold and gold receivables	93.6	58.7	54.8	52.3	42.5
A.2. Claims on non-residents denominated in foreign currency	669.7	675.4	619.3	527.5	445.2
2.1. Receivables from the IMF	28.5	31.4	30.0	6.9	5.3
2.2. Balances with foreign institutions, debt securities, loans granted, other foreign assets	641.2	644.0	589.3	520.6	439.9
A.5. Claims on credit institutions related to monetary policy operations denominated in domestic currency	0.0	0.0	0.0	0.1	0.0
A.7. Debt securities of residents denominated in domestic currency	138.9	140.7	149.3	112.6	0.0
A.10. Other assets	1.5	1.5	1.8	2.0	1.4
Total assets	903.6	876.2	825.3	694.3	489.1
Liabilities	2023	2022	2021	2020	2019
L.1. Banknotes and coins in circulation	377.5	368.6	355.6	321.8	238.8
L.2. Liabilities to credit institutions related to monetary policy operations denominated in domestic currency	74.4	55.1	96.5	62.6	65.4
L.3. Other liabilities to credit institutions denominated in domestic currency	2.6	0.9	0.8	0.4	0.4
L.4. Liabilities due to issued debt securities in domestic currency	303.1	252.2	184.5	127.8	65.0
L.5. Liabilities to other residents denominated in domestic currency	11.9	11.9	15.3	24.9	9.3
L.6. Liabilities to non-residents denominated in domestic currency	4.1	4.1	4.0	2.2	2.3
L.7. Liabilities to residents denominated in foreign currency	45.6	59.0	32.6	46.3	22.4
L.8. Liabilities to non-residents denominated in foreign currency	67.5	53.6	36.0	45.4	43.7
L.9. SDR allocation	27.9	30.9	29.8	7.1	6.9
L.11. Other liabilities	0.5	0.4	1.1	0.7	0.2
L.12. Provisions	0.2	15.3	16.7	10.0	6.9
12.1. FX risk provision	0.0	15.1	16.5	9.9	6.7
12.2. Provisions for liabilities	0.2	0.2	0.2	0.2	0.2
L.13. Revaluation accounts	35.0	50.1	51.0	45.7	30.5
L.14. Capital	1.5	1.5	1.5	1.9	1.5
14.1. Statutory fund	1.5	1.5	1.5	1.5	1.5
14.2. Reserve fund	0.0	0.0	0.0	0.4	0.0
L.15. Financial result	-48.2	-27.4	0.0	-2.5	-4.0
15.1. Financial result for the financial year	-20.8	-16.9	11.0	9.3	7.8
15.2. Loss of previous years	-27.4	-10.5	-11.0	-11.9	-11.9
Total liabilities	903.6	876.2	825.3	694.3	489.1

15.3. Characteristics of the NBP Profit and Loss Account

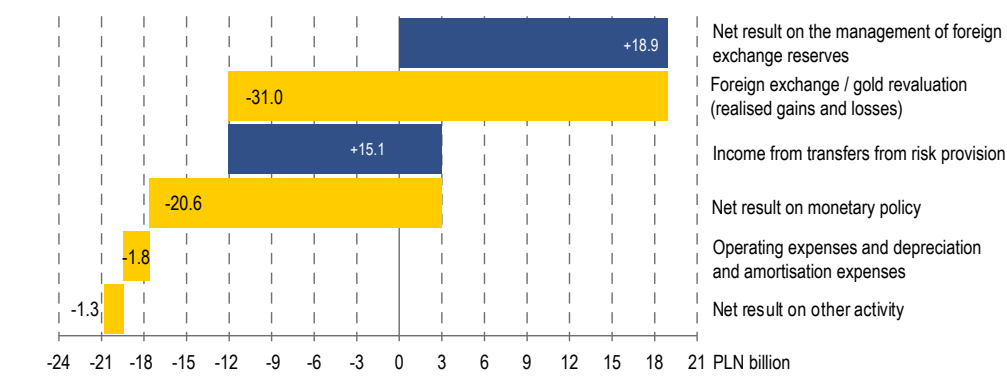
The financial result of NBP in 2023 was negative and amounted to PLN -20.8 billion.

The financial result of the Bank is derived from the functions it performs as well as from market conditions. The loss primarily stemmed from the appreciation of the zloty against foreign currencies, which translated into unrealised currency revaluation losses and a negative net result on realised foreign exchange gains/losses. NBP fully released the FX provision to cover the losses. Moreover, the Bank recorded a negative net result on monetary policy (a rise in expenses on bills issued by NBP and expenses on interest on the required minimum reserve). The loss of NBP was reduced by a positive net result on the management of foreign exchange reserves.⁶ In 2023, the operating expenses of the Bank as well as depreciation and amortisation expenses remained at a similar level as in the previous year.

Table 15.10. Financial result of NBP for 2023 and 2022 (PLN billion)

	2023	2022
P&L.1. Net result on interest	-1.6	-5.8
1.1. Interest income	26.6	9.4
1.2. Interest expenses	-28.2	-15.2
P&L.2. Net result on financial operations	-17.5	-9.8
2.1. Realised net result	-3.8	15.5
2.2. Unrealised losses	-28.8	-26.7
2.3. Net result on impairment of financial assets	0.0	0.0
2.4. Transfer to/from FX risk provision	15.1	1.4
P&L.3. Net result on commissions and fees	0.0	0.0
P&L.4. Income on shares and participating interests	0.0	0.0
P&L.5. Other income	0.1	0.1
P&L.A. Total net income	-19.0	-15.4
P&L.6. Salaries	-0.8	-0.7
P&L.7. Administrative expenses	-0.4	-0.3
P&L.8. Depreciation and amortisation expenses	-0.1	-0.1
P&L.9. Expenses on issue of banknotes and coins	-0.5	-0.4
P&L.10. Other expenses	0.0	0.0
P&L.B. Financial result for the financial year	-20.8	-16.9

⁶ Calculated in the currency of financial instruments.

Figure 15.9. Financial result of NBP for 2023 by areas

As a result of the prevailing role of financial instruments in the NBP Balance Sheet, the most important elements of the Bank's Profit and Loss Account relate to interest, discount and premium (net result on interest) and foreign exchange gains/losses and price revaluation gains related to the trading in investment instruments of foreign exchange reserves (net result on financial operations) as well as the net interest result on monetary policy instruments. In addition, the Bank bears the costs associated with its operations (salaries, administrative costs, expenses on the issue of banknotes and coins and depreciation and amortisation expenses). In 2023, compared to the previous year, an increase in the net result on interest was recorded (although it was negative, as in 2022). This increase was associated, among others, with substantially higher net interest result on foreign markets where foreign exchange reserves are invested (higher yields on foreign markets in 2023 compared to 2022) amid simultaneously higher expenses related to the conduct of NBP's monetary policy. On the other hand, the appreciation of the zloty against foreign currencies contributed to a decrease in the net result on financial operations – through a negative net result from realised foreign exchange gains/losses on transactions denominated in foreign currency and unrealised losses on valuation of FX positions at the end of 2023.

15.3.1. Net result on the management of foreign exchange reserves

Income and expenses related to investment instruments of foreign exchange reserves mainly involve interest on debt securities and deposits (presented under the net result on interest), result on the sale transactions in debt securities and price revaluation of debt securities (only revaluation losses)⁷ and the net result on off-balance sheet financial instruments (presented under the net result on financial operations).⁸ The net result on the management of foreign exchange reserves is largely determined by the trends in factors beyond the control of NBP. These factors mainly include: a volume of inflows of foreign currency from abroad and the developments in financial markets – mutual relationships of the exchange rates of reserve

⁷ Debt securities denominated in foreign currency, excluding the portfolio of HTM securities, are valued according to the average market price or based on yield curve rates (if market prices are not available). In accordance with the principle of prudence, revaluation gains are recognised under liabilities in the NBP Balance Sheet (as an element of the equity of NBP) therefore they do not increase the financial result of NBP. Debt securities denominated in foreign currency held to maturity are valued at the clean price adjusted for calculated discount and premium, less impairment.

⁸ Applies to the valuation of derivatives used to manage foreign currency reserves.

currencies and their exchange rates against the zloty, interest rates in foreign markets, and values of equity indices. The net result on the management of foreign exchange reserves is also affected by the adopted investment structure of foreign exchange reserves and the type of financial instruments used.

Table 15.11. Net result on the management of foreign exchange reserves in 2023 and 2022 by currency and instrument (PLN billion)

2023	USD*	EUR	GBP	CAD	AUD	NOK	NZD	Total
P&L.1. Net result on interest	9.0	3.5	2.5	2.1	1.7	1.0	0.7	20.5
Term deposits	0.8	0.7	0.0	0.0	0.0	0.2	0.2	2.0
Reverse repos	1.0	0.8	0.7	0.2	0.1	0.0	0.0	2.8
Repos	-1.0	-0.7	-0.6	-0.2	-0.1	0.0	0.0	-2.6
Debt securities	8.1	2.8	2.4	2.1	1.6	0.7	0.5	18.4
P&L.2. Net result on financial operations	-0.4	0.4	-0.7	-0.2	-0.4	-0.2	0.0	-1.6
Realised price gains/losses	-0.3	0.5	-0.6	-0.2	-0.4	-0.1	0.0	-1.1
Price revaluation losses	-0.1	-0.1	-0.1	0.0	-0.1	-0.2	0.0	-0.5
Financial result for the financial year	8.6	4.0	1.8	1.9	1.3	0.7	0.7	18.9
2022	USD*	EUR	GBP	CAD	AUD	NOK	NZD	Total
P&L.1. Net result on interest	3.3	-0.1	0.8	0.9	0.8	0.5	0.4	6.5
Term deposits	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.3
Reverse repos	0.1	0.0	0.2	0.0	0.1	0.0	0.0	0.4
Repos	-0.1	0.0	-0.1	0.0	-0.1	0.0	0.0	-0.3
Debt securities	3.2	-0.2	0.7	0.9	0.8	0.4	0.3	6.1
P&L.2. Net result on financial operations	-14.2	-8.1	-4.5	-2.7	-3.6	-1.3	-0.9	-35.2
Realised price gains/losses	-4.2	-1.6	-1.3	-0.8	-1.5	-0.3	-0.2	-9.9
Price revaluation losses	-9.9	-6.6	-3.2	-1.9	-2.1	-1.0	-0.7	-25.3
Financial result for the financial year	-10.9	-8.3	-3.8	-1.8	-2.8	-0.8	-0.5	-28.8
Change of financial result for the current year	19.4	12.3	5.5	3.7	4.0	1.5	1.2	47.7

* Interest on term deposits in gold is also included, which is accrued and paid in the US dollar.

The main reasons for the increase in the net result on the management of foreign exchange reserves in 2023 compared to the previous year included higher average annual yields on debt securities in foreign markets that accompanied a tightening of monetary policy by major central banks amid inflation and the increase of foreign stock exchange indices. Market conditions translated into an increase in the net result on interest on debt securities held by NBP and deposits and a positive net result of the investment in equity index futures.

15.3.2. Foreign exchange gains/losses and gold prices and transfer to/from FX risk provision

The impact of foreign exchange gains/losses and gold prices on the NBP financial result depends on the trends in the exchange rate of the zloty against foreign currencies and the price of gold both in the course of the year (realised FX gains/losses) and as at the balance sheet date (unrealised gains/losses on valuation of foreign currency and gold holdings). Realised foreign

exchange gains/losses are presented under the net result on financial operations. However, at the end of the year the impact on the NBP financial result due to foreign currency holdings is asymmetrical, as in the case of revaluation of debt securities. Currency revaluation losses and gold revaluation losses (unrealised losses) decrease the net result on financial operations. On the other hand, currency revaluation gains and gold revaluation gains (unrealised gains) increase the equity of NBP and are not recognised in the NBP financial result.

Foreign exchange gains/losses represent the most volatile element of the NBP financial result. The net result on realised foreign exchange/gold revaluation gains/losses in 2023 mainly related to the sale transactions of USD, EUR, GBP, CAD, AUD, NOK and NZD. Compared to the previous year, the net result fell by PLN 28.2 billion (107.7%), primarily as a result of a negative average annual difference between the average NBP exchange rate and the average cost of the holding for (EUR, GBP, CAD, AUD, NOK and NZD) as well as a decrease in the positive difference for USD, amid a simultaneously lower sale volume for all main foreign currencies.

Table 15.12. Foreign exchange/gold revaluation gains/losses and transfer to/from FX risk provision in 2023 and 2022 (PLN billion)

2023	USD	EUR	GBP	CAD	AUD	NOK	NZD	Gold	Other	Total
P&L.2. Net result on financial operations	-5.4	-6.7	-3.7	-4.7	-4.6	-4.1	-1.8	0.0	0.0	-15.9
Foreign exchange gains/losses	-5.4	-6.7	-3.7	-4.7	-4.6	-4.1	-1.8	0.0	0.0	-31.0
– realised foreign exchange gains/losses	2.5	-1.0	-0.3	-0.5	-0.9	-1.5	-0.9	0.0	0.0	-2.7
– unrealised currency revaluation losses	-7.9	-5.6	-3.4	-4.2	-3.6	-2.6	-0.9	0.0	0.0	-28.2
Transfer to/from FX risk provision										15.1
2022	USD	EUR	GBP	CAD	AUD	NOK	NZD	Gold	Other	Total
P&L.2. Net result on financial operations	14.5	2.2	1.9	0.9	2.2	0.8	0.3	0.3	0.9	25.5
Foreign exchange gains/losses	14.5	2.2	1.9	0.9	2.2	0.8	0.3	0.3	0.9	24.0
– realised foreign exchange gains/losses	14.5	2.2	1.9	1.9	2.2	1.2	0.5	0.3	0.9	25.5
– unrealised currency revaluation losses	0.0	0.0	0.0	-1.0	0.0	-0.3	-0.1	0.0	0.0	-1.4
Transfer to/from FX risk provision										1.4
Change in net result on financial operations	-19.8	-8.9	-5.6	-5.6	-6.8	-5.0	-2.1	-0.3	-0.9	-41.4

The FX risk provision protects the central bank against the materialisation of FX risk and its adverse impact on the financial result (the value of foreign currency assets is negatively affected by the appreciation of the zloty). In 2023, the appreciation of the zloty against main foreign currencies⁹ was as follows: USD – 10.6%, EUR – 7.3%, GBP – 5.6%, CAD – 8.6%, AUD – 10.4%, NOK – 13.3% and NZD – 10.9%. NBP fully released the FX risk provision in the amount of PLN 15.1 billion to cover unrealised currency revaluation losses.

⁹ Calculated by comparing the average NBP exchange rates of foreign currencies as at 31 December 2023 and 31 December 2022.

15.3.3. Net result on monetary policy

NBP bills were the main instrument of monetary policy conducted amid a liquidity surplus prevailing in the domestic banking sector. In connection with the issue of bills, NBP incurs discount expenses (presented under the net result on interest). The level of expenses of monetary policy mainly depends on surplus liquidity in the banking sector and the level of interest rates, the required minimum reserve rate and its interest rate, set by the Monetary Policy Council. On the other hand, the NBP measures taken in the years 2020–2021 and aimed at reducing the negative impact of the COVID-19 pandemic resulted in a positive net result on interest on purchased debt securities denominated in domestic currency (interest, discount and premium).

Table 15.13. Result on monetary policy conducted in 2023 and 2022 (PLN billion)

	2023	2022	Change
P&L.1. Net result on interest	-20.6	-12.0	-8.7
NBP bills	-18.1	-10.4	-7.7
Required minimum reserve	-4.4	-3.2	-1.2
Deposit facility	-0.3	-0.4	0.1
Debt securities denominated in domestic currency	2.2	2.2	0.0
Other	0.0	-0.1	0.1

In 2023, NBP posted a negative net result on its monetary policy. The decrease in the net result, compared to the previous year, was primarily linked to the rising expenses of discount on bills issued by NBP and higher interest expenses on required minimum reserve funds (due to a rise in the average annual level of bills issued and in NBP interest rates as well as a higher average annual level of the required minimum reserve rate in 2023).

15.3.4. Operating expenses and depreciation and amortisation expenses

In 2023, NBP recorded an increase in operating expenses and depreciation and amortisation expenses by PLN 0.3 billion (21.5%) compared to 2022. This was linked, among others, to an increase in expenses on the issue of banknotes and coins (i.e. the cost of producing banknotes and coins), administrative expenses and in salaries in line with the adopted HR and payroll policy. Expenses on the issue of banknotes and coins depend primarily on the number of banknotes and coins ordered and their purchase prices as well as the cost of purchasing bullion for coin production.

Figure 15.10. Structure of operating expenses and depreciation and amortisation expenses in 2023 and 2022

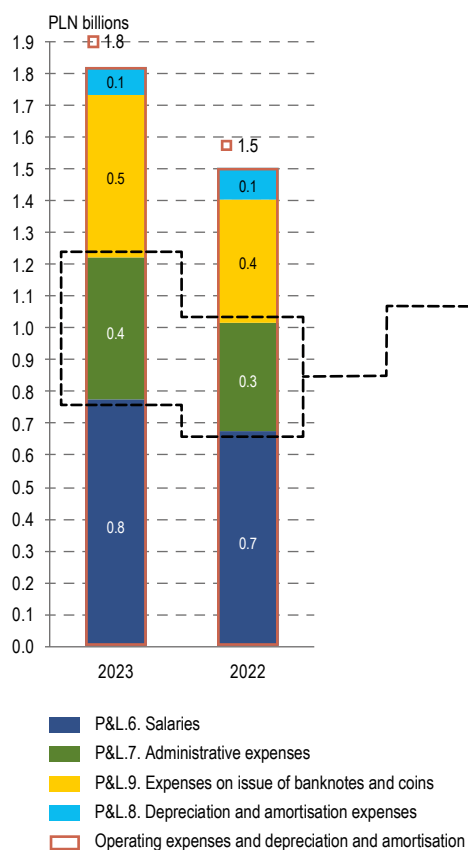
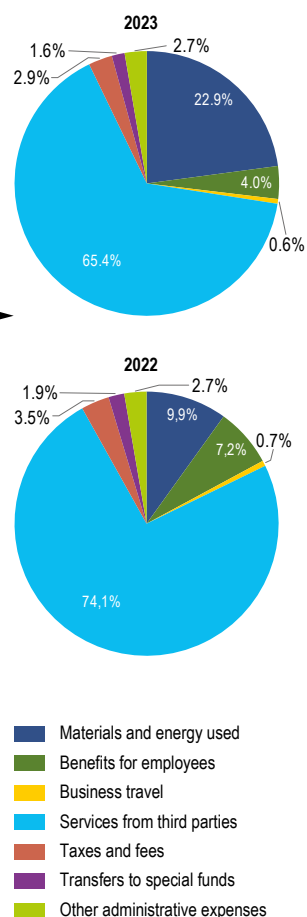


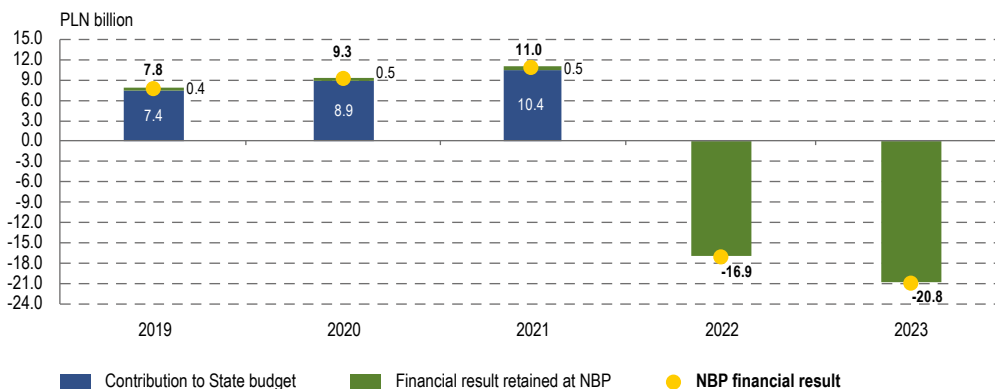
Figure 15.11. Structure of administrative expenses in 2023 and 2022



15.3.5. Allocation of the financial result and contribution from profit to the State budget

The financial result of NBP for 2023 was negative and amounted to PLN -20.8 billion. The loss for 2023 will increase the uncovered loss of previous years shown in the item *Loss of previous years* in the equity of NBP.

The result is provided for a given year, a contribution to the State budget is made in the following year after the approval of the annual financial statements of NBP by the Council of Ministers.

Figure 15.12. Financial result and contribution from profit to the State budget in 2019–2023

Seigniorage

The issue of cash involves the cost of purchasing banknotes and coins. Unlike other NBP liabilities, the liability due to the issue of banknotes and coins does not bear interest and therefore does not generate interest expenses for NBP. On the other hand, financial assets acquired in return generate certain income for NBP.

Income earned on assets whose source of financing is the liability due to the issue of banknotes and coins, less expenses on the issue, is referred to as seigniorage. It represents income from the issue of money.

The main assets of NBP are foreign exchange reserves (including gold) and – since 2020 – also debt securities denominated in domestic currency held for monetary policy purposes. For this reason, in simple terms it can be assumed that what constitutes income on the issue of money is the net result on the management of foreign exchange reserves, including the net result on foreign exchange gains/losses and net result on debt securities denominated in domestic currency, in a part respectively corresponding to the share of liabilities due to the issue of money in the total assets of NBP, less expenses on the issue of banknotes and coins. In 2023, the estimated seigniorage amounted to PLN -3.1 billion (PLN -1.2 billion in 2022).

15.3.6. NBP Profit and Loss Account – five-year statement

Foreign exchange reserves and the rates of return on their investment (taking into account FX rates), as well as the volume of monetary policy operations and domestic interest rates have the greatest influence on the amount of the NBP financial result. Changes in the financial result are most often caused by the volatility of FX rates against the Polish zloty. Moreover, they are affected by changes in the yields on debt securities in foreign markets and on the level of domestic interest rates.

Table 15.14. NBP Profit and Loss Account in 2019–2023 (PLN billion)

	2023	2022	2021	2020	2019
P&L.1. Net result on interest	-1.6	-5.8	2.3	3.1	3.3
P&L.2. Net result on financial operations	-17.5	-9.8	9.9	7.3	5.6
P&L.3. Net result on commissions and fees	0.0	0.0	0.0	0.0	0.0
P&L.4. Income on shares and participating interests	0.0	0.0	0.0	0.0	0.0
P&L.5. Other income	0.1	0.1	0.2	0.1	0.1
P&L.A. Total net income	-19.0	-15.4	12.4	10.6	9.0
P&L.6. Salaries	-0.8	-0.7	-0.6	-0.6	-0.6
P&L.7. Administrative expenses	-0.4	-0.3	-0.3	-0.2	-0.3
P&L.8. Depreciation and amortisation expenses	-0.1	-0.1	-0.1	-0.1	-0.1
P&L.9. Expenses on issue of banknotes and coins	-0.5	-0.4	-0.4	-0.3	-0.3
P&L.10. Other expenses	0.0	0.0	0.0	0.0	0.0
P&L.B. Financial result for the financial year	-20.8	-16.9	11.0	9.3	7.8

Appendix 1

Selected macroeconomic and financial data

Selected macroeconomic and financial data

Table A1. GDP and its components in 2015–2023

	2023		2015	2016	2017	2018	2019	2020	2021	2022	2023	2023				
	Current prices, PLN billion	% of GDP	Annual growth at previous year's prices (%)										Q1	Q2	Q3	Q4
GDP	3 410.1	100.0	4.4	3.0	5.1	5.9	4.4	-2.0	6.9	5.6	0.2	-0.4	-0.6	0.5	1.0	
Domestic demand	3 202.4	93.9	3.9	2.2	5.4	6.3	3.3	-2.7	8.5	5.2	-3.2	-4.8	-2.6	-4.1	-1.5	
Consumption	2 586.6	75.9	3.5	3.3	5.4	4.4	4.1	-1.5	5.8	4.3	-0.1	-1.6	-1.9	1.2	2.0	
Household consumption	1 917.6	56.2	3.8	3.6	6.3	4.4	3.5	-3.6	6.2	5.4	-1.0	-1.8	-2.9	0.8	0.0	
Capital formation	615.8	18.1	5.6	-1.7	5.6	13.8	0.5	-7.5	19.4	8.5	-14.1	-17.8	-5.6	-22.9	-10.3	
Gross fixed capital formation	605.7	17.8	6.9	-7.6	1.6	12.6	6.2	-2.3	1.2	2.7	13.1	6.0	16.5	11.3	15.8	
Exports	1 971.5	57.8	6.6	9.0	9.0	6.8	5.3	-1.1	12.3	7.4	3.4	6.0	-0.6	4.5	3.6	
Imports	1 763.8	51.7	5.6	7.7	9.9	7.5	3.2	-2.4	16.1	6.8	-2.0	-1.0	-3.5	-2.9	-0.5	
Value added	3 081.0	90.3	4.5	2.8	5.0	5.9	4.3	-2.0	6.6	5.9	1.2	0.8	1.0	1.1	1.7	
Industry	777.5	22.8	4.2	4.5	1.9	5.0	4.7	-3.5	0.0	8.2	-0.2	-0.8	-1.0	-1.9	2.1	
Construction	200.4	5.9	11.6	-5.0	-1.2	8.5	-0.8	-8.0	8.7	5.3	3.6	2.0	3.2	2.6	5.7	
Market services and agriculture	1 644.2	48.2	5.0	3.8	8.2	6.1	5.4	-2.0	9.0	7.0	0.8	0.9	0.8	1.5	0.2	
Non-market services	458.9	13.5	-0.4	1.0	2.8	5.6	2.7	3.5	8.3	-1.3	3.7	3.2	3.7	3.7	4.2	
Contribution to GDP growth at previous year's prices (in percentage points)																
Domestic demand	-	-	3.9	2.2	5.2	6.1	3.2	-2.6	8.0	5.0	-3.1	-4.8	-2.5	-4.0	-1.4	
Consumption	-	-	2.7	2.6	4.1	3.3	3.1	-1.1	4.4	3.2	0.0	-1.3	-1.5	0.9	1.4	
Household consumption	-	-	2.3	2.1	3.6	2.5	2.0	-2.0	3.4	3.0	-0.5	-1.1	-1.7	0.5	0.0	
Capital formation	-	-	1.2	-0.4	1.1	2.7	0.1	-1.5	3.6	1.8	-3.1	-3.5	-1.0	-4.9	-2.8	
Gross fixed capital formation	-	-	1.4	-1.6	0.3	2.2	1.2	-0.4	0.2	0.4	2.1	0.8	2.3	1.8	3.6	
Net exports	-	-	0.5	0.8	-0.1	-0.2	1.2	0.6	-1.1	0.6	3.3	4.4	1.9	4.5	2.4	
Contribution to value added growth at previous year's prices (in percentage points)																
Industry	-	-	1.1	1.2	0.5	1.3	1.2	-0.9	0.0	2.1	0.0	-0.2	-0.2	-0.4	0.6	
Construction	-	-	0.9	-0.4	-0.1	0.6	-0.1	-0.6	0.6	0.3	0.2	0.1	0.2	0.2	0.4	
Market services and agriculture	-	-	2.5	1.9	4.2	3.2	2.8	-1.1	4.7	3.6	0.4	0.4	0.5	0.8	0.1	
Non-market services	-	-	-0.1	0.2	0.4	0.8	0.4	0.5	1.3	-0.2	0.5	0.5	0.5	0.5	0.6	

Note: Market services and agriculture are covered by sections A, G-N and R-U of the PKD classification [Polish classification of Economic Activity]: agriculture, trade, transportation, accommodation and catering, information and communication, financial and insurance activity, real estate activities, professional, scientific and technical activities, administration and support service activities, arts, entertainment and recreation, other service activity, activities of households and extraterritorial organisations and bodies. Non-market services comprise categories O, P and Q of the PKD classification: public administration and defence, compulsory social security, education, human health and social work activities. Contributions to GDP and value-added growth may not add up to total GDP and value added growth due to rounding.

Source: Statistics Poland data, NBP calculations.

Table A2. Annual growth in consumer goods and services prices and the contribution of the main price categories to CPI

	Weights 2023, %	Change (y/y, %)													
		2023												Average in 2023	Average in 2022
		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII		
CPI	100.0	16.6	18.4	16.1	14.7	13.0	11.5	10.8	10.1	8.2	6.6	6.6	6.2	11.4	14.4
Core inflation	54.8	11.7	12.0	12.3	12.2	11.5	11.1	10.6	10.0	8.4	8.0	7.3	6.9	10.1	9.1
Non-food products	29.6	10.4	10.8	11.5	11.2	10.8	10.5	10.0	9.0	7.3	6.9	6.3	5.7	9.1	7.5
Services	25.1	13.3	13.3	13.3	13.3	12.3	11.7	11.3	11.1	9.7	9.3	8.6	8.2	11.2	11.2
Food and non-alcoholic beverages	27.0	20.6	24.0	24.0	19.7	18.9	17.8	15.6	12.7	10.4	8.0	7.3	6.0	15.1	15.4
Processed	15.0	22.0	24.3	24.7	22.3	20.5	18.6	16.2	12.7	11.0	8.6	7.0	5.7	15.7	16.3
Unprocessed	12.0	18.9	23.6	23.1	16.6	16.9	16.8	14.9	12.7	9.6	7.3	7.7	6.3	14.3	14.4
Energy	18.3	26.0	31.0	16.4	14.9	9.2	3.9	4.5	6.8	4.1	0.4	3.2	4.3	9.8	29.9
Energy carriers	11.7	29.7	31.1	26.0	23.5	20.4	18.0	16.8	13.9	9.9	8.3	7.9	9.8	17.5	32.5
Electrical energy	4.2	23.1	22.4	22.4	22.4	22.4	22.3	22.3	22.3	19.5	19.5	19.5	19.5	21.4	4.9
Gas	2.8	16.1	23.7	15.9	15.3	14.6	14.4	14.9	15.1	14.8	15.2	15.3	15.6	15.9	39.3
Liquid and solid fuels	2.5	60.5	53.6	32.4	19.6	4.8	-4.7	-8.7	-17.5	-23.6	-25.5	-25.3	-19.7	-2.2	104.1
Heat energy	2.3	36.3	40.0	40.7	40.3	40.6	40.2	38.3	36.1	30.7	24.1	20.6	19.7	33.3	16.5
Fuels	6.5	18.8	30.8	0.2	-0.1	-9.5	-18.0	-15.5	-6.1	-7.0	-14.4	-5.7	-6.0	-4.0	25.2
According to 12 COICOP groups															
Food and non-alcoholic beverages	27.0	20.6	24.0	24.0	19.7	18.9	17.8	15.6	12.7	10.4	8.0	7.3	6.0	15.1	15.4
Alcoholic beverages and tobacco products	5.7	9.8	11.1	12.0	12.4	12.5	12.4	11.5	11.1	10.5	10.1	9.9	9.5	11.1	7.4
Clothing and footwear	4.3	6.5	6.6	7.7	8.1	7.4	7.9	6.9	6.7	4.3	4.4	4.7	3.3	6.2	5.2
Home maintenance and energy carriers	19.6	21.6	22.7	19.6	18.2	16.1	14.6	13.8	12.0	9.5	8.3	8.1	9.2	14.3	22.8
Home equipment and household maintenance	5.3	13.8	13.4	14.4	13.4	12.4	11.0	10.6	9.4	8.1	7.5	5.9	5.8	10.4	10.5
Health	5.7	10.7	10.1	9.5	9.5	10.0	9.9	9.8	9.7	6.1	5.4	5.5	5.2	8.4	7.1
Transportation	10.0	16.5	23.7	3.9	4.6	-3.2	-9.7	-8.5	-1.7	-2.8	-7.9	-2.2	-2.8	0.1	19.9
Telecommunications	4.5	6.3	7.8	9.4	9.4	9.3	9.1	9.2	9.3	7.6	9.0	6.7	6.7	8.3	4.1
Recreation and culture	6.2	16.7	16.0	16.4	14.9	13.3	12.4	12.1	10.9	8.6	7.5	6.5	5.5	11.6	11.3
Education	1.2	13.9	14.0	14.1	13.8	13.7	13.7	13.6	13.5	11.1	10.5	10.4	10.3	12.6	8.7
Restaurants and hotels	5.1	17.6	17.2	16.9	16.2	15.0	14.4	13.8	13.3	12.0	11.1	10.3	9.9	13.8	15.6
Other goods and services	5.5	11.9	12.8	13.8	13.5	13.8	13.4	13.4	11.4	10.0	9.4	8.5	8.2	11.6	9.3

Table A2. Annual growth in consumer goods and services prices and the contribution of the main price categories to CPI, cont'd

	Weights 2023, %	Contribution to annual CPI growth (in percentage points)														Average in 2023	Average in 2022
		2023															
		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII				
CPI	100.0	16.6	18.4	16.1	14.7	13.0	11.5	10.8	10.1	8.2	6.6	6.6	6.2	11.4	14.4		
Core inflation	54.8	6.5	6.8	6.8	6.7	6.3	6.0	5.8	5.5	4.6	4.3	4.0	3.7	5.5	5.1		
Non-food products	29.6	3.1	3.3	3.4	3.3	3.2	3.1	2.9	2.6	2.1	2.0	1.8	1.7	2.7	2.4		
Services	25.1	3.4	3.4	3.4	3.4	3.1	2.9	2.8	2.8	2.4	2.3	2.1	2.0	2.8	2.7		
Food and non-alcoholic beverages	27.0	5.5	6.4	6.3	5.3	5.1	4.7	4.2	3.4	2.8	2.2	2.0	1.7	4.1	4.1		
Processed	15.0	3.3	3.6	3.6	3.3	3.0	2.7	2.4	1.9	1.7	1.3	1.1	0.9	2.4	2.3		
Unprocessed	12.0	2.3	2.8	2.7	2.1	2.1	2.0	1.8	1.5	1.1	0.9	0.9	0.8	1.7	1.8		
Energy	18.3	4.6	5.3	3.0	2.7	1.7	0.8	0.8	1.3	0.8	0.1	0.6	0.8	1.8	5.1		
Energy carriers	11.7	3.4	3.6	3.0	2.7	2.4	2.1	2.0	1.7	1.2	1.0	0.9	1.1	2.1	3.6		
Electrical energy	4.2	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.9	0.2		
Gas	2.8	0.5	0.7	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9		
Liquid and solid fuels	2.5	1.1	1.0	0.6	0.4	0.1	-0.1	-0.2	-0.5	-0.7	-0.8	-0.7	-0.5	-0.1	2.1		
Heat energy	2.3	0.8	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.7	0.6	0.5	0.5	0.8	0.4		
Fuels	6.5	1.1	1.7	0.0	0.0	-0.7	-1.3	-1.1	-0.4	-0.4	-0.9	-0.4	-0.4	-0.3	1.5		
According to 12 COICOP groups																	
Food and non-alcoholic beverages	27.0	5.5	6.4	6.3	5.3	5.1	4.7	4.2	3.4	2.8	2.2	2.0	1.7	4.1	4.1		
Alcoholic beverages and tobacco products	5.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.6	0.5		
Clothing and footwear	4.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.3	0.2		
Home maintenance and energy carriers	19.6	4.3	4.5	3.8	3.5	3.1	2.8	2.7	2.4	1.9	1.7	1.6	1.8	2.8	4.4		
Home equipment and household maintenance	5.3	0.7	0.7	0.8	0.7	0.7	0.6	0.6	0.5	0.4	0.4	0.3	0.3	0.5	0.6		
Health	5.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.3	0.3	0.3	0.3	0.5	0.4		
Transportation	10.0	1.6	2.1	0.4	0.5	-0.3	-1.0	-0.9	-0.2	-0.3	-0.8	-0.2	-0.3	0.0	1.9		
Telecommunications	4.5	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.3	0.4	0.2		
Recreation and culture	6.2	1.0	1.0	1.0	0.9	0.8	0.8	0.8	0.7	0.5	0.5	0.4	0.3	0.7	0.7		
Education	1.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1		
Restaurants and hotels	5.1	0.9	0.9	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.7	0.7		
Other goods and services	5.5	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.6	0.5	0.5	0.5	0.4	0.6	0.5		

Note: core inflation quoted in the table denotes CPI inflation excluding prices of food and energy.

Source: Statistics Poland data and NBP calculations based on Statistics Poland data.

Table A3. Balance of payments in 2015–2023 (PLN million)

Balance of payments	2015	2016	2017	2018	2019	2020	2021	2022	2023
Current account	-22 796	-18 603	-22 366	-41 151	-5 447	57 451	-34 122	-73 565	53 723
Balance of trade in goods	-8 766	-5 812	-20 464	-47 990	-18 733	31 444	-35 439	-113 792	28 531
Balance of services	46 177	60 792	76 745	91 420	103 444	101 991	122 298	171 082	179 985
Balance of primary income	-67 310	-71 884	-84 041	-89 638	-95 598	-88 791	-119 231	-121 025	-143 440
Balance of secondary income	7 103	-1 699	5 394	5 057	5 440	12 807	-1 750	-9 830	-11 353
Capital account	46 826	17 882	22 313	34 135	38 170	41 456	19 133	15 582	6 170
Financial account	8 610	14 216	-9 509	-1 455	22 707	80 099	-11 998	-54 945	43 576
Balance of direct investment	-40 303	-14 092	-29 796	-60 293	-46 818	-55 076	-100 377	-111 659	-77 123
Balance of portfolio investment	16 752	-14 247	-17 162	15 998	46 508	29 424	45 177	-12 276	20 158
Balance of other investment	32 709	-47 479	72 257	21 038	-11 177	37 794	-15 620	10 142	1 929
Derivative financial instruments	-3 664	766	-4 256	-4 760	-5 364	-4 253	-13 671	-2 358	11 737
Official reserve assets	3 116	89 268	-30 552	26 562	39 558	72 210	72 493	61 206	86 875
Errors and omissions	-15 420	14 937	-9 456	5 561	-10 016	-18 808	2 991	3 038	-16 317

Source: NBP data.

Table A4. Selected external stability indicators in 2015–2023

	2015	2016	2017	2018	2019	2020	2021	2022	2023
Current account balance/GDP (%)	-1.3	-1.0	-1.1	-1.9	-0.2	2.5	-1.3	-2.4	1.6
Current and capital account balance/GDP (%)	1.3	0.0	0.0	-0.3	1.4	4.2	-0.6	-1.9	1.8
Balance of trade in goods/GDP (%)	2.1	3.0	2.8	2.0	3.7	5.7	3.3	1.9	6.1
Official reserve assets in terms of monthly imports of goods and services	5.4	6.5	4.8	4.9	5.2	6.3	5.7	4.7	5.2
Gross external debt/GDP (%)	72.0	76.7	67.3	64.2	58.9	60.7	56.5	53.0	49.3
Net international investment position/GDP (%)	-60.6	-59.7	-60.3	-54.7	-48.8	-43.9	-39.8	-33.3	-31.4

Source: NBP and Statistics Poland data, NBP calculations.

Table A5. M3 monetary aggregate (as at the end of the year, PLN million)

	2015	2016	2017	2018	2019	2020	2021	2022	2023
M3	1 154 993	1 265 662	1 324 369	1 446 093	1 565 575	1 822 728	1 984 816	2 091 255	2 268 269
Repos	7 267	6 239	6 478	11 240	6 809	2 836	5 821	4 920	5 387
Debt securities issued with maturity up to 2 years	2 467	3 211	5 043	6 620	6 117	5 143	4 498	8 087	3 539
Money market fund shares/units	0	0	0	0	0	0	0	0	0
M2	1 145 259	1 256 212	1 312 847	1 428 233	1 552 648	1 814 749	1 974 497	2 078 248	2 259 343
Deposits and other liabilities with agreed maturity up to 2 years	453 134	440 908	406 473	415 880	397 776	283 035	249 710	493 347	574 084
Households	304 874	302 917	279 207	282 755	277 564	190 210	147 790	302 448	364 122
Other financial institutions	30 516	23 244	22 190	24 489	26 225	19 600	18 283	30 825	40 010
Non-financial corporations	103 365	99 234	88 269	87 586	82 830	65 214	74 747	138 282	150 705
Non-profit institutions serving households	7 022	7 251	7 515	7 779	7 373	3 886	3 178	7 287	10 012
Local government	5 633	5 887	6 046	4 562	3 244	3 272	4 332	9 190	7 281
Social security funds	1 724	2 375	3 245	8 710	540	853	1 380	5 317	1 953
M1	692 124	815 304	906 375	1 012 353	1 154 872	1 531 714	1 724 787	1 584 901	1 685 260
Cash in circulation (excluding MFI vault cash)	149 716	174 401	184 486	203 212	224 073	306 809	340 406	353 708	362 604
Overnight deposits and other current liabilities	542 409	640 903	721 888	809 141	930 799	1 224 904	1 384 380	1 231 193	1 322 656
Households	341 115	402 001	453 227	523 307	603 824	786 844	898 211	776 517	838 531
Other financial institutions	20 302	25 899	31 589	32 800	26 065	31 196	37 769	33 564	37 867
Non-financial corporations	145 975	169 753	187 139	199 722	233 409	311 223	340 367	325 017	353 568
Non-profit institutions serving households	12 518	14 912	16 426	18 290	19 471	25 717	28 311	28 174	28 961
Local government	18 868	25 255	26 744	27 722	33 936	50 999	67 733	57 903	53 474
Social security funds	3 630	3 084	6 764	7 299	14 093	18 926	11 990	10 018	10 256

MIFs – Monetary Financial Institutions.

Source: NBP data.

Selected macroeconomic and financial data

Table A6. M3 counterparts (stock at the end of each year, PLN million)

	2015	2016	2017	2018	2019	2020	2021	2022	2023
External assets, net	187 103	234 209	232 528	290 278	344 825	428 689	525 127	639 095	733 981
External assets	451 322	572 727	483 804	544 419	590 795	700 775	816 705	971 076	1 074 104
External liabilities	264 219	338 519	251 276	254 141	245 969	272 087	291 579	331 981	340 123
Credit to other residents	1 089 011	1 137 243	1 175 789	1 264 010	1 324 871	1 385 186	1 452 454	1 470 517	1 479 795
Loans and other claims	1 029 145	1 076 440	1 113 993	1 197 892	1 259 552	1 262 829	1 327 636	1 346 044	1 345 547
Households	632 523	665 062	676 362	723 233	766 334	789 087	826 552	794 280	776 600
Other financial corporations	58 344	58 546	65 782	74 182	83 732	81 788	96 150	113 376	137 470
Non-financial corporations	297 950	314 533	333 362	358 589	366 114	348 096	362 898	398 062	386 053
Non-profit institutions serving households	6 068	6 485	6 946	7 296	7 621	7 995	8 359	8 496	8 266
Local government	34 260	31 814	31 541	34 592	35 750	35 863	33 676	31 829	37 157
Social security funds	0	0	0	0	0	0	0	0	0,252
Debt securities	47 229	48 020	47 502	47 610	46 910	103 687	108 951	110 198	120 511
Other financial institutions	2 359	3 959	3 496	3 500	3 164	61 781	66 655	65 696	71 654
Non-financial corporations	26 100	25 423	24 941	22 584	19 637	16 529	17 090	16 456	13 070
Local government	18 770	18 638	19 064	21 526	24 109	25 377	25 206	28 046	35 788
Equity and non-MMF investment fund shares or units	12 637	12 783	14 294	18 508	18 409	18 669	15 867	14 275	13 738
Other financial corporations	10 381	10 601	12 070	15 676	15 882	16 252	13 702	12 426	12 254
Non-financial corporations	2 256	2 182	2 222	2 831	2 526	2 416	2 158	1 848	1 453
Credit to central government, net	201 343	253 371	268 824	275 697	310 283	411 635	388 064	341 747	414 236
Credit to central government	239 787	311 159	321 398	346 352	383 746	533 733	536 411	504 185	580 275
Loans	1 142	961	1 011	1 043	1 127	1 287	1 614	1 625	1 897
Debt securities	193 333	259 586	267 216	293 297	331 138	475 229	475 925	438 982	514 442
Deposits of central government	38 444	57 788	52 574	70 655	73 464	122 099	148 347	162 438	166 039
Longer-term financial liabilities	359 605	389 984	374 963	407 306	438 021	505 957	501 988	487 265	516 552
Deposits and other liabilities with agreed maturity over 2 years	22 001	25 189	25 784	25 676	28 812	28 956	26 039	26 771	27 105
Households	16 552	19 839	21 344	21 836	25 362	25 549	23 334	24 605	25 015
Other financial corporations	4 624	4 452	3 483	2 939	2 541	2 312	1 243	630	516
Non-financial corporations	733	777	789	772	784	948	1 311	1 376	1 453
Non-profit institutions serving households	68	102	144	100	100	118	126	137	94
Local government	25	19	24	29	26	28	25	23	26
Social security funds	0	0	0	0	0	0	0	0	0
Debt securities issued with maturity over 2 years	43 879	53 782	69 762	72 267	78 530	106 207	117 215	124 363	150 766
Capital and reserves	293 725	311 013	279 417	309 363	330 679	370 794	358 733	336 131	338 681
Fixed assets (excluding financial assets)	51 475	52 610	53 221	54 777	61 958	65 391	65 037	66 972	71 471
Other items, net	-14 334	-21 788	-31 031	-31 364	-38 341	37 785	56 121	60 190	85 338

Source: NBP data.

Appendix 2

List of selected NBP publications

List of selected NBP publications

The following publications were included in the ISI Master Journal List:

- Damian Stelmasiak, Karol Szafranek, Paweł Macias, Aneta Błażejowska, *Online food prices and shocks to product availability since Covid-19*, “Applied Economics Letters”, online publication.
- Aleksandra Hałka, Agnieszka Leszczyńska-Paczesna, *Inflation measurement in times of large consumption shifts: Evidence of the CPI bias from Poland*, “Acta Oeconomica: Periodical of the Hungarian Academy of Sciences”, 73(3).
- Natalia Nehrebecka, *Distribution of credit-risk concentration in particular sectors of the economy, and economic capital before and during the COVID-19 pandemic*, “Economic Change and Restructuring”, 56(1), 129–158.
- Marcin Bielecki, Michał Brzoza-Brzezina, Marcin Kolasa, *Demographics, Monetary Policy, and the Zero Lower Bound*, “Journal of Money, Credit and Banking”, 55(7), 1857–1887.
- Michał Gradzewicz, Jakub Mućk, *Globalisation and the fall of markups*, “The World Economy”, online publication.

In the series *Materiały i Studia*, the following papers were published:

- *Mechanizm transmisji polityki pieniężnej w Polsce. Stan wiedzy w 2023 roku* [Monetary Policy Transmission Mechanism in Poland. What do we know in 2023?], edited by: Magda Ciżkowicz-Pękała, Andrzej Kocięcki, Tomasz Łyziak, Mateusz Pipienia, Ewa Stanisławska.
- Arkadiusz Jan Derkacz, Artur Gajda, *Preferencje najemców mieszkań w Polsce. Raport z badania pilotażowego* [Housing tenant preferences in Poland. Pilot study report].

The following papers were published in the *NBP Working Paper series*:

- Aarti Singh, Jacek Suda, Anastasia Zervou, *Heterogeneous labor market response to monetary policy: small versus large firms*.
- Jan A. Baran, *Labour quality growth in Poland*.
- Karol Szafranek, Grzegorz Szafranski, Agnieszka Leszczyńska-Paczesna, *Inflation returns. Revisiting the role of external and domestic shocks with Bayesian structural VAR*.
- Mariusz Kapuściński, *Interest rate pass-through to risk-free rates in Poland*.
- Mariusz Kapuściński, *Updated estimates of the role of the bank lending channel in monetary policy transmission in Poland*.
- Jakub Mućk, Łukasz Postek, *Supply chains shocks and inflation in Europe*.

- Marcin Borsuk, Nicolas Eugster, Paul-Olivier Klein, Oskar Kowalewski, *Family firms and carbon emissions*.
- Krzysztof Kruszewski, Mikołaj Szadkowski, *In search of accounting principles for the central bank*.
- Jacek Kotłowski, *The role of central bank forecasts in uncertain times*.
- Marcin Bielecki, Aneta Błażejowska, Michał Brzoza-Brzezina, Kamila Kuziemska-Pawlak, Grzegorz Szafranski, *Estimates and projections of the natural rate of interest for Poland and the euro area*.
- *Monetary policy transmission mechanism in Poland. What do we know in 2023?* Edited by: Magda Ciżkowicz-Pękała, Andrzej Kocięcki, Tomasz Łyziak, Mateusz Pipienia, Ewa Stanisławska.

Other scientific publications:

- Anna Dobrzańska, *Restrukturyzacja i uporządkowana likwidacja zakładów ubezpieczeń w prawie krajowym Państw Członkowskich UE – analiza porównawcza* [Recovery and resolution of insurance companies in the national law of EU Member States – a comparative analysis], “Prace i Studia Kolegium Zarządzania i Finansów”, issue 189, Warsaw School of Economics, 147–163.
- Aneta Kosztowniak, *Changes in the lending activity of banks in Poland, including the portfolio of non-financial corporate loans, Data science in central banking: applications and tools*, “IFC Bulletin”, 59, Irving Fischer Committee on Central Bank Statistics, BIS.
- Aneta Kosztowniak, *What should be the optimal financial structure of the FDI inflows to Poland in stimulating growth processes?*, *Data science in central banking: applications and tools*, “IFC Bulletin”, 59, Irving Fischer Committee on Central Bank Statistics, BIS.
- Jarosław Michalewicz, *Fala kryzysowa w systemach bankowych USA i Szwajcarii w marcu 2023 roku* [Crisis wave in the US and Swiss banking systems in March 2023], “Bezpieczny Bank”, 91(2), 109–140.
- Marta Kightley, Jacek Suda, *The impact of monetary policy on employment in Poland through the lens of disaggregated data*, “BIS Papers”, 142, November 2023, 251–263.
- Lukas Henkel, Elisabeth Wieland, Aneta Błażejowska, Cristina Conflitti, Brian Fabo, Ludmila Fadejeva, Jana Jonckheere, Peter Karadi, Paweł Macias, Jan-Oliver Menz, Pascal Seiler, Karol Szafranek, *Price setting during the coronavirus (COVID-19) pandemic*, “ECB Occasional Paper Series”, 324.
- Georg Strasser, Elisabeth Wieland, Paweł Macias, Aneta Błażejowska, Karol Szafranek, David Wittekopf, Jörn Franke, Lukas Henkel, Chiara Osbat, *E-commerce and price setting: evidence from Europe*, “ECB Occasional Paper Series”, 320.

- Piotr Boguszewski, Katarzyna Puchalska, *Rola badań ankietowych przedsiębiorstw niefinansowych w warunkach niestandardowych wstrząsów ekonomicznych* [The role of surveys of non-financial firms under non-standard economic shocks], in: “Monitorowanie działalności gospodarczej. Gospodarka po pandemii Covid-19” [Monitoring economic activity. The economy after the Covid-19 pandemic], statistics compiled and edited under scientific supervision of M. Radzikowski, Warsaw School of Economics.
- Paweł Kowalewski, Dominik A. Skopiec, *Wzrost znaczenia złota w rezerwach dewizowych banków centralnych gospodarek wschodzących* [Growing importance of gold in the foreign exchange reserves of central banks of emerging economies], “Bank i Kredyt”, 54(3), 259–284.
- Paweł Kowalewski, Sayuri Shirai, *A quarter of a century of the BoJ’s efforts to overcome liquidity trap*, “Bank i Kredyt”, 54(4), 335–364.
- Ilona Skibińska-Fabrowska, Małgorzata Czuchryta, Adrian Żak, *The relationship between payment inclusion and the demand for cash*, “Bank i Kredyt”, 54(4), 365–388.
- Paweł Kowalewski, Błażej Lepczyński, *Targeted Longer-Term Refinancing Operations – history and evolution from the perspective of commercial banks’ ability to meet liquidity requirements*, “Bank i Kredyt”, 54(6), 577–606.

Appendix 3

Voting records of the Monetary Policy Council members on motions and resolutions

Voting records of the Monetary Policy Council members on motions and resolutions

The voting records of the Monetary Policy Council members on motions and resolutions in 2023 are presented below.

Date	Subject matter of motion or resolution	Voting of the MPC members	
		For	Against
4 January 2023	Motion to raise the NBP interest rates by 1.00 percentage points Motion did not pass	J.B. Tyrowicz	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski L. Kotecki P. Litwiniuk G. Masłowska H.J. Wnorowski
4 January 2023	Motion to raise the NBP interest rates by 0.50 percentage points Motion did not pass	L. Kotecki J.B. Tyrowicz	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski P. Litwiniuk G. Masłowska H.J. Wnorowski
4 January 2023	Motion to raise the NBP interest rates by 0.25 percentage points Motion did not pass	P. Litwiniuk	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski L. Kotecki G. Masłowska J.B. Tyrowicz H.J. Wnorowski
8 February 2023	Motion to raise the NBP interest rates by 1.00 percentage points Motion did not pass	J.B. Tyrowicz	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski L. Kotecki P. Litwiniuk G. Masłowska H.J. Wnorowski
8 February 2023	Motion to raise the NBP interest rates by 0.25 percentage points Motion did not pass	L. Kotecki P. Litwiniuk	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski G. Masłowska J.B. Tyrowicz H.J. Wnorowski
8 March 2023	Motion to raise the NBP interest rates by 1.00 percentage points Motion did not pass	J.B. Tyrowicz	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski L. Kotecki P. Litwiniuk G. Masłowska H.J. Wnorowski

Voting records of the Monetary Policy Council members on motions and resolutions

Date	Subject matter of motion or resolution	Voting of the MPC members	
		For	Against
8 March 2023	Motion to raise the NBP interest rates by 0.25 percentage points Motion did not pass	L. Kotecki P. Litwiniuk	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski G. Masłowska J.B. Tyrowicz H.J. Wnorowski
4 April 2023	Resolution No. 1/2023 on approving the annual Financial Statements of Narodowy Bank Polski as at 31 December 2022.	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski L. Kotecki P. Litwiniuk G. Masłowska J.B. Tyrowicz H.J. Wnorowski	No-one
5 April 2023	Motion to raise the NBP interest rates by 1.00 percentage points Motion did not pass	J.B. Tyrowicz	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski L. Kotecki P. Litwiniuk G. Masłowska H.J. Wnorowski
5 April 2023	Motion to raise the NBP interest rates by 0.25 percentage points Motion did not pass	L. Kotecki P. Litwiniuk J.B. Tyrowicz	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski G. Masłowska H.J. Wnorowski
9 May 2023	Resolution No. 2/2023 on approving <i>the Report on Monetary Policy in 2022</i>	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski G. Masłowska H.J. Wnorowski	L. Kotecki P. Litwiniuk J.B. Tyrowicz
9 May 2023	Resolution No. 3/2023 on the evaluation of the activities of the NBP Management Board as regards the implementation of monetary policy guidelines for 2022	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski G. Masłowska H.J. Wnorowski	L. Kotecki P. Litwiniuk J.B. Tyrowicz
9 May 2023	Resolution No. 4/2023 on approving <i>the Report on the Operations of Narodowy Bank Polski in 2022</i>	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski P. Litwiniuk G. Masłowska H.J. Wnorowski	L. Kotecki J.B. Tyrowicz
10 May 2023	Motion to raise the NBP interest rates by 1.00 percentage points Motion did not pass	J.B. Tyrowicz	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski L. Kotecki P. Litwiniuk G. Masłowska H.J. Wnorowski

Appendix 3

Date	Subject matter of motion or resolution	Voting of the MPC members	
		For	Against
10 May 2023	Motion to raise the NBP interest rates by 0.25 percentage points Motion did not pass	L. Kotecki P. Litwiniuk J.B. Tyrowicz	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski G. Masłowska H.J. Wnorowski
6 June 2023	Motion to raise the NBP interest rates by 1.00 percentage points Motion did not pass	J.B. Tyrowicz	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski L. Kotecki P. Litwiniuk G. Masłowska H.J. Wnorowski
6 June 2023	Motion to raise the NBP interest rates by 0.25 percentage points Motion did not pass	L. Kotecki P. Litwiniuk J.B. Tyrowicz	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski G. Masłowska H.J. Wnorowski
5 July 2023	Resolution No. 1/DRF/2023 on the appointment of a registered auditor for the annual financial statements of Narodowy Bank Polski for the years 2023, 2024 and 2025	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski L. Kotecki P. Litwiniuk G. Masłowska J.B. Tyrowicz H.J. Wnorowski	No-one
6 July 2023	Motion to raise the NBP interest rates by 1.00 percentage points Motion did not pass	J.B. Tyrowicz	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski L. Kotecki P. Litwiniuk G. Masłowska H.J. Wnorowski
5 September 2023	Resolution No. 5/2023 on adopting the monetary policy guidelines for 2024	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski P. Litwiniuk G. Masłowska H.J. Wnorowski	L. Kotecki J.B. Tyrowicz
6 September 2023	Motion to raise the NBP interest rates by 1.00 percentage points Motion did not pass	J.B. Tyrowicz	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski L. Kotecki P. Litwiniuk G. Masłowska H.J. Wnorowski
6 September 2023	Motion to cut the NBP interest rates by 0.75 percentage points Motion passed	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski G. Masłowska H.J. Wnorowski	L. Kotecki P. Litwiniuk J.B. Tyrowicz

Voting records of the Monetary Policy Council members on motions and resolutions

Date	Subject matter of motion or resolution	Voting of the MPC members	
		For	Against
6 September 2023	Resolution No. 6/2023 on the reference rate, refinancing credit rate, deposit rate as well as the rediscount and discount rates at NBP	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski G. Masłowska H.J. Wnorowski	L. Kotecki P. Litwiniuk J.B. Tyrowicz
4 October 2023	Motion to raise the NBP interest rates by 1.75 percentage points Motion did not pass	J.B. Tyrowicz	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski L. Kotecki P. Litwiniuk G. Masłowska H.J. Wnorowski
4 October 2023	Motion to cut the NBP interest rates by 0.25 percentage points Motion passed	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski G. Masłowska H.J. Wnorowski	L. Kotecki P. Litwiniuk J.B. Tyrowicz
4 October 2023	Resolution No. 7/2023 on the reference rate, refinancing credit rate, deposit rate as well as the rediscount and discount rates at NBP	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski G. Masłowska H.J. Wnorowski	L. Kotecki P. Litwiniuk J.B. Tyrowicz
8 November 2023	Motion to raise the NBP interest rates by 2.00 percentage points Motion did not pass	J.B. Tyrowicz	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski L. Kotecki P. Litwiniuk G. Masłowska H.J. Wnorowski
5 December 2023	Resolution No. 8/2023 on approving the financial plan of Narodowy Bank Polski for 2024	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski G. Masłowska H.J. Wnorowski	L. Kotecki P. Litwiniuk J.B. Tyrowicz
6 December 2023	Motion to raise the NBP interest rates by 2.00 percentage points Motion did not pass	J.B. Tyrowicz	A. Glapiński I.K. Dąbrowski I. Duda W.S. Janczyk C. Kochalski L. Kotecki P. Litwiniuk G. Masłowska H.J. Wnorowski

Appendix 4

**Financial Statements
of Narodowy Bank Polski
as at 31 December 2023
together with
the Independent
Auditor's Report**

Balance Sheet of Narodowy Bank Polski as at 31 December 2023¹

Assets	Note	31.12.2023	31.12.2022
		<i>PLN thousand</i>	
1. Gold and gold receivables	1	93,591,432.7	58,650,238.7
2. Claims on non-residents denominated in foreign currency		669,677,006.4	675,407,337.1
2.1. <i>Receivables from the IMF</i>	2	28,497,233.9	31,411,666.6
2.2. <i>Balances with foreign institutions, debt securities, loans granted and other foreign assets</i>	3.1	641,179,772.6	643,995,670.5
6. Other claims on credit institutions denominated in domestic currency		7.8	169.2
7. Debt securities of residents denominated in domestic currency	3.2	138,887,605.0	140,673,185.5
10. Other assets		1,489,034.4	1,497,159.3
10.1. <i>Tangible fixed assets and intangible assets</i>	4	983,611.8	1,016,124.3
10.2. <i>Other financial assets</i>	3.3	288,890.2	303,134.2
10.3. <i>Off-balance-sheet instruments revaluation differences</i>	10	32,204.6	34,734.7
10.4. <i>Accruals and prepaid expenses</i>	8	55,447.5	49,683.9
10.5. <i>Sundry</i>	3.4	128,880.2	93,482.2
Total assets		903,645,086.3	876,228,089.8

Liabilities	Note	31.12.2023	31.12.2022
		<i>PLN thousand</i>	
1. Banknotes and coins in circulation	5	377,521,375.0	368,611,663.5
2. Liabilities to credit institutions related to monetary policy operations denominated in domestic currency	6.1	74,421,141.6	55,112,907.5
2.1. <i>Current accounts (incl. the required minimum reserve accounts)</i>		48,914,397.0	34,914,457.6
2.2. <i>Deposit facilities</i>		25,506,744.6	20,198,449.9
3. Other liabilities to credit institutions denominated in domestic currency	6.2	2,581,882.6	940,440.8
4. Liabilities due to issued securities denominated in domestic currency	6.1	303,071,103.1	252,181,174.3
5. Liabilities to other residents denominated in domestic currency	6.2	11,946,940.4	11,883,806.3
5.1. <i>Liabilities to general government</i>		10,338,349.3	10,792,940.6
5.2. <i>Other liabilities</i>		1,608,591.1	1,090,865.7
6. Liabilities to non-residents denominated in domestic currency	6.2	4,081,562.3	4,124,197.2
7. Liabilities to residents denominated in foreign currency	6.3	45,645,528.6	59,010,072.3
8. Liabilities to non-residents denominated in foreign currency	6.3	67,515,057.8	53,625,136.0
9. SDR allocation	2	27,878,502.6	30,871,510.9
11. Other liabilities		452,449.9	430,621.7
11.1. <i>Off-balance-sheet instruments revaluation differences</i>	10	16,914.1	2,404.1
11.2. <i>Accruals and deferred income</i>	8	108,880.7	97,303.7
11.3. <i>Sundry</i>	6.4	326,655.1	330,913.9
12. Provisions		213,806.0	15,281,500.7
12.1. <i>FX risk provision</i>	9.2	0.0	15,078,591.4
12.2. <i>Provisions for liabilities</i>	7	213,806.0	202,909.3
13. Revaluation accounts	9.1	35,017,440.4	50,056,738.6
14. Capital and reserves	9	1,500,000.0	1,500,000.0
15. Financial result	9.3	-48,201,704.0	-27,401,680.0
15.1. <i>Financial result for the financial year</i>		-20,800,024.0	-16,943,670.7
15.2. <i>Loss of previous years</i>		-27,401,680.0	-10,458,009.3
Total liabilities		903,645,086.3	876,228,089.8

¹ In the Balance Sheet of NBP, the items which are not used or which show a zero balance in both presented periods have been omitted.

Profit and Loss Account of Narodowy Bank Polski for the year ended 31 December 2023

	Note	2023	2022
		PLN thousand	
1. Net result on interest	11	-1,646,378.5	-5,829,784.9
1.1. Interest income		26,576,129.6	9,371,032.8
1.2. Interest expenses		-28,222,508.1	-15,200,817.7
2. Net result on financial operations		-17,506,447.5	-9,768,368.9
2.1. Realised gains/losses	12.1	-3,812,335.5	15,548,530.0
2.2. Unrealised losses	12.2	-28,772,698.2	-26,737,763.7
2.3. Net result on impairment on financial assets		-5.2	-4.7
2.4. Net result on FX risk provision		15,078,591.4	1,420,869.5
3. Net result on commissions and fees	13	5,439.3	-449.4
3.1. Commissions and fees income		50,550.1	52,945.2
3.2. Commissions and fees expenses		-45,110.8	-53,394.6
4. Income on shares and participating interests	14	42,578.5	32,215.8
5. Other income	19	137,998.7	140,909.0
A. Total net income		-18,966,809.5	-15,425,478.4
6. Salaries	15	-775,354.8	-673,408.3
7. Administrative expenses	16	-444,896.2	-342,854.6
8. Depreciation and amortisation expenses	17	-90,595.9	-95,484.0
9. Expenses on issue of banknotes and coins	18	-513,290.1	-389,963.3
10. Other expenses	19	-9,077.5	-16,482.1
B. Financial result for the financial year		-20,800,024.0	-16,943,670.7

Notes

1. Introduction

1.1. Legal basis, scope of activities and bodies of NBP

In accordance with Article 227 para. 1 of the Constitution of the Republic of Poland, Narodowy Bank Polski, hereinafter referred to as “NBP”, is the central bank of the State. It has the exclusive right to issue money as well as to formulate and implement monetary policy. NBP is responsible for the value of the Polish currency.

The role, functions, objective and tasks of NBP are set forth, in particular, in the following acts and regulations:

- the Act of 29 August 1997 on Narodowy Bank Polski (Journal of Laws of 2022, item 2025), hereinafter referred to as the “Act on NBP”,
- the Act of 29 August 1997 – Banking Law (Journal of Laws of 2023, item 2488, as amended).
- the Treaty on the Functioning of the European Union (consolidated version) and Protocol (No 4) on the Statute of the European System of Central Banks and of the European Central Bank (Official Journal of the EU 2016/C 202 of 7 June 2016).

Pursuant to Article 2 of the Act on NBP, Narodowy Bank Polski has a legal personality and is not subject to entry into the register of State enterprises. NBP performs its activities in the territory of the Republic of Poland, and its registered office is in Warsaw.

In accordance with the Act on NBP, the basic objective of the activity of NBP is to maintain price stability, while supporting the economic policy of the government, insofar as this does not constrain the basic objective of NBP. The tasks of NBP also include:

- organising payments,
- managing the foreign exchange reserves,
- conducting foreign exchange activities within the bounds stipulated by relevant laws,
- providing banking services to the State budget,
- regulating the liquidity of banks and providing them with refinancing facilities,
- establishing the necessary conditions for the development of the banking system,
- acting in favour of the stability of the financial system,
- acting with the aim of eliminating or mitigating systemic risk in the financial system,
- compiling monetary and banking statistics, the balance of payments and the international investment position,
- performing other tasks as specified by laws.

In accordance with the Constitution of the Republic of Poland and the Act on NBP, the bodies of NBP are:

- 1) Governor of NBP (appointed for a six-year term of office),
- 2) Monetary Policy Council (its members are appointed for a six-year non-renewable term of office),
- 3) Management Board of NBP (its members are appointed for a six-year term of office).

The composition of NBP bodies as at 31 December 2023 was as follows:

Governor of NBP

Adam Glapiński

Monetary Policy Council

Chairperson	<i>Adam Glapiński</i>		
Members	<i>Ireneusz Dąbrowski</i>	<i>Cezary Kochalski</i>	<i>Gabriela Masłowska</i>
	<i>Iwona Duda</i>	<i>Ludwik Kotecki</i>	<i>Joanna Tyrowicz</i>
	<i>Wiesław Janczyk</i>	<i>Przemysław Litwiniuk</i>	<i>Henryk Wnorowski</i>

Management Board of NBP²

Chairperson	<i>Adam Glapiński</i>		
First Deputy Governor of NBP	<i>Marta Kightley</i>		
Deputy Governor of NBP	<i>Adam Lipiński</i>		
Members	<i>Marta Gajęcka</i>	<i>Piotr Pogonowski</i>	<i>Rafał Sura</i>
	<i>Paweł Mucha</i>	<i>Artur Soboń</i>	<i>Paweł Szalamacha</i>

1.2. Legal basis of preparation of the financial statements

The Management Board of NBP prepared the Financial Statements of NBP as at 31 December 2023 on the basis of the following provisions:

- the Act on NBP,
- Resolution No. 13/2020 of the Monetary Policy Council of 6 November 2020 on the accounting principles of Narodowy Bank Polski, the format of the balance sheet, the profit and loss account and the contents of the notes (NBP Official Journal, Item 24),
- Resolution No. 6/2019 of the Monetary Policy Council of 5 November 2019 on the principles for creating and releasing the provision against the foreign exchange rate risk of the zloty at Narodowy

² On 6 December 2023 Artur Soboń was appointed member of the Management Board of NBP.

Bank Polski (NBP Official Journal, item 14), hereinafter referred to as "Resolution No. 6/2019 of the MPC",

- Resolution No. 64/2020 of the Management Board of Narodowy Bank Polski of 21 December 2020 on the accounting organisation rules at Narodowy Bank Polski (as amended).

These regulations constitute the NBP accounting policy.

1.3. Period covered by the financial statements

The financial statements cover the financial year from 1 January 2023 to 31 December 2023. Comparative data in the financial statements cover the financial year from 1 January 2022 to 31 December 2022.

1.4. Certified auditor and its selection

The annual financial statements of NBP prepared as at 31 December 2023 are subject to audit by the audit company KPMG Audyt Spółka z ograniczoną odpowiedzialnością sp.k., with its registered office in Warsaw. The audit company was selected by the Monetary Policy Council, hereinafter referred to as the "MPC", in 2023 on the basis of Article 69 para. 1 of the Act on NBP. The selection was made following an open tendering, pursuant to the Act of 11 September 2019 – Public Procurement Law (Journal of Laws of 2022, item 1710, as amended), for a period of three years (audit of the financial statements for the years 2023, 2024 and 2025) with the option to extend the agreement for another three-year period (audit of the financial statements for the years 2026, 2027 and 2028).

1.5. Information on the adoption and approval of NBP financial statements for the year 2022

The annual financial statements of NBP prepared as at 31 December 2022 were adopted by the MPC by Resolution No. 1/2023 on 4 April 2023 (NBP Official Journal, item 4) and approved by the Council of Ministers by Resolution No. 109/2023 on 23 June 2023. The certified auditor in charge of auditing the financial statements, on behalf of audit company KPMG Audyt Spółka z ograniczoną odpowiedzialnością sp.k., issued an unmodified (unqualified) opinion on the audited financial statements.

In the financial statements prepared as at 31 December 2022, NBP recorded a negative net financial result of PLN -16,943,670.7 thousand. Therefore, in 2023 NBP paid no contribution from profit to the State budget, neither did it allocate a contribution to NBP's reserve fund.

2. Description of significant accounting principles

To enhance the understanding of the information presented in the financial statements, detailed information about the significant principles of the accounting policy binding at NBP and on the assessments and estimates made are provided in individual explanatory notes (see Chapter 5).

2.1. Basic accounting principles

The accounting principles applied by NBP, as specified in the legal regulations listed in point 1.2. of the Introduction to the financial statements, conform to the standards applied in the European System of Central Banks, hereinafter referred to as “ESCB”, the basis of which is the Guideline (EU) 2016/2249 of the European Central Bank, hereinafter referred to as the “ECB”, of 3 November 2016 on the legal framework for accounting and financial reporting in the European System of Central Banks (ECB/2016/34, as amended), hereinafter referred to as “the ECB Guideline”.

The following accounting principles are applied during the preparation of the financial statements of NBP:

- true and fair view,
- going concern,
- prudence,
- materiality,
- comparability,
- accruals principle.

2.2. Going concern

The financial statements of NBP were prepared under the going concern assumption. In accordance with Article 58 of the Act on NBP, NBP cannot be declared bankrupt.

2.3. Recognition of transactions in the accounting books of NBP

All economic events of a given financial year are recognised in the accounting books for that year.

When recognising transactions in the accounting books, NBP follows the so-called economic approach as laid down in the ECB Guideline. Consequently, the following rules are applied:

- foreign currencies and gold purchased or sold in a spot transaction or a forward transaction are recognised in the NBP accounting books (on off-balance-sheet accounts) on the trade date,
- interest, discount and premium on assets and liabilities as well as on off-balance-sheet instruments are recognised in the profit and loss account at the end of each operating day (see Note 11).

Debt securities and financial instruments of Exchange-Traded Funds (hereinafter referred to as “ETFs”), purchased or sold in a spot transaction, are recognised in the NBP accounting books on the settlement date.

2.4. Valuation as at the balance sheet date

As at the balance sheet date, for gold, foreign currencies, debt securities and ETFs purchased by NBP and off-balance-sheet financial instruments the principle of valuation at market value is applied.³ The revaluation results of assets and liabilities to market value as at the balance sheet date are recognised in accordance with the following rules (see Note 12):

- recognising unrealised losses (revaluation losses) in the financial result,
- unrealised gains (revaluation gains) are not recognised in the financial result – they are recognised on the liabilities side of the balance sheet as *Revaluation accounts*.

Price revaluation of financial instruments valued at market price is carried out prior to their currency revaluation.

The value of individual assets and liabilities and gains and losses are determined separately, without netting the value of items which differ in kind:

- gold conforming to London Good Delivery standard is valued at the average market price for an ounce of gold quoted in US dollars on the London Bullion Market,
- marketable debt securities not classified as held-to-maturity are valued at their market value,
- marketable debt securities held to maturity are valued at their clean price adjusted for accrued discount and premium, less impairment⁴,
- marketable debt securities held for monetary policy purposes are valued at their clean price adjusted for accrued discount and premium, less impairment,
- debt securities issued by NBP are valued at their issue price adjusted for accrued discount and premium,
- ETFs are valued at market value,
- forward transactions in debt securities are valued by comparing the market value of the debt securities on the valuation date with their value set in the agreement, discounted as at the settlement date of the spot transaction,
- futures are valued at market value,
- the remaining assets and liabilities are valued at, respectively, nominal value, transaction price or market value.

³ The principle of valuation at market value was not applied for debt securities held to maturity and debt securities held for monetary policy purposes. Market value is the average of the bid and the ask prices based on quotations for transactions of standard volume on a given market by recognised operators, whether operating in an organised market or an over-the-counter market, or – if prices are not available on the market – a value determined according to an accepted and consistently applied valuation model, including a value determined by reference to appropriate yield curves which were published.

⁴ Marketable debt securities held to maturity may be sold before their maturity:

- 1) if the value of the securities sold is considered non-significant in comparison with the total value of the held-to-maturity securities holding, or
- 2) if the securities are sold during one month before maturity date, or
- 3) under exceptional circumstances, in particular in the case of a significant deterioration of the issuer's creditworthiness.

Assets not valued at market value are reviewed for impairment, i.e. whether it is highly probable that a given asset will not generate expected economic benefits in the future. If such evidence is identified, the amount of expected impairment is determined by comparing their book value with their recoverable amount.

Assets, liabilities and off-balance-sheet financial instruments in foreign currencies have their value determined in domestic currency. In the valuation process, the average NBP exchange rates prevailing at the balance sheet date are used.

For the valuation as at 31 December 2023, the prices/exchange rates announced on 29 December 2023 were used and for comparable data – those announced on 30 December 2022.

2.5. Events after the balance-sheet date

The balance sheet and the profit and loss account shall be adjusted for the events the information on which was received after the balance sheet date and prior to the approval of the NBP annual financial statements, if such events materially affect their content and are events adjusting their balance at the balance sheet date.

3. Changes in accounting principles

In 2023, there were no changes in the NBP accounting rules.

4. Values based on professional estimates

When preparing its financial statements, NBP makes specific estimates and assumptions that affect the amounts recognised in the financial statements. The estimates and assumptions are based, among others, on historical data and expectations about future events that are believed to be reasonable at the date of preparation of the financial statements. As the existing circumstances and expectations about future events may change as a result of market changes or an occurrence of factors beyond NBP's control, the NBP-made estimates are reviewed on a regular basis.

The key area where NBP makes estimates is the calculation of the amount of the FX risk provision.⁵ In accordance with Resolution No. 6/2019 of the MPC, the estimated FX risk provision is equal to the amount that would cover a potential change in the value of foreign currency holdings due to identified foreign exchange rate risk of the zloty, decreased by estimated unrealised gains on changes in the foreign exchange rate of the zloty (see Note 9 and Note 9.2).

Other areas in which NBP makes significant estimates relate to, in particular, setting:

⁵ I.e. the provision against the foreign exchange rate risk of the zloty, whose principles for creating and releasing are determined by the MPC in Resolution No. 6/2019.

- the amount of provisions for liabilities due to retirement and disability severance payments, death in service benefits and jubilee awards (the provisions are estimated on the basis of actuarial assessment carried out periodically by an independent actuary),
- periods of use of tangible fixed assets and intangible assets,
- the discount rates of outstanding lease fees (the rates are used to determine the value of lease-related payments, and consequently to determine the value of right-of-use assets – see Note 4 and Note 6.4),
- write-downs due to asset impairment.

5. Explanatory notes

Note 1 Gold and gold receivables

Financial instruments in gold are recognised in the NBP accounting books at transaction price. The transaction price of an ounce of gold in USD is converted into domestic currency at the average NBP exchange rate of the US dollar as at the transaction date.

Gold assets constitute a holding of gold for which the average cost is determined. The average cost of gold holding, which is the average cost of purchasing an ounce of gold by NBP, is used to calculate income and expenses arising from the sale of gold (realised gains or losses on transactions in gold) and determine the results of balance sheet valuation.

At the balance sheet date, gold is valued at the market value of an ounce of gold in USD, converted into domestic currency at the average NBP exchange rate of the USD prevailing at the balance sheet date. No distinction is made between the results of currency and price valuation of gold – they are treated jointly as gold holdings revaluation differences. Unrealised losses, recognised in the financial result on the balance sheet date, change the average cost of gold holding.

PLN thousand	31.12.2023	31.12.2022	Change
Gold stored at NBP	27,359,768.1	26,894,727.8	465,040.3
Gold on accounts with foreign banks, of which:	66,231,664.6	31,755,510.9	34,476,153.7
- current accounts in gold	39,020,304.0	0.0	39,020,304.0
- term deposits in gold	27,211,360.6	31,755,510.9	-4,544,150.3
Total	93,591,432.7	58,650,238.7	34,941,194.0
<i>of which gold revaluation differences</i>	28,309,187.8	27,515,054.6	794,133.2

		31.12.2023	31.12.2022	Change
Gold stored at NBP	thousands of ounces	3,371.2	3,371.2	0.0
	(tonnes)	(104.9)	(104.9)	(0.0)
Gold on accounts with foreign banks, of which:	thousands of ounces	8,161.1	3,980.6	4,180.5
	(tonnes)	(253.8)	(123.8)	(130.0)
- current accounts in gold	thousands of ounces	4,808.1	0.0	4,808.1
	(tonnes)	(149.5)	(0.0)	(149.5)
- term deposits in gold	thousands of ounces	3,353.0	3,980.6	-627.6
	(tonnes)	(104.3)	(123.8)	(-19.5)
Total	thousands of ounces	11,532.3	7,351.8	4,180.5
	(tonnes)	(358.7)	(228.7)	(130.0)

Gold is held at NBP and on accounts with foreign banks. Gold in foreign banks is:

- held on the current accounts,
- invested in term deposit transactions with foreign financial institutions; interest on term deposits in gold is accrued and paid in USD (see Note 3.1 and Note 11).

The increase in the balance by 4,180.5 thousand ounces (130.0 tonnes) was mainly a result of gold purchase transactions made by NBP on the interbank market in 2023 (see Note 3.1).

The domestic currency value of the item was also affected by the revaluation of the holding of gold (see Note 9.1).

Note 2 Receivables from and liabilities to the IMF

Transactions with the International Monetary Fund (hereinafter the "IMF") are recognised in the NBP accounting books at nominal value. As at the balance-sheet date, the amounts of receivables from and liabilities to the IMF are valued according to nominal value. Valuation of assets is carried out with consideration for impairment write-downs.

The balances resulting from operations with the IMF are denominated in Special Drawing Rights (SDR) or in the zloty. The SDR is construed as a separate foreign currency.

The balances in SDR are converted into domestic currency at the average NBP exchange rate as at the balance-sheet date.

Items related to the IMF:

- **Reserve tranche** corresponds to the Republic of Poland's member quota in the IMF, less liabilities due to the account in domestic currency operated by NBP for the IMF (so-called No. 1 Account of the IMF).

The quota in the IMF of each member country is determined on the basis of selected macroeconomic indicators and paid in full amount (in domestic currency and in foreign currencies). The size of member quota determines for a given country, among others, the number of its voting rights in the IMF, the assigned amount of SDR allocation and the limits of loans granted to that country.

The funds accumulated in No. 1 Account of the IMF are used by the IMF under quarterly Financial Transaction Plans (FTPs). The funds are exchanged for foreign currency and transferred to member countries – IMF borrowers, which results in an increase in reserve tranche. On the other hand, loan repayments made by IMF borrowers in foreign currencies are exchanged for the domestic currency and credited to No. 1 Account of the IMF, which results in a decrease in reserve tranche.

- **Current account with the IMF** includes funds received under SDR allocation and payments in SDR due to loans extended to the IMF, as well as due to settlements arising from interest and fees on balances and transactions related to the IMF.
- **Term deposit in the IMF** (non-interest bearing term deposit) includes funds in the IMF-administered PRG-HIPC Trust (Poverty Reduction and Growth – Heavily Indebted Poor Countries Initiative).
- **Loans in foreign currency extended to the IMF**

Since 2011 NBP has been a participant in the New Arrangements to Borrow (NAB). As a participant in the NAB, NBP has made a commitment to extend to the IMF interest-bearing loans up to the arranged limit. Under the decision effective from 1 January 2021 to 31 December

2025, at the end of 2023 and 2022 the maximum limit for loans amounted to SDR 2,570,800.0 thousand.⁶

Under the 2020 bilateral borrowing agreement (BBA), effective from 1 January 2021 to 31 December 2023, which in 2023 was extended with the approval of NBP by one year, i.e. until 31 December 2024, NBP has made a commitment to extend interest-bearing loans to the IMF amounting up to the SDR equivalent of EUR 2,701,000.0 thousand.⁷ The funds may be transferred by NBP at the request of the IMF. The IMF will be able to use these funds provided that it exhausts other available resources originating from quotas of member countries and loans under the NAB. Neither in 2023 nor in 2022 did the IMF borrow funds under BBA.

- **SDR allocation**, means SDRs granted to member countries. Under the SDR allocations, conducted in 2009 and in 2021, the Republic of Poland received a total of SDR 5,229,896.4 thousand.

Reserve tranche (except for its fixed part amounting to SDR 56,236.0 thousand), the balance of the current account with the IMF, loans extended to the IMF and SDR allocation are remunerated on the basis of the interest rate determined by the IMF.

PLN thousand	Balance sheet item	31.12.2023	31.12.2022	Change
Reserve tranche, of which		5,807,757.3	6,264,325.2	-456,567.9
- Member quota in the IMF		22,258,324.9	24,880,087.8	-2,621,762.9
- No. 1 Account of the IMF		-16,450,567.6	-18,615,762.6	2,165,195.0
Current account with the IMF		22,638,303.1	25,033,317.9	-2,395,014.8
Term deposit with the IMF		37,447.2	41,565.5	-4,118.3
Loans extended to the IMF		13,726.3	72,458.0	-58,731.7
Total assets (Receivables from the IMF)	A.2.1	28,497,233.9	31,411,666.6	-2,914,432.7
SDR allocation (Liabilities to the IMF)	L.9	27,878,502.6	30,871,510.9	-2,993,008.3
Net item		618,731.3	540,155.7	78,575.6
<i>of which SDR currency revaluation differences</i>		<i>-45,660.7</i>	<i>6,581.6</i>	<i>-52,242.3</i>

thousand SDR	Balance sheet item	31.12.2023	31.12.2022	Change
Reserve tranche		1,097,086.7	1,066,086.7	31,000.0
- Member quota in the IMF		4,095,400.0	4,095,400.0	0.0
- No. 1 Account of the IMF		-2,998,313.3	-3,029,313.3	31,000.0
Current account with the IMF		4,276,380.4	4,260,265.1	16,115.3
Term deposit with the IMF		7,073.8	7,073.8	0.0
Loans extended to the IMF		2,592.9	12,331.2	-9,738.3
Total assets (Receivables from the IMF)	A.2.1	5,383,133.8	5,345,756.8	37,377.0
SDR allocation (Liabilities to the IMF)	L.9	5,266,255.4	5,253,831.0	12,424.4
Net item		116,878.4	91,925.8	24,952.6

⁶ That is PLN 13,609,301.0 thousand according to the average NBP exchange rate as at 31 December 2023.

⁷ That is PLN 11,743,948.0 thousand according to the average NBP exchange rate as at 31 December 2023.

In 2023, the change in the item in original currency was mainly due to:

- an increase in the reserve tranche, which was a result of transactions under the FTPs – payments in favour of IMF member countries made by the IMF from No. 1 Account of the IMF with NBP,
- an increase in the current account with the IMF, mainly as a result of settlements with the IMF,
- a decrease in receivables due to loans extended to the IMF under the NAB, which was mainly a result of the repayment of a portion of debt towards NBP by the IMF.⁸

The domestic currency value of the receivables from the IMF and liabilities to the IMF was primarily affected by the currency revaluation of SDR (see Note 9.1).

Note 3 Other financial assets

- **Debt securities and ETFs**

Debt securities purchased in a spot transaction are recognised in the NBP accounting books at the clean price.

Debt securities with the same International Securities Identification Number (ISIN) code, in relation to which NBP has a defined business intent, constitute a holding of debt securities.

For a securities holding, the average cost of holding is determined. The average cost of a debt securities holding, which is the average cost of purchasing by NBP a debt security of a given code (adjusted for the accrued discount and premium), is used to calculate income and expenses arising from the sale of debt securities (realised price gains or losses) and to determine the results of balance sheet valuation.

Interest, discount and premium on debt securities purchased are recognised in the financial result (the net result on interest) at the end of each operating day in amounts accrued according to the internal rate of return method, separately for each debt securities holding.

As at the balance sheet date, debt securities denominated in foreign currencies not classified as held-to-maturity are valued at market price prevailing at the balance sheet date. Unrealised losses related to a given debt securities holding are not netted with unrealised gains on any other holding of securities. Unrealised losses recognised in the financial result on the balance sheet date change the average cost of a securities holding, adjust the internal rate of return as well as change the discount and premium accrued in the following days.

As at the balance sheet date, debt securities denominated in foreign currency held to maturity are valued at purchase price, excluding the coupon purchased (clean price) adjusted for the accrued discount and premium, less impairment.

⁸ As at 31 December 2023, the outstanding amount of the NBP's commitment to the IMF under the NAB amounted to SDR 2,568,225.0 thousand (PLN 13,595,669.5 thousand according to the average NBP exchange rate as at 31 December 2023). As at 31 December 2022, the outstanding amount of NBP's commitment was SDR 2,558,525.0 thousand (PLN 15,033,892.9 thousand according to the average NBP exchange rate as at 31 December 2022).

As at the balance sheet date, debt securities denominated in domestic currency held for monetary policy purposes are valued at purchase price, excluding the coupon purchased (clean price) adjusted for the accrued discount and premium, less impairment.

ETFs are recognised in the NBP accounting books at transaction price.

The price valuation of an ETF is made on a net basis, i.e. based on the value of the share portfolio reflecting the index which the ETF replicates, and not based on the underlying instrument.

As at the balance sheet date, an ETF is valued at market price, separately for each ETF holding.

- **Reverse repo transactions**

A reverse repo transaction is a contract under which an entity agrees to purchase assets and, simultaneously, agrees to re-sell equivalent assets in future, at transaction price. This transaction is recognised in assets as a loan granted, collateralised with assets received. Securities received as collateral do not increase the holding of these securities and are not recognised in the balance sheet assets. Securities received in reverse repo transactions are not subject to valuation and no income or expense on these securities is recognised in the financial result of NBP.

The difference between the agreed purchasing and re-selling price of securities in reverse repo transactions is recognised in the financial result at the end of each operating day in amounts calculated according to the straight-line method.

As at the balance sheet date, reverse repo transactions are valued at nominal value.

- **Term deposits**

Term deposits are recognised in the NBP accounting books and valued as at the balance sheet date at nominal value.

- **Current accounts, margins related to futures, foreign banknotes and coins in stock**

Current accounts, margins deposited in cash and foreign banknotes and coins in stock are recognised in the NBP accounting books and valued at the balance sheet date at nominal value.

- **Non-marketable shares, participating interests**

Non-marketable shares and participating interests are recognised in the NBP accounting books and valued at the balance sheet date at purchase price, less impairment.

- **Credit and loans granted, other claims**

Credit and loans granted and other claims are recognised in the NBP accounting books and valued at the balance sheet date at nominal value, less impairment.

- **Financial assets in foreign currency**

Following the valuation of financial assets in foreign currency according to the above principles, the balances are converted into domestic currency at the average NBP exchange rate as at the balance-sheet date.

Note 3.1 Balances with foreign institutions, debt securities, loans granted and other foreign assets

PLN thousand	31.12.2023	31.12.2022	Change
Current accounts, of which	21,828,872.8	35,354,005.4	-13,525,132.6
- current account with the ECB for settlements in TARGET	2,856,950.6	15,008,464.4	-12,151,513.8
Term deposits	44,777,916.0	37,562,191.4	7,215,724.6
Reverse repo transactions	66,812,921.8	53,550,113.6	13,262,808.2
Debt securities, of which	499,316,527.3	516,089,683.1	-16,773,155.8
- held-to-maturity debt securities	39,743,031.1	44,572,354.4	-4,829,323.3
ETFs	7,884,375.5	0.0	7,884,375.5
Foreign banknotes and coins in stock	269,014.8	329,942.3	-60,927.5
Other claims, of which	290,144.4	1,109,734.7	-819,590.3
- margins related to futures transactions	270,501.3	1,088,239.0	-817,737.7
- interest on term deposits in gold	2,066.7	3,888.1	-1,821.4
- other	17,576.4	17,607.6	-31.2
Total	641,179,772.6	643,995,670.5	-2,815,897.9
of which			
- currency revaluation differences	-33,877,956.9	22,343,479.9	-56,221,436.8
- price revaluation differences	4,554,134.6	-25,273,296.8	29,827,431.4

The item comprises mostly the main investment instruments of foreign currency reserves in USD, EUR, GBP, CAD, AUD, NOK and NZD, that is:

- debt securities (discount and fixed-interest-rate) – all debt securities purchased by NBP are marketable debt securities; under the implemented investment policy a portion of fixed-interest-rate debt securities issued by the US Government, in the amount of USD 9.9 billion, constitutes a held-to-maturity portfolio; in 2023 funds received from the redemption of maturing securities were reinvested under this securities portfolio,⁹
- ETFs tracking the stock market indices: S&P 500 (USA), Euro STOXX 50 (euro area), FTSE 100 (United Kingdom), TSX Capped Composite (Canada), ASX 200, Solactive Australia 200 (Australia),
- term deposits,
- reverse repo transactions – under the NBP investment process, reverse repo transactions are usually executed simultaneously with repo transactions¹⁰ (see Note 6.3).

The item also includes margins related to futures whose decrease resulted from a lower investment in futures (see Note 10.3).

⁹ As at 31 December 2023, the market value of debt securities classified as held to maturity was PLN 35,636,916.4 thousand (PLN 38,603,591.0 thousand as at 31 December 2022).

¹⁰ As at 31 December 2023, debt securities for the value of PLN 67,029,301.0 thousand were collateral to repo transactions (PLN 52,472,008.5 thousand as at 31 December 2022).

Basic investment instruments of foreign currency reserves by foreign currency are presented below.

31.12.2023							
<i>thousand units of original currency</i>	USD	EUR	GBP	CAD	AUD	NOK	NZD
Term deposits	5,055,628.6	2,695,145.1	216,961.7	147,739.2	224,447.4	13,305,542.0	1,428,299.7
Reverse repo transactions	5,005,638.7	5,772,699.2	2,904,025.1	2,524,339.4	0.0	0.0	0.0
Debt securities	52,132,650.9	23,479,017.7	12,037,856.4	17,725,356.4	16,284,704.9	63,033,193.9	4,541,481.9
ETFs	402,222.9	984,309.0	353,937.7	83,003.3	2,153.8	0.0	0.0
Total	62,596,141.1	32,931,171.0	15,512,780.9	20,480,438.3	16,511,306.1	76,338,735.9	5,969,781.6

31.12.2022							
<i>thousand units of original currency</i>	USD	EUR	GBP	CAD	AUD	NOK	NZD
Term deposits	3,176,884.5	1,889,427.0	481,443.3	302,832.4	288,020.3	14,242,794.7	1,423,394.8
Reverse repo transactions	1,837,082.2	5,630,323.8	2,828,558.6	0.0	1,364,600.8	0.0	0.0
Debt securities	50,213,583.7	22,384,081.3	11,446,271.0	16,174,867.6	14,377,788.1	51,867,070.8	3,875,206.7
ETFs	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	55,227,550.4	29,903,832.1	14,756,272.9	16,477,700.0	16,030,409.2	66,109,865.5	5,298,601.5

Change							
<i>thousand units of original currency</i>	USD	EUR	GBP	CAD	AUD	NOK	NZD
Term deposits	1,878,744.1	805,718.1	-264,481.6	-155,093.2	-63,572.9	-937,252.7	4,904.9
Reverse repo transactions	3,168,556.5	142,375.4	75,466.5	2,524,339.4	-1,364,600.8	0.0	0.0
Debt securities	1,919,067.2	1,094,936.4	591,585.4	1,550,488.8	1,906,916.8	11,166,123.1	666,275.2
ETFs	402,222.9	984,309.0	353,937.7	83,003.3	2,153.8	0.0	0.0
Total	7,368,590.7	3,027,338.9	756,508.0	4,002,738.3	480,896.9	10,228,870.4	671,180.1

The change in the item in original currency was mainly driven by:

- the inflow of funds in foreign currency due to transactions of holders of accounts with NBP, with a simultaneous decrease in the balance of funds on the current account with the ECB for settlements in TARGET following the lower balance of accounts in euro operated by NBP for domestic banks for settlements in that system (see Note 6.1 and Note 6.3),
- an increased investment in simultaneous reverse repo and repo transactions in USD and CAD amid a simultaneous decrease in investment in AUD (see Note 6.3),
- purchase of gold for foreign currencies (see Note 1).

Additionally, the change in the item was a result of price revaluation and currency revaluation (see Note 9.1, Note 12.1 and Note 12.2).

Note 3.2 Debt securities held for monetary policy purposes

<i>PLN thousand</i>	31.12.2023	31.12.2022	Change
Treasury securities	76,426,465.4	78,258,176.6	-1,831,711.2
Debt securities guaranteed by the State Treasury	62,461,139.6	62,415,008.9	46,130.7
Total	138,887,605.0	140,673,185.5	-1,785,580.5

This item is related to NBP's 2020-2021 operations to purchase Treasury bonds and debt securities guaranteed by the Treasury in the secondary market as part of structural open market operations. They were conducted with the aim to change the liquidity structure of the banking sector in the long term, as well as to provide liquidity of the secondary market of purchased securities and strengthen the monetary policy transmission mechanism (see Note 11).

The decrease in the value of the item in 2023 was mainly related to the issuer's redemption of Treasury securities, with a nominal value of PLN 1,047,000.0 thousand, at maturity (see the table below, Note 6.1 and Note 11).

<i>PLN thousand</i>	31.12.2022	Interest accrued	Redemption	Interest received	31.12.2023
Treasury securities	78,258,176.6	999,970.0	-1,047,000.0	-1,784,681.2	76,426,465.4
Debt securities guaranteed by the State Treasury	62,415,008.9	1,151,203.3	0.0	-1,105,072.6	62,461,139.6
Total	140,673,185.5	2,151,173.3	-1,047,000.0	-2,889,753.8	138,887,605.0

Note 3.3 Other financial assets

<i>PLN thousand</i>	31.12.2023	31.12.2022	Change
Shares and participating interests in domestic entities, of which	128,848.9	128,848.9	0.0
- shares in Krajowy Depozyt Papierów Wartościowych S.A.	51,708.1	51,708.1	0.0
- shares in Krajowa Izba Rozliczeniowa S.A.	75,312.5	75,312.5	0.0
- participating interests in Bazy i Systemy Bankowe Sp. z o.o.	1,820.0	1,820.0	0.0
- other	8.3	8.3	0.0
Shares and participating interests in foreign entities, of which	160,041.3	174,285.3	-14,244.0
- participating interests in the European Central Bank	106,492.3	114,866.2	-8,373.9
- shares in the Bank for International Settlements	52,938.0	58,760.0	-5,822.0
- participating interests in S.W.I.F.T	611.0	659.1	-48.1
Total	288,890.2	303,134.2	-14,244.0

The decrease in the value of the item resulted from the currency revaluation of shares and participating interests in foreign entities.

The participation of NBP in domestic entities did not change in comparison to 31 December 2022, and as at 31 December 2023 was as follows:

NBP's participation in domestic entities, of which

Entity	Share capital (PLN thousand)	Nominal price per share/participating interest (PLN thousand)	Number of shares/participating interests held by NBP	NBP's participation in the share capital (%)
	31.12.2023	31.12.2023	31.12.2023	31.12.2023
NBP's participation in domestic entities, of which				
- Krajowy Depozyt Papierów Wartościowych S.A.	21,000.0	1.0	7,000	33.33%
- Krajowa Izba Rozliczeniowa S.A.	5,445.0	0.5	3,750	34.44%
- Bazy i Systemy Bankowe Sp. z o.o.	10,000.0	10.0	1,000	100.00%

The participation of NBP in foreign entities was as follows:

- participating interests in the European Central Bank

Since 1 May 2004, i.e. the day of Poland's accession to the European Union, NBP has held a participating interest in the ECB's capital. As at 31 December 2023 and 31 December 2022, the capital paid up by NBP to the ECB amounted to EUR 24,492.3 thousand.

In accordance with Article 28(2) of the Statute of the European System of Central Banks and the European Central Bank, hereinafter referred to as the "Statute of the ESCB and the ECB", only the national central banks of the ESCB are entitled to subscribe the ECB's capital. The ECB's capital is subscribed according to the subscription key determined in Article 29(1) of the Statute of the ESCB and the ECB, i.e. shares of national central banks in the ECB's capital are expressed in percentage and correspond to the shares of individual member states in the population and the combined gross domestic product of EU states (in equal consideration). The subscription key of the ECB capital is regularly adjusted every five years, as well as at the time a change in the EU membership takes place. The last regular adjustment of the key was made in 2019. On 1 February 2020 an adjustment of the subscription key of the ECB capital was made following the exit of the United Kingdom from the European Union and, as a consequence, the withdrawal of the Bank of England from the ESCB.¹¹ Following this adjustment, the share of NBP in the ECB's subscribed capital increased from 5.2068% to 6.0335%, which corresponds to an increase in participating interest from EUR 563,636.5 thousand to EUR 653,126.8 thousand (see Note 21).

As a central bank from outside the euro area, NBP is required to pay up the minimum percentage of the ECB's capital subscribed by it, which was specified by the ECB General Council (pursuant to Article 47 of the Statute of the ESCB and the ECB) and constitutes NBP's contribution to the operational costs of the ECB. The percentage has amounted to 3.75% since 29 December 2010. Unlike euro area central banks, NBP has no right to participate in the ECB's profits nor is required to cover its losses. As at 31 December 2023 and 31 December 2022, the capital paid up by NBP to

¹¹ The amount of the ECB's subscribed capital has not changed as a result of the withdrawal of the Bank of England from the ESCB and amounts to EUR 10,825,007.1 thousand.

the ECB amounted to EUR 24,492.3 thousand. Upon Poland's entry into the euro area, NBP will be required to pay up the remaining 96.25% of the ECB's capital subscribed by it, i.e. EUR 628,634.5 thousand.

- shares of the Bank for International Settlements, hereinafter referred to as "BIS"
As at 31 December 2023 and 31 December 2022, NBP held 8,000 shares that converted into the same number of votes. 25% of the nominal value of shares (the nominal value of 1 share amounts to SDR 5.0 thousand) was paid up, which totals SDR 10,000.0 thousand. The share of NBP in the share capital of BIS amounts to 1.41%.
- participating interests in S.W.I.F.T. (*Society for Worldwide Interbank Financial Telecommunication*)
As at 31 December 2023 and as at 31 December 2022 NBP had 47 shares (in the amount of EUR 140.5 thousand), which represented less than 0.05% of their total number.

Note 3.4. Sundry

<i>PLN thousand</i>	31.12.2023	31.12.2022	Change
Inventories, of which	31,987.5	10,170.9	21,816.6
- <i>precious metals</i>	31,044.9	8,987.7	22,057.2
- <i>collector items not in circulation</i>	376.5	369.7	6.8
- <i>other</i>	566.1	813.5	-247.4
Credit and loans extended to employees in domestic currency, of which	22,247.3	21,770.2	477.1
- <i>loans extended from the Employee Benefit Fund</i>	14,931.7	13,574.8	1,356.9
Other claims, of which	46,376.4	51,474.8	-5,098.4
- <i>to public authorities</i>	136.6	5.8	130.8
- <i>on customers and suppliers</i>	20,640.6	31,089.2	-10,448.6
- <i>other</i>	25,599.2	20,379.8	5,219.4
Funds of the Employee Benefit Fund	7,979.9	7,670.6	309.3
Adjustment of off-balance-sheet instruments to the average cost of foreign currency holding	20,289.1	2,395.7	17,893.4
Total	128,880.2	93,482.2	35,398.0

The increase in the item *Precious metals* mainly related to the stock of bullion for the purpose of collector coin production in 2024.

Both as at 31 December 2023 and as at 31 December 2022 *Adjustment of off-balance-sheet instruments to the average cost of foreign currency holding* related to spot transactions in foreign currency recognised on off-balance-sheet accounts. The increase in the item is the result of the volume of these transactions as at the end of the year (see Note 10.1) and the difference between the average cost of holding and the purchase/sale price of the transaction.

Note 4 Tangible fixed assets and intangible assets

▪ Tangible fixed assets and intangible assets

Tangible fixed assets and intangible assets are recognised in the NBP accounting books at:

- purchase price, increased by costs directly related to the purchase and adaptation of an asset to the condition enabling its use, or
- production cost

– or according to market value, if determining the purchase price or production cost is not possible.

Tangible fixed assets and intangible assets are depreciated/amortised according to the straight-line method beginning from the month which follows the month when the asset was made available for use. The table below presents the estimated periods of use for particular groups of tangible fixed assets and intangible assets set for 31 December 2023.

Tangible fixed assets	Periods of use (in months)
Land, NBP's cultural goods	unlimited
Buildings and premises	480 or 780
Land and water engineering objects	267-480
Machines, devices, appliances, tools, and other equipment	36-360 ¹
Vehicles	72-180
Intangible assets	Periods of use (in months)
IT software licences	72 or 144
IT software developed by NBP	120
Copyrights, including the rights related to inventions, trademarks, utility and industrial designs	120

¹A period of 360 months applies to turbine generator sets and electric generating sets, including AC electric generating units or sets of a voltage below 1000 V.

In specific cases, individual periods of use are adopted for tangible fixed assets and intangible assets.

Periods of use of tangible fixed assets and intangible assets are verified each financial year.

In the case of tangible fixed assets and intangible assets with a low initial value, i.e. below PLN 10.0 thousand, depreciation/amortisation is made on a one-off basis, in the amount equal to their initial value, at the end of the month when the assets were made available for use.

As at the balance sheet date, tangible fixed assets and intangible assets are valued at initial value less depreciation/amortisation and impairment.

- **Right-of-use assets**

Right-of-use assets comprise rights to use assets subject to lease (excluding intangible assets), including also the right of perpetual usufruct of land. Right-of-use assets are recognised in the NBP accounting books at cost, including in particular:

- the amount of initial valuation of the lease liability (see Note 6),
- lease fees paid on the date of commencement or before the date of commencement of the lease, less lease incentives received,
- initial direct costs incurred by NBP.

The value of a right-of-use assets item is depreciated or amortised throughout the period of lease or the period of use of the underlying assets item, whichever is shorter, using the straight-line method, starting from the month of the item's initial recognition.

As at the balance-sheet date, the value of right-of-use assets is valued at the initial value less revaluation of the lease liability (see Note 6.4) and less depreciation/amortisation and impairment.

In the case of a change of lease conditions, right-of-use assets and lease liabilities are adjusted accordingly (see Note 6).

Fees related to short-term lease (i.e. when the period of lease is no longer than 12 months and when no purchase of underlying asset is foreseen) or low-value lease (i.e. where the underlying asset or the monthly lease fee is worth less than PLN 10.0 thousand, except for the lease concerning the right of perpetual usufruct of land) are not settled according to the above principles and are recognised as expense throughout the lease period.

PLN thousand	31.12.2023	31.12.2022	Change
Tangible fixed assets	715,258.9	730,911.1	-15,652.2
Right-of-use assets	195,747.3	198,658.8	-2,911.5
Intangible assets	72,605.6	86,554.4	-13,948.8
Total	983,611.8	1,016,124.3	-32,512.5

Change in tangible fixed assets, right-of-use assets and intangible fixed assets in 2023 (due to rounding, individual figures in the table may not add up to totals)	Tangible fixed assets				Right-of-use assets			Intangible assets			
	Land, buildings, premises, land and water engineering objects	Machines, devices, appliances, tools, equipment and vehicles	Tangible fixed assets under construction	Total	Right of perpetual usufruct of land	Other right-of-use assets	Total	IT software licences	Copyrights, proprietary rights and similar rights and values	Intangible assets under construction	Total
Gross value as at start of period	976,859.5	721,145.2	22,340.7	1,720,345.4	180,396.4	49,210.1	229,606.6	438,374.6	20,117.6	3,933.5	462,425.7
Increases	2,005.7	52,862.9	25,713.5	80,582.1	2,508.2	9,640.4	12,148.7	1,576.9	1,105.6	2,222.7	4,905.2
Decreases	-25.2	-40,098.7	-38,428.4	-78,552.3	0.0	-6,228.0	-6,228.0	-20,725.0	-281.1	-498.6	-21,504.7
Gross value as at end of period	976,840.0	733,909.4	9,625.7	1,723,375.2	182,904.7	52,622.6	235,527.2	419,226.5	20,942.1	5,657.6	445,826.1
of which fully depreciated/amortised	1,503.1	287,479.6	0.0	288,982.7	0.0	0.0	0.0	96,362.7	4,613.4	0.0	102,976.1
Depreciation/amortisation as at start of period	-452,205.7	-536,478.5	0.0	-988,684.2	-7,693.0	-23,254.8	-30,947.7	-365,284.1	-10,578.2	0.0	-375,862.3
Increases	-14,615.0	-42,594.8	0.0	-57,209.7	-2,645.1	-12,407.2	-15,052.4	-16,591.1	-1,755.9	0.0	-18,347.0
Decreases	25.2	39,570.8	0.0	39,596.0	0.0	6,220.2	6,220.2	20,724.6	273.1	0.0	20,997.7
Depreciation/amortisation as at end of period	-466,795.5	-539,502.4	0.0	-1,006,297.9	-10,338.1	-29,441.8	-39,779.9	-361,150.6	-12,061.0	0.0	-373,211.6
Impairment as at start of period	-272.9	-477.2	0.0	-750.1	0.0	0.0	0.0	-8.9	0.0	0.0	-8.9
Increases	0.0	-68.2	0.0	-68.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Decreases	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Impairment as at end of period	-272.9	-545.4	0.0	-818.3	0.0	0.0	0.0	-8.9	0.0	0.0	-8.9
Net value as at end of period	511,771.6	193,861.6	9,625.7	715,258.9	172,566.6	23,180.7	195,747.3	58,066.9	8,881.1	5,657.6	72,605.6

Change in tangible fixed assets, right-of-use assets and intangible fixed assets in 2022 (due to rounding, individual figures in the table may not add up to totals)	Tangible fixed assets				Right-of-use assets			Intangible assets			
	Land, buildings, premises, land and water engineering objects	Machines, devices, appliances, tools, equipment and vehicles	Tangible fixed assets under construction	Total	Right of perpetual usufruct of land	Other right-of-use assets	Total	IT software licences	Copyrights, proprietary rights and similar rights and values	Intangible assets under construction	Total
Gross value as at start of period	970,487.5	691,023.9	11,530.6	1,673,042.0	175,983.5	48,002.4	223,985.9	434,093.6	20,184.3	7,482.4	461,780.3
Increases	6,372.0	45,084.1	45,403.7	96,859.8	4,412.9	2,453.2	6,866.1	10,573.4	1,867.4	3,437.4	15,878.1
Decreases	0.0	-14,962.8	-34,593.7	-49,556.4	0.0	-1,245.4	-1,245.4	-6,292.4	-1,934.1	-6,986.3	-15,212.8
Gross value as at end of period	976,859.5	721,145.2	22,340.7	1,720,345.4	180,396.4	49,210.1	229,606.6	438,374.6	20,117.6	3,933.5	462,425.7
of which fully depreciated/amortised	1,507.0	295,557.4	0.0	297,064.4	0.0	0.0	0.0	111,559.7	3,373.9	0.0	114,933.6
Depreciation/amortisation as at start of period	-437,274.2	-507,236.9	0.0	-944,511.1	-5,085.3	-13,478.6	-18,563.9	-350,453.2	-10,750.6	0.0	-361,203.7
Increases	-14,947.5	-44,095.1	0.0	-59,042.7	-2,607.6	-11,021.5	-13,629.2	-21,129.3	-1,747.0	0.0	-22,876.2
Decreases	16.0	14,853.5	0.0	14,869.6	0.0	1,246.4	1,246.4	6,298.3	1,919.3	0.0	8,217.6
Depreciation/amortisation as at end of period	-452,205.7	-536,478.5	0.0	-988,684.2	-7,693.0	-23,254.8	-30,947.7	-365,284.1	-10,578.2	0.0	-375,862.3
Impairment as at start of period	-272.9	-477.2	0.0	-750.1	0.0	0.0	0.0	-8.9	0.0	0.0	-8.9
Increases	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Decreases	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Impairment as at end of period	-272.9	-477.2	0.0	-750.1	0.0	0.0	0.0	-8.9	0.0	0.0	-8.9
Net value as at end of period	524,380.9	184,189.5	22,340.7	730,911.1	172,703.5	25,955.4	198,658.8	73,081.5	9,559.4	3,933.5	86,554.4

Note 5 Banknotes and coins in circulation

Banknotes and coins in circulation are recognised as liabilities and are valued at the balance-sheet date at a nominal value of the issued general circulation banknotes and coins, decreased by a nominal value of the following general circulation banknotes and coins denominated in domestic currency:

- at NBP cash points and vaults,
- placed as deposit in the vaults of other authorised entities,
- that have been withdrawn from circulation due to being worn out or damaged.

PLN thousand	31.12.2023	31.12.2022	Change
Domestic banknotes in circulation	370,844,853.0	362,247,258.9	8,597,594.1
Domestic coins in circulation	6,676,522.0	6,364,404.6	312,117.4
Total	377,521,375.0	368,611,663.5	8,909,711.5

The item comprises banknotes and coins in circulation issued by NBP, including collector banknotes and coins, whose value as at 31 December 2023 amounted to PLN 329,396.0 thousand as compared with PLN 322,821.6 thousand as at 31 December 2022.

The average level of banknotes and coins in circulation throughout 2023 amounted to PLN 370,382.0 million as compared with PLN 376,350.1 million in 2022.

Note 6 Other financial liabilities

▪ Current accounts and term deposits operated by NBP

Liabilities due to balances on current accounts and term deposit accounts operated by NBP are recognised in the NBP accounting books and valued as at the balance-sheet date at nominal value.

▪ Issued debt securities

Issued debt securities are recognised in the NBP accounting books at issue price and valued as at the balance sheet date at issue price, adjusted for accrued discount and premium.

▪ Repo transactions

A repo transaction is a contract under which an entity agrees to sell securities and, simultaneously, agrees to re-purchase these securities after a stated time, for an agreed price. This transaction is recognised in *Liabilities* as a received deposit, collateralised with assigned assets. Securities assigned as collateral do not decrease the holding of these securities and are disclosed in the assets of the NBP balance sheet.

The difference between the agreed selling and re-purchasing price of securities in repo transactions is recognised in the financial result at the end of each operating day in amounts calculated according to the straight-line method.

As at the balance-sheet date, repo transactions are valued at nominal value.

- **Lease liabilities**

A lease liability is recognised in the NBP accounting books at the discounted value of outstanding lease payments. For payments on the rights of perpetual usufruct of land, the interest rate of long-term Treasury bonds in wholesale offering set as at the date of recognition in the NBP accounting books is taken as the rate of discount of lease payments. For the remaining lease liabilities, the NBP reference rate binding on the day of their recognition in the NBP accounting books is used as the rate of discount.

As at the balance sheet date, the value of lease liabilities is adjusted for the value of interest rate calculated according to the adopted discount rate and outstanding lease payments.

In the event of a change of lease conditions, the value of right-of-use assets and lease liabilities is adjusted accordingly (see Note 4).

- **Other financial liabilities**

Other financial liabilities are recognised in the NBP accounting books and valued as at the balance sheet date at their nominal value.

- **Financial liabilities in foreign currency**

Following the valuation of financial liabilities in foreign currency according to the above principles, the balances are converted into domestic currency at the average NBP exchange rate prevailing at the balance-sheet date.

Note 6.1 Liabilities related to monetary policy operations

PLN thousand	Balance sheet item	31.12.2023	31.12.2022	Change	
	Current accounts (incl. required minimum reserve accounts) of which	48,914,397.0	34,914,457.6	13,999,939.4	
	- current accounts of banks and KSKOK	48,039,155.2	33,925,136.3	14,114,018.9	
	- required minimum reserve accounts of banks not having a current account with NBP	505,872.9	589,165.0	-83,292.1	
	- interest on required minimum reserve	369,368.9	400,156.3	-30,787.4	
	Deposit facilities, of which	25,506,744.6	20,198,449.9	5,308,294.7	
	- accrued interest	11,001.6	6,914.9	4,086.7	
	Liabilities to credit institutions related to monetary policy operations denominated in domestic currency	L.2	74,421,141.6	55,112,907.5	19,308,234.1
	NBP bills issued under main operations	238,002,885.5	174,492,282.6	63,510,602.9	
	NBP bills issued under fine-tuning operations	65,068,217.6	77,688,891.7	-12,620,674.1	
	Liabilities due to issued debt securities denominated in domestic currency	L.4	303,071,103.1	252,181,174.3	50,889,928.8
	Total	377,492,244.7	307,294,081.8	70,198,162.9	

The note comprises liabilities related to monetary policy operations conducted by NBP.

The amount of funds held by banks and KSKOK¹² with NBP due to the required minimum reserve depends on the basis for calculating the required minimum reserve and the required minimum reserve ratio in force. The required minimum reserve is an averaged value in the maintenance period.

Liabilities related to issued debt securities denominated in domestic currency comprise mainly liabilities to domestic banks related to the issue of NBP bills under open market main operations¹³ and fine-tuning¹⁴ operations aimed to absorb liquidity.¹⁵

The funds of the required minimum reserve and deposit facilities bear interest, whereas NBP bills are issued at a discount. As at 31 December 2023 and 31 December 2022, the interest rates which are the basis for remuneration of the required minimum reserve funds, deposit facilities and for determining discount on bills issued by NBP under open market operations were as follows:

Rate of interest on liabilities due to monetary policy operations

%	31.12.2023	31.12.2022
Required minimum reserve*	5.75	6.75
Deposit facility**	5.25	6.25
NBP bills***	5.75	6.75

* The interest rate of the funds of the required minimum reserve.

** NBP deposit rate.

*** NBP reference rate.

¹² Credit unions hold their required minimum reserve at their accounts with the National Association of Cooperative Savings and Credit Unions [Krajowa Spółdzielcza Kasa Oszczędnościowo-Kredytowa, KSKOK].

¹³ In 2023, the maturity of main operations was 7 and 8 days (in 2022 it was 6, 7 and 8 days).

¹⁴ In 2023, as in 2022, the maturity of fine-tuning operations was 1 day, 2, 3 and 4 days.

¹⁵ Pursuant to Resolution No. 30/2003 of the NBP Management Board of 12 September 2003 on the issue of NBP bills (NBP Official Journal No 15, item 24, as amended) NBP bills can be purchased by domestic banks, branches of foreign banks and branches of foreign credit institutions, the Bank Guarantee Fund and KSKOK.

The change in the total liabilities of NBP related to monetary policy operations (an increase by PLN 70,198,162.9 thousand as at 31 December 2023 as compared with 31 December 2022) was affected by, among others, the following factors:

- the purchase of foreign currency incoming to NBP due to transactions by holders of accounts with NBP (see Note 3.1 and Note 6.3),
- cash flows related to NBP's net result on monetary policy instruments (see Note 11) and NBP's other own operations,
- an increase in the volume of cash in circulation in 2023 (see Note 5),
- the issuer's redemption of Treasury securities held by NBP at maturity (see Note 3.2).

The balance of funds held by banks at NBP is allocated between NBP bills, deposit facility or a current account according to individual decisions made by banks.

Note 6.2 Other liabilities denominated in domestic currency

<i>PLN thousand</i>	Balance sheet item	31.12.2023	31.12.2022	Change
Settlements in the domestic payment systems of Krajowa Izba Rozrachunkowa, of which		2,581,882.6	940,440.8	1,641,441.8
- in the Elixir system		1,717,657.8	296,934.2	1,420,723.6
- in the Express Elixir system		864,224.8	643,506.6	220,718.2
Other liabilities to credit institutions denominated in domestic currency	L.3	2,581,882.6	940,440.8	1,641,441.8
Liabilities to general government, of which	L.5.1	10,338,349.3	10,792,940.6	-454,591.3
- State budget accounts		5,349,905.0	6,529,897.4	-1,179,992.4
- accounts of social insurance funds		4,861,532.7	4,147,311.7	714,221.0
- other		126,911.6	115,731.5	11,180.1
Other liabilities	L.5.2	1,608,591.1	1,090,865.7	517,725.4
Liabilities to other residents denominated in domestic currency	L.5	11,946,940.4	11,883,806.3	63,134.1
Accounts of international financial institutions and central banks, of which		28,852.2	31,005.8	-2,153.6
- No. 2 Account of the IMF		20,582.1	23,378.3	-2,796.2
Accounts of international non-financial organisations		4,052,710.1	4,093,191.4	-40,481.3
Liabilities to non-residents denominated in domestic currency	L.6	4,081,562.3	4,124,197.2	-42,634.9
Total		18,610,385.3	16,948,444.3	1,661,941.0

The item comprises mainly:

- current accounts, auxiliary accounts and term deposit accounts in domestic currency operated by NBP for general government entities and non-monetary financial institutions,

- current accounts in domestic currency operated by NBP for international financial and non-financial organisations and central banks, including the account operated by NBP for the IMF, which is used for the Fund's administrative expenditures (so-called No. 2 Account of the IMF – see Note 12.1),
- liabilities due to settlements in the payment systems operated by Krajowa Izba Rozliczeniowa S.A.

The increase in the item vis-a-vis residents was mainly related to the increase in liabilities due to settlements in the payment systems operated by Krajowa Izba Rozliczeniowa S.A. and the higher balance of accounts operated by NBP in domestic currency for social insurance funds and accounts operated for entities from outside the general government sector, with a simultaneous decrease in the balance of accounts operated for the State budget.

Note 6.3 Liabilities denominated in foreign currency

<i>PLN thousand</i>	Balance sheet item	31.12.2023	31.12.2022	Change
State budget accounts		42,311,446.2	43,632,742.0	-1,321,295.8
Accounts of domestic banks for settlements in TARGET		2,856,851.7	15,008,405.6	-12,151,553.9
Other liabilities to residents		477,230.7	368,924.7	108,306.0
Liabilities to residents denominated in foreign currency	L.7	45,645,528.6	59,010,072.3	-13,364,543.7
Repo transactions		66,800,236.4	53,539,855.3	13,260,381.1
Accounts of international non-financial organisations		72,382.4	75,187.0	-2,804.6
Other liabilities to non-residents		642,439.0	10,093.7	632,345.3
Liabilities to non-residents denominated in foreign currency	L.8	67,515,057.8	53,625,136.0	13,889,921.8
Total		113,160,586.4	112,635,208.3	525,378.1
<i>of which currency revaluation differences</i>		<i>-5,682,160.1</i>	<i>2,925,807.6</i>	<i>-8,607,967.7</i>

The item comprises mainly:

- current accounts, auxiliary accounts and term deposit accounts in foreign currency operated by NBP for general government entities and accounts of domestic banks for settlements in TARGET,
- liabilities due to repo transactions with foreign financial institutions; under the investment process implemented by NBP, repo transactions are usually executed simultaneously with reverse repo transactions (see Note 3.1).

Repo transactions by foreign currency are presented below.

<i>thousand units of original currency</i>	USD	EUR	GBP	CAD	AUD
31.12.2023	5,005,227.5	5,772,107.9	2,902,376.4	2,524,254.0	0.0
31.12.2022	1,837,038.7	5,629,448.7	2,827,476.2	0.0	1,364,523.5
Change	3,168,188.8	142,659.2	74,900.2	2,524,254.0	-1,364,523.5

- liabilities denominated in foreign currency due to payment orders by holders of accounts with NBP, which are in the course of settlement as at the balance-sheet date.

The increase in the item was mainly related to the higher value of repo transactions with a simultaneous decrease in the balances on accounts in foreign currency operated by NBP for domestic banks for settlements in TARGET (see Note 3.1) and for the State budget.

Note 6.4 Sundry

PLN thousand	31.12.2023	31.12.2022	Change
Lease liabilities	204,327.3	204,917.9	-590.6
Other liabilities, of which	64,697.1	71,231.0	-6,533.9
- to public authorities	25,883.2	20,615.3	5,267.9
- to suppliers	21,229.6	26,649.3	-5,419.7
- other	17,584.3	23,966.4	-6,382.1
Employee Benefit Fund	22,946.9	21,296.0	1,650.9
Adjustment of off-balance-sheet instruments to the average cost of foreign currency holding	34,683.8	33,469.0	1,214.8
Total	326,655.1	330,913.9	-4,258.8

Lease liabilities comprise the present (discounted) value of outstanding lease payments. They mainly relate to the rights to perpetual usufruct of land (see Note 4 and Note 11).

As at 31 December 2023 and 31 December 2022 *Adjustment of off-balance-sheet instruments to the average cost of foreign currency holding* related to spot transactions in foreign currency recognised on off-balance-sheet accounts. The increase in the item is the result of the volume of these transactions as at the end of the year (see Note 10.1) and the difference between the purchase/sale price of the transaction and the average cost of holding.

Note 7 Provisions for liabilities

Provisions for liabilities are recognised in the NBP accounting books when NBP is under an obligation arising from past events and when it is probable that the fulfilment of the obligation or the materialisation of the identified risk will reduce the economic benefits of NBP, and the amount of this obligation can be measured reliably. Provisions are created and recognised as expense in the amount that is estimated in a reliable way and that would have to be paid not later than on the balance sheet date to fulfil the above mentioned obligation.

Provisions for liabilities are adjusted as at the balance sheet date. Provisions for liabilities unused due to a full or partial cessation of the obligation justifying their creation are released as income. Provisions for liabilities may be allocated exclusively for the purpose for which they were created.

Appendix 4

PLN thousand	31.12.2023	31.12.2022	Change
Provisions for liabilities to employees	212,432.8	201,352.5	11,080.3
Other provisions	1,373.2	1,556.8	-183.6
Total	213,806.0	202,909.3	10,896.7

The change in provisions for liabilities in 2023 and 2022 by allocation into specific categories is presented in the tables below (see also Note 15 and Note 16).

PLN thousand	31.12.2022	Increase	Use	Decrease	31.12.2023
Provisions for liabilities to employees, of which	201,352.5	44,802.5	-33,621.6	-100.6	212,432.8
- due to retirement severance payments	105,847.0	21,204.2	-12,119.7	0.0	114,931.5
- due to disability severance payments	2,293.2	373.9	-103.8	0.0	2,563.3
- due to jubilee awards	64,594.7	18,825.1	-11,776.2	0.0	71,643.6
- due to untaken leaves	14,062.3	3,248.4	-197.1	0.0	17,113.6
- due to amounts paid after death	3,860.0	0.0	-19.6	-100.6	3,739.8
- due to statutory and additional severance payments for employees under employment contracts who are laid off for reasons unrelated to employees	10,695.3	1,150.9	-9,405.2	0.0	2,441.0
Other provisions, of which	1,556.8	160.5	-286.5	-57.6	1,373.2
- for liabilities due to court proceedings	1,489.9	160.5	-286.5	-50.6	1,313.3
- for liabilities resulting from financial operations in domestic currency	66.9	0.0	0.0	-7.0	59.9
Total	202,909.3	44,963.0	-33,908.1	-158.2	213,806.0

PLN thousand	31.12.2021	Increase	Use	Decrease	31.12.2022
Provisions for liabilities to employees, of which	192,667.9	27,080.5	-18,395.9	0.0	201,352.5
- due to retirement severance payments	105,747.2	6,469.4	-6,369.6	0.0	105,847.0
- due to disability severance payments	2,339.3	88.2	-134.3	0.0	2,293.2
- due to jubilee awards	66,667.4	8,180.3	-10,253.0	0.0	64,594.7
- due to untaken leaves	12,009.3	2,553.1	-500.1	0.0	14,062.3
- due to amounts paid after death	3,671.9	314.9	-126.8	0.0	3,860.0
- due to statutory and additional severance payments for employees under employment contracts who are laid off for reasons unrelated to employees	2,232.8	9,474.6	-1,012.1	0.0	10,695.3
Other provisions, of which	1,703.8	83.0	0.0	-230.0	1,556.8
- for liabilities due to court proceedings	1,642.1	77.8	0.0	-230.0	1,489.9
- for liabilities resulting from financial operations in domestic currency	61.7	5.2	0.0	0.0	66.9
Total	194,371.7	27,163.5	-18,395.9	-230.0	202,909.3

Note 8 Accruals, prepaid expenses and deferred income

Expenses and income related to future periods are recognised in the NBP accounting books, respectively, as components of assets and liabilities.

Expenses and income, partly or completely related to future financial years, are recognised in the NBP accounting books accordingly as accruals and prepaid expenses or accruals and deferred income and are carried to the financial result of the financial year which they concern.

Expenses relating to the current financial year for which the obligation to pay will arise in the following financial year are recognised in the financial result in the amount estimated in a reliable way, and the underlying potential liability of the current financial year is recognised in the accounting books as accruals and prepaid expenses.

The value of assets received free of charge or the value of disclosed tangible fixed assets and intangible assets subject to depreciation/amortisation according to the straight-line method are initially recognised in accounting books as accruals and deferred income and are subsequently carried to the financial result along with depreciation/amortisation made on these assets.

<i>PLN thousand</i>	Balance sheet item	31.12.2023	31.12.2022	Change
Prepaid expenses related to services		55,447.5	49,683.9	5,763.6
Total assets (Accruals and prepaid expenses)	A.10.4	55,447.5	49,683.9	5,763.6
Accruals		107,826.9	96,136.8	11,690.1
Deferred income		1,053.8	1,166.9	-113.1
Total assets (Accruals and deferred income)	L.11.2	108,880.7	97,303.7	11,577.0

Prepaid expenses and accruals related to services concern mainly expenditures related to NBP's own administrative activities (the former relate primarily to fees for IT services in favour of NBP, whereas the latter include mainly components of salaries for 2023 paid out in the following year, and future liabilities due to supplies of goods and services in 2023).

Note 9 Net Equity

In line with the practice adopted by central banks of the ESCB, NBP classifies the following as its equity:

- the statutory fund, determined by Article 61 of the Act on NBP,
- the reserve fund which – in accordance with Article 62 of the Act on NBP – is created from the transfer of 5% of NBP's annual profit until it reaches the amount equivalent to the statutory fund and may only be used to cover the NBP's balance sheet losses,
- the provision against the foreign exchange rate risk of the zloty, created as provided for in Article 65 of the Act on NBP,
- gold revaluation account,
- gold, currency and price revaluation gains,
- loss of previous years and loss of the current financial year,
- part of profit of the current year at the disposal of NBP (5% of profit), which will be allocated to increase the reserve fund.

- **Gold, currency and price revaluation gains (unrealised gains)**

Revaluation gains on gold holding are determined by comparing the average cost of gold holding with the average market price of gold converted into PLN, which is higher than the average cost of gold holding.

Foreign currency revaluation gains are determined by comparing the average cost of foreign currency holding with the average NBP exchange rate, which is higher than the average cost of foreign currency holding.¹⁶

Price revaluation gains on debt securities are determined by comparing the average cost of debt securities holding with the average market price of these securities, which is higher than the average cost of holding.

Price revaluation gains on ETFs are determined by comparing the average cost of ETFs holding with the average market price of these instruments, which is higher than the average cost of holding.

Price revaluation gains on forward transactions in debt securities are determined by comparing the contract price discounted as at the settlement date (spot) with a lower (in the case of forward sale) or higher (in the case of forward purchase) average market price of debt securities as at valuation date.

The value of gold holding revaluation differences, revaluation differences on holdings of individual foreign currencies, price revaluation differences on debt securities holdings and ETFs holdings are determined separately, without netting the value of individual items which differ in kind.

- **Gold revaluation account**

Gold revaluation account comprises surpluses of unrealised gains over unrealised losses stemming from recalculation of gold, which arose before 1 January 2004.

The balance of the gold revaluation account is decreased - by recognising it as income - in the amount of unrealised gold revaluation losses recognised in the financial result at the balance sheet date.

- **FX risk provision**

The FX risk provision is estimated on the basis of financial risk assessment methods which are generally accepted and consistently applied by NBP (see Chapter 7.1.4.).

At NBP, the Value at Risk (VaR) methodology is employed to perform an analysis of the foreign exchange rate risk of the zloty. It estimates the loss expected due to fluctuations of the foreign exchange rate of the zloty, which in normal conditions and with an assumed probability should not be exceeded within the adopted time horizon. At NBP, a horizon of one year and a 95% confidence level were adopted for the purposes of estimating FX risk provision.

The Value at Risk is then decreased by unrealised foreign currency revaluation gains estimated on the basis of statistical distribution analysis. The estimation is based on the foreign currency holdings as at the balance sheet date and historical time series of the average cost of currency holdings and

¹⁶ In the case of a negative holding of foreign currency, revaluation gains are determined by comparing the average cost of foreign currency holding with the average NBP exchange rate, which is lower than the average cost of foreign currency holding.

the average NBP exchange rates for these currencies. Such an approach makes it possible to determine a stable level of unrealised gains and thus limits volatility of the FX risk provision.

The provision is created and released at the balance sheet date.

The provision is created as expense in the amount equal to half of the surplus of income on realised FX gains over realised and unrealised FX losses recognised in the financial result for the financial year. The creation of the provision must not lead to a negative financial result of the financial year for NBP.

The provision is released – by recognising it as income – to cover unrealised losses arising from changes in the foreign exchange rate of the zloty, increased by the surplus of the realised FX losses over realised FX gains, in the amount that could result in a loss.

The surplus of the created provision over its estimated value is released as income.

PLN thousand	L.12 Provisions	L.13 Revaluation accounts		L.14 Capital and reserves		L.15 Financial result		Total
	FX risk provision	Gold revaluation account	Revaluation accounts*	Statutory fund	Reserve fund	Loss of previous years	Financial result for the financial year	
	L.12	L.13	L.13	L.14	L.14	L.15	L.15	
As at 31.12.2021	16,499,460.9	1,618,023.2	49,420,876.3	1,500,000.0	0.0	-11,006,735.2	10,974,518.7	69,006,143.9
Contribution from NBP's profit							-10,425,792.8	-10,425,792.8
Allocation of NBP profit to reserve fund					548,725.9		-548,725.9	0.0
Covering loss of previous years					-548,725.9	548,725.9		0.0
Gold, currency and price revaluation gains			-982,160.9					-982,160.9
Transfer from FX risk provision	-1,420,869.5							-1,420,869.5
Financial result for the financial year							-16,943,670.7	-16,943,670.7
As at 31.12.2022	15,078,591.4	1,618,023.2	48,438,715.4	1,500,000.0	0.0	-10,458,009.3	-16,943,670.7	39,233,650.0
Allocation of NBP loss for 2022 to the item Loss of previous years						-16,943,670.7	16,943,670.7	0.0
Gold, currency and price revaluation gains			-15,039,298.2					-15,039,298.2
Transfer from FX risk provision	-15,078,591.4							-15,078,591.4
Financial result for the financial year							-20,800,024.0	-20,800,024.0
As at 31.12.2023	0.0	1,618,023.2	33,399,417.2	1,500,000.0	0.0	-27,401,680.0	-20,800,024.0	-11,684,263.6

* Revaluation accounts include gold revaluation gains, currency revaluation gains and price revaluation gains on debt securities, ETF and off-balance-sheet financial instruments (see Note 9.1).

The decrease in NBP's equity was mainly a result of an appreciation of the zloty against foreign currencies, which manifested itself by a decline in unrealised currency revaluation gains, and recognising unrealised currency revaluation losses, as well as realised currency revaluation losses (see Note 9.1, Note 12.2 and Note 12.1). The negative equity has negative impact neither on the attainment/accomplishment of the basic objective of the activity of NBP to maintain price stability nor on the execution of other NBP's tasks. Therefore, it does not constitute a factor restricting the central bank's independence (see Chapter 2.2).

Note 9.1 Revaluation accounts

<i>PLN thousand</i>	31.12.2023	31.12.2022	Change
Gold revaluation gains	28,309,187.8	27,515,054.6	794,133.2
Currency revaluation gains	154.1	20,878,316.0	-20,878,161.9
Price revaluation gains, of which	5,090,075.3	45,344.8	5,044,730.5
- on debt securities	5,065,052.4	43,545.4	5,021,507.0
- on ETFs	25,009.9	0.0	25,009.9
- on off-balance-sheet financial instruments	13.0	1,799.4	-1,786.4
Gold revaluation account	1,618,023.2	1,618,023.2	0.0
Total	35,017,440.4	50,056,738.6	-15,039,298.2

Average cost of holding of foreign currency and gold, average NBP exchange rates and average market price of gold

<i>PLN</i>	Average cost of holding	Average NBP exchange rate / Average price of gold	Average cost of holding	Average NBP exchange rate / Average price of gold
	31.12.2023		31.12.2022	
USD	4.0776	3.9350	4.0272	4.4018
EUR	4.5844	4.3480	4.6212	4.6899
GBP	5.2735	4.9997	5.2919	5.2957
CAD	3.2041	2.9698	3.3083	3.2486
AUD	2.9009	2.6778	2.9651	2.9890
NOK	0.4212	0.3867	0.4509	0.4461
NZD	2.6321	2.4836	2.8119	2.7884
SDR	5.6845	5.2938	5.8044	5.8760
Ounce of gold	5,660.7845	8,115.5440	4,235.0060	7,977.6022

▪ Gold revaluation gains

In 2023, an increase in gold revaluation gains was mainly related to an increase in gold holding (see Note 1). The increase in the price of gold was due to the increase in the price of an ounce of gold in USD (it was respectively: USD 2,062.40 as at 31 December 2023 and USD 1,812.35 as at 31 December 2022), with a simultaneous decrease in the average USD exchange rate.

- **Currency revaluation gains**

<i>PLN thousand</i>	31.12.2023	31.12.2022	Change
USD	0.0	18,945,722.3	-18,945,722.3
EUR	0.0	1,531,382.1	-1,531,382.1
GBP	0.0	44,852.0	-44,852.0
AUD	0.0	347,683.6	-347,683.6
SDR	0.0	7,297.6	-7,297.6
CHF	154.1	1,116.8	-962.7
Other	0.0	261.6	-261.6
Total	154.1	20,878,316.0	-20,878,161.9

- **Price revaluation gains on debt securities**

<i>PLN thousand</i>	31.12.2023	31.12.2022	Change
Debt securities in USD	1,252,774.3	37,808.1	1,214,966.2
Debt securities in EUR	1,645,795.2	275.0	1,645,520.2
Debt securities in GBP	896,296.0	686.8	895,609.2
Debt securities in CAD	513,330.3	4,775.5	508,554.8
Debt securities in AUD	534,425.0	0.0	534,425.0
Debt securities in NOK	83,762.1	0.0	83,762.1
Debt securities in NZD	138,669.5	0.0	138,669.5
Total	5,065,052.4	43,545.4	5,021,507.0

- **Price revaluation gains on ETFs**

<i>PLN thousand</i>	31.12.2023	31.12.2022	Change
ETFs in USD	2,994.0	0.0	2,994.0
ETFs in GBP	20,678.9	0.0	20,678.9
ETFs in CAD	1,014.7	0.0	1,014.7
ETFs in AUD	322.3	0.0	322.3
Total	25,009.9	0.0	25,009.9

- **Price revaluation gains on off-balance sheet financial instruments**

As at 31 December 2023, price revaluation gains on off-balance-sheet financial instruments related to forward purchase transactions in debt securities denominated in USD. As at 31 December 2022, price revaluation gains on off-balance-sheet financial instruments related to forward sale transactions in debt securities denominated in AUD (see Note 10 and Note 10.2).

- **Gold revaluation account**

As a result of the non-occurrence as at 31 December 2023 of unrealised gold revaluation losses, NBP, similarly to 31 December 2022, did not release the gold revaluation account.

Note 9.2 FX risk provision

As at 31 December 2023, the estimation of the FX risk provision (equal to the amount of value at risk less unrealised gains on the foreign exchange rate of the zloty) amounted to PLN 62,481,287.0 thousand (PLN 94,551,517.4 thousand as at 31 December 2022). Pursuant to Resolution No. 6/2019 of the MPC, as at 31 December 2023 the provision was released in the amount of PLN 15,078,591.4 thousand to cover a portion of unrealised foreign currency losses, increased by the surplus of the realised foreign currency losses over realised foreign currency gains (as at 31 December 2022 the provision was released in the amount of PLN 1,420,869.5 thousand – see Note 12.1, Note 12.2, and Chapter 7.1.4). As at 31 December 2023, the FX risk provision amounted to PLN 0 (PLN 15,078,591.4 thousand as at 31 December 2022).

Note 9.3 Financial result

- **Financial result for the financial year**

The NBP financial result for 2023 was negative (loss) and amounted to PLN -20,800,024.0 thousand (the 2022 loss amounted to PLN -16,943,670.7 thousand).

A negative financial result for the financial year is subject to accumulation in the item *Loss of previous years*.

- **Loss of previous years**

Uncovered loss of previous years in the amount of PLN 27,401,680.0 thousand is the result of NBP's loss for the year:

- 2007 – in the amount of PLN 12,427,261.7 thousand,
- 2017 – in the amount of PLN 2,524,935.6 thousand,
- 2022 – in the amount of PLN 16,943,670.7 thousand,

and its partial coverage from the reserve fund:

- in 2008 – in the amount of PLN 969,350.0 thousand,
- in 2015 – in the amount of PLN 250,000.0 thousand,
- in 2016 – in the amount of PLN 400,000.0 thousand,
- in 2018 – in the amount of PLN 1,467,483.8 thousand,
- in 2021 – in the amount of PLN 858,628.2 thousand,
- in 2022 – in the amount of PLN 548,725.9 thousand.

The reserve fund is the only source of the coverage of a loss.

Note 10 Off-balance-sheet items

▪ Spot transactions in foreign currency

Foreign currency purchased or sold for another foreign currency is recognised in the NBP accounting books at the value of the foreign currency quoted in the transaction, which is converted into domestic currency at the average exchange rate prevailing at the transaction date.

Foreign currency purchased or sold for domestic currency is recognised in the NBP accounting books at transaction value, unless separate regulations provide otherwise.

The results of an adjustment to the average cost of foreign currency holding and revaluation gains or losses on transactions in foreign currency recognised on off-balance-sheet accounts are presented in the NBP balance sheet according to the balance of adjustment and revaluation of these transactions, determined separately for each foreign currency – gains as assets, while losses as liabilities.

▪ Debt securities purchased or sold in a forward transaction

Debt securities purchased or sold in a forward transaction are recognised from the trade date to the settlement date on off-balance-sheet accounts at an agreed price. On the trade date, debt securities purchased or sold in a forward transaction do not change the amount of a holding of debt securities.

Debt securities purchased or sold in a forward transaction are valued at the balance sheet date at the market value of such transactions prevailing at the valuation date by comparing the market value of debt securities with the price set in the agreement, discounted as at the settlement date of the spot transaction. The common rules for recognition of unrealised gains and losses are applied to revaluation gains and losses.

Price revaluation gains or losses on forward transactions in debt securities denominated in foreign currency recognised on off-balance-sheet accounts are presented in the NBP balance sheet – gains as assets, while losses as liabilities.

On the transaction settlement date, debt securities purchased in a forward transaction increase the holding of debt securities, while debt securities sold in a forward transaction decrease the holding of securities.

If more than one transaction for the forward purchase or sale of securities has been entered, valuation and settlement of these transactions are carried out separately.

▪ Futures

Futures are recognised on off-balance-sheet accounts, from the trade date to the settlement date, at nominal value of the purchased or sold underlying instrument.

If, on the closing day of the open position in futures, the actual flow of the underlying instrument takes place, its purchase or sale is recognised at market value.

The list of currency revaluation gains and currency revaluation losses on spot transactions in foreign currency recognised in off-balance-sheet transactions and of price revaluation gains and price revaluation losses on forward transactions in securities denominated in foreign currency is presented below (see Note 9.1 and Note 12.2).

<i>PLN thousand</i>	Balance sheet item	31.12.2023	31.12.2022	Change
Currency revaluation gains on FX spot transactions		32 191,6	32 935,3	-743,7
Price revaluation gains on forward transactions in debt securities in foreign currency		13,0	1 799,4	-1 786,4
Total assets (Off-balance-sheet instruments revaluation differences)	A.10.3	32 204,6	34 734,7	-2 530,1
Currency revaluation losses on FX spot transactions		16 914,1	2 352,2	14 561,9
Price revaluation losses on forward transactions in debt securities in foreign currency		0,0	51,9	-51,9
Total liabilities (Off-balance-sheet instruments revaluation differences)	L.11.1	16 914,1	2 404,1	14 510,0

Note 10.1 Spot transactions recognised on off-balance-sheet accounts

<i>PLN thousand</i>	Balance sheet item	31.12.2023	31.12.2022	Change
Currency to be received due to FX spot transactions	-	669,845.4	730,113.9	-60,268.5
Currency to be paid due to FX spot transactions	-	669,845.4	730,113.9	-60,268.5
Gains on adjustments to the average costs of holding	A.10.5	20,289.1	2,395.7	17,893.4
Losses on adjustments to the average costs of holding	L.11.3	34,683.8	33,469.0	1,214.8
Currency revaluation gains on FX spot transactions	A.10.3	32,191.6	32,935.3	-743.7
Currency revaluation losses on FX spot transactions	L.11.1	16,914.1	2,352.2	14,561.9

As at 31 December 2023, the decrease in off-balance-sheet items resulted from a lower volume of FX spot transactions carried out by NBP.

The change in the adjustment to the average cost of holding of spot transactions in foreign currency is related to the volume of those transactions as at the year-end and of the difference between the average cost of holding and the exchange rate of purchase/sale of those transactions.

The change in the currency valuation of spot transactions denominated in foreign currency is related to the volume of those transactions as at the year-end and of the difference between the average cost of holding and the average NBP exchange rate.

Note 10.2 Debt securities purchased or sold in a forward transaction

PLN thousand	Balance sheet item	31.12.2023	31.12.2022	Change
Debt securities denominated in foreign currency bought in forward transactions, of which		115 524,2	1 297 788,0	-1 182 263,8
- debt securities in USD		115 524,2	1 297 788,0	-1 182 263,8
Debt securities denominated in foreign currency sold in forward transactions, of which		0,0	860 358,3	-860 358,3
- debt securities in AUD		0,0	860 358,3	-860 358,3
Price revaluation gains	A.10.3	13,0	1 799,4	-1 786,4
Price revaluation losses	L.11.1	0,0	51,9	-51,9

Forward transactions in debt securities denominated in foreign currency are used by NBP as part of the foreign currency reserve management.

The change in the price valuation of forward transactions in debt securities denominated in foreign currency is related to the volume of those transactions as at the year-end and of the difference between the market price of these securities and their contract price.

Note 10.3 Futures

PLN thousand	31.12.2023	31.12.2022	Change
Bond futures purchased, of which	37,074,766.4	1,731,913.2	35,342,853.2
- bond futures in AUD	2,663,451.0	0.0	2,663,451.0
- bond futures in CAD	2,893,811.7	1,731,913.2	1,161,898.5
- bond futures in EUR	11,308,764.1	0.0	11,308,764.1
- bond futures in USD	20,208,739.6	0.0	20,208,739.6
Bond futures sold, of which	7,455,003.2	998,006.8	6,456,996.4
- bond futures in AUD	921,060.0	0.0	921,060.0
- bond futures in CAD	604,397.9	330,133.4	274,264.5
- bond futures in EUR	1,892,715.1	0.0	1,892,715.1
- bond futures in USD	4,036,830.1	667,873.4	3,368,956.7
Equity index futures purchased, of which	0.0	3,824.9	-3,824.9
- equity index futures in EUR	0.0	1,339.9	-1,339.9
- equity index futures in GBP	0.0	251.3	-251.3
- equity index futures in USD	0.0	2,233.7	-2,233.7

Futures are used by NBP as part of the foreign currency reserves management (see Note 3.1), with the aim to raise long-term yields on foreign currency reserves and increase investment diversification.

Note 11 Net result on interest

Interest, discount and premium on debt securities purchased are recognised in the financial result in amounts calculated according to the internal rate of return, which is adjusted in the event of price revaluation losses on securities at the end of a year (see Note 12.2).

Discount on debt securities issued by NBP is recognised in the financial result in amounts calculated for the period for which a given security was issued, according to the straight-line method.

Interest on other financial assets and liabilities is recognised in the financial result at the end of each operating day in amounts calculated according to the straight-line method, except for interest:

- to be paid due to the required minimum reserve, which is recognised in the financial result at the end of each month in amounts calculated for each reserve period,
- on funds deposited in current accounts in other banks, which is recognised in the financial result on the payment date,
- on margins related to futures, which is recognised in the financial result on the payment date,
- on assets and liabilities related to NBP's own administrative activities, including on lease liabilities, which is recognised not later than at the end of the month.

Interest on term deposits in gold is accrued and paid in USD (see Note 1 and Note 3.1).

Interest to be received or paid due to forward transactions in foreign currency, which results from a difference between the set FX spot and forward rate, is recognised in the net result on interest at the end of each operating day in amounts calculated according to the straight-line method.

Interest to be received or paid due to swap transactions in foreign currency, which results from a difference between the set FX spot and forward rates, is recognised in the net result on interest at the end of each operating day in amounts calculated according to the straight-line method.

Accrued interest, discount and premiums in foreign currency are converted into domestic currency at the average NBP exchange rate.

PLN thousand	Income*		Expenses**		Result		
	2023	2022	2023	2022	2023	2022	Change
Investment instruments of foreign exchange reserves, of which	23,201,869.4	6,791,713.9	-2,703,103.1	-321,468.5	20,498,766.3	6,470,245.4	14,028,520.9
- debt securities	18,375,592.0	6,058,536.9	0.0	0.0	18,375,592.0	6,058,536.9	12,317,055.1
- term deposits	2,003,596.3	310,273.7	0.0	0.0	2,003,596.3	310,273.7	1,693,322.6
- reverse repo transactions	2,765,958.8	412,888.0	0.0	0.0	2,765,958.8	412,888.0	2,353,070.8
- repo transactions	0.0	0.0	-2,637,618.7	-321,293.1	-2,637,618.7	-321,293.1	-2,316,325.6
- other	56,722.3	10,015.3	-65,484.4	-175.4	-8,762.1	9,839.9	-18,602.0
Gold	24,318.8	14,407.6	0.0	0.0	24,318.8	14,407.6	9,911.2
International Monetary Fund	1,130,443.6	377,792.4	-1,116,405.7	-379,302.3	14,037.9	-1,509.9	15,547.8
Monetary policy instruments, of which:	2,151,191.0	2,190,234.2	-22,791,955.1	-14,144,621.4	-20,640,764.1	-11,954,387.2	-8,686,376.9
- NBP bills	0.0	0.0	-18,134,400.8	-10,395,434.6	-18,134,400.8	-10,395,434.6	-7,738,966.2
- debt securities	2,151,173.3	2,188,736.9	0.0	0.0	2,151,173.3	2,188,736.9	-37,563.6
- required minimum reserve***	1.9	1,485.9	-4,354,125.6	-3,184,812.9	-4,354,123.7	-3,183,327.0	-1,170,796.7
- deposit facility	0.0	0.0	-303,428.7	-448,632.3	-303,428.7	-448,632.3	145,203.6
- other	15.8	11.5	0.0	-115,741.6	15.8	-115,730.1	115,745.9
Other interest income/expense, of which	68,306.8	-3,115.3	-1,611,044.2	-355,425.5	-1,542,737.4	-358,540.8	-1,184,196.6
Total	26,576,129.6	9,371,032.8	-28,222,508.1	-15,200,817.7	-1,646,378.5	-5,829,784.9	4,183,406.4

* Income (and expenses in case of a negative interest rate) on interest on financial assets.

** Expenses (and income in case of a negative interest rate) on interest on financial liabilities.

*** Income includes interest income for non-compliance with the obligation to maintain the required minimum reserve.

The increase of the net result on interest income in 2023 was mainly related to an increase in income on investment instruments of foreign currency reserves as a result of higher yields in foreign markets in average annual terms, with a simultaneous increase in expenses on monetary policy, caused primarily by an increase in the NBP annual average reference rate, and a simultaneous rise in interest expenses on accounts operated by NBP.

Net result on interest on investment instruments of foreign currency reserves (see Note 3.1 and Note 6.3)

2023									
PLN thousand	USD	EUR	GBP	CAD	AUD	NOK	NZD	Other	Total
Debt securities	8,143,507.0	2,838,701.6	2,383,023.8	2,104,218.3	1,637,991.0	736,410.5	531,739.8	0.0	18,375,592.0
Term deposits	847,019.1	655,542.5	41,656.7	27,772.4	17,519.3	225,751.3	188,745.3	-410.3	2,003,596.3
Reverse repo transactions	1,047,849.5	761,213.2	698,083.6	196,629.6	62,182.9	0.0	0.0	0.0	2,765,958.8
Repo transactions	-1,021,596.4	-726,639.9	-636,834.7	-192,822.9	-59,724.8	0.0	0.0	0.0	-2,637,618.7
Other	-34,761.5	19,997.6	3,660.3	1,554.8	740.3	15.1	14.2	17.1	-8,762.1
Total	8,982,017.7	3,548,815.0	2,489,589.7	2,137,352.2	1,658,708.7	962,176.9	720,499.3	-393.2	20,498,766.3

2022									
PLN thousand	USD	EUR	GBP	CAD	AUD	NOK	NZD	Other	Total
Debt securities	3,196,719.9	-177,897.9	701,983.9	864,107.4	805,990.2	391,763.2	275,870.2	0.0	6,058,536.9
Term deposits	84,828.2	5,724.3	28,443.3	14,682.8	8,790.2	91,851.2	75,953.7	0.0	310,273.7
Reverse repo transactions	132,747.9	32,089.6	181,657.9	3,516.3	62,595.0	0.0	281.3	0.0	412,888.0
Repo transactions	-122,206.5	-287.5	-139,173.1	-3,276.7	-56,107.5	0.0	-241.8	0.0	-321,293.1
Other	8,637.2	-74.0	1,044.3	319.6	46.2	25.6	-147.8	-11.2	9,839.9
Total	3,300,726.7	-140,445.5	773,956.3	879,349.4	821,314.1	483,640.0	351,715.6	-11.2	6,470,245.4

Change									
PLN thousand	USD	EUR	GBP	CAD	AUD	NOK	NZD	Other	Total
Debt securities	4,946,787.1	3,016,599.5	1,681,039.9	1,240,110.9	832,000.8	344,647.3	255,869.6	0.0	12,317,055.1
Term deposits	762,190.9	649,818.2	13,213.4	13,089.6	8,729.1	133,900.1	112,791.6	-410.3	1,693,322.6
Reverse repo transactions	915,101.6	729,123.6	516,425.7	193,113.3	-412.1	0.0	-281.3	0.0	2,353,070.8
Repo transactions	-899,389.9	-726,352.4	-497,661.6	-189,546.2	-3,617.3	0.0	241.8	0.0	-2,316,325.6
Other	-43,398.7	20,071.6	2,616.0	1,235.2	694.1	-10.5	162.0	28.3	-18,602.0
Total	5,681,291.0	3,689,260.5	1,715,633.4	1,258,002.8	837,394.6	478,536.9	368,783.7	-382.0	14,028,520.9

The increase of PLN 14,028,520.9 thousand in the net result on interest on investment instruments of foreign currency reserves was recorded amid:

- an increase in the average annual interest on debt securities and on term deposits,
- higher average annual investment in simultaneous repo and reverse repo transactions in USD, EUR, CAD and GBP and, at the same time, lower average annual investment in simultaneous repo and reverse repo transactions in AUD,
- an average annual appreciation of the zloty against all reserve currencies (see table below).

Average annual foreign exchange rates

PLN	2023	2022	Change
USD	4.2021	4.4607	-0.2586
EUR	4.5430	4.6869	-0.1439
GBP	5.2216	5.4986	-0.2770
CAD	3.1135	3.4255	-0.3120
AUD	2.7923	3.0933	-0.3010
NOK	0.3983	0.4643	-0.0660
NZD	2.5810	2.8287	-0.2477

Interest income on gold (see Note 1 and Note 3.1)

The item includes the net result on interest on term deposits in the form of physical gold holding, which is accrued and paid in USD. The increase in the item in 2023 was the result of the higher, in average annual terms, placement of deposits and a simultaneous appreciation of the zloty against USD, in average annual terms.

Net result on interest on receivables/liabilities related to the IMF (see Note 2)

PLN thousand	Income		Expenses		Result		
	2023	2022	2023	2022	2023	2022	Change
Interest on reserve tranche	224,268.1	69,948.3	0.0	0.0	224,268.1	69,948.3	154,319.8
Interest on current account with the IMF	904,408.8	306,711.6	0.0	0.0	904,408.8	306,711.6	597,697.2
Interest on loans extended to the IMF	1,766.7	1,132.5	0.0	0.0	1,766.7	1,132.5	634.2
Interest on SDR allocation	0.0	0.0	-1,116,405.7	-379,302.3	-1,116,405.7	-379,302.3	-737,103.4
Total	1,130,443.6	377,792.4	-1,116,405.7	-379,302.3	14,037.9	-1,509.9	15,547.8

The net result on interest on receivables/liabilities related to the IMF is a result of interest income on interest-bearing receivables in SDR (reserve tranche¹⁷, current account with the IMF and loans extended to the IMF) and interest expenses on interest-bearing liabilities in SDR (SDR allocation, see Note 2). The increase in the net result was primarily a result of the increase in the average annual interest on SDR in the context of the surplus of receivables over liabilities in SDR as well as an appreciation of the zloty against SDR in average annual terms (a fall in the exchange rate from 5.9606 in 2022 to 5.6055 in 2023).

¹⁷ The value of the non-interest-bearing part of the reserve tranche is fixed and amounts to SDR 56,236.0 thousand (see Note 2).

Net interest result on monetary policy instruments (see Note 3.2 and Note 6.1)

The decrease, by PLN 8,686,376.9 thousand, in the net result on interest on instruments used in monetary policy operations was mostly driven by:

- higher, by PLN 7,738,966.2 thousand, discount expenses on NBP bills (see Note 6.1), which was mainly a result of a rise in the average annual level of main and fine-tuning operations and a rise in the average annual NBP reference rate,

PLN thousand	2023	2022	Change
Discount expenses on NBP bills issued under main monetary policy operations	-17,667,206.6	-10,107,613.5	-7,559,593.1
Discount expenses on NBP bills issued under fine-tuning monetary policy operations	-467,194.2	-287,821.1	-179,373.1
Total	-18,134,400.8	-10,395,434.6	-7,738,966.2

Average annual level of main and fine-tuning operations* and average annual reference rate

PLN million / %	2023	2022	Change
Main operations	270,658.4	191,702.0	78,956.4
Fine-tuning operations	7,170.2	5,818.0	1,352.2
NBP reference rate	6.45	5.28	1.17 p.p.

* All calendar days from 1 January to 31 December were taken into account in the calculation of the average annual level of main and fine-tuning operations.

- higher, by PLN 1,170,796.7 thousand, interest expenses on the required minimum reserve, which resulted from an increase in the average level of the required minimum reserve during the year and an increase in the average annual interest on the required minimum reserve (see Note 6.1),

Average level of required minimum reserve* and average annual interest rate on required minimum reserve

PLN million / %	2023	2022	Change
Required minimum reserve	67,634.5	56,615.9	11,018.6
Interest rate on required minimum reserve	6.45	5.28	1.17 p.p.

* Amounts of the required minimum reserve are calculated based on reserve maintenance periods weighted with the number of days in the period.

with a simultaneous:

- lower, by PLN 145,203.6 thousand, expenses on deposit facility, which was a result of the lower average use of this instrument and, at the same time, a higher average annual level of deposit rate,

Value of deposit facilities and the average annual level of deposit rate

PLN million / %	2023	2022	Change
Total value of deposit facilities*	1,908,132.6	3,438,074.6	-1,529,942.0
Average annual deposit rate**	5.95	4.78	1.17 p.p.

* Value calculated for the days of use.

** All calendar days from 1 January to 31 December were taken into account for the calculation of the average annual level of the interest rate.

- lower, by PLN 37,563.6 thousand, net result on securities purchased under structural open market operations (see Note 3.2).

PLN thousand	2023	2022	Change
Net result on debt securities held for monetary policy purposes	2,151,173.3	2,188,736.9	-37,563.6
- Treasury securities	999,970.0	1,038,181.6	-38,211.6
- debt securities guaranteed by the State Treasury	1,151,203.3	1,150,555.3	648.0

Other interest income/expenses

The item *Other interest income/expenses* comprises mainly interest expenses on accounts operated by NBP for the State budget and interest income and expenses related to settlements in TARGET. The item also comprises interest expenses on lease liabilities (see Note 4 and Note 6.4).

PLN thousand	Income		Expenses		Result		
	2023	2022	2023	2022	2023	2022	Change
Interest expenses on current and auxiliary accounts as well as term deposits with NBP, of which	0.0	0.0	-1,603,292.4	-359,773.3	-1,603,292.4	-359,773.3	-1,243,519.1
- in foreign currency	0.0	0.0	-1,350,608.4	-148,477.0	-1,350,608.4	-148,477.0	-1,202,131.4
- in domestic currency	0.0	0.0	-252,684.0	-211,296.3	-252,684.0	-211,296.3	-41,387.7
Interest income/expenses related to settlements in TARGET*	66,603.2	-3,837.8	-351.0	11,421.8	66,252.2	7,584.0	58,668.2
Other interest income/expenses	1,703.6	722.5	-7,400.8	-7,074.0	-5,697.2	-6,351.5	654.3
Total	68,306.8	-3,115.3	-1,611,044.2	-355,425.5	-1,542,737.4	-358,540.8	-1,184,196.6

* Income includes income and expenses (a negative interest rate) on interest on assets related to settlements in TARGET, whereas expenses include income on interest on liabilities related to settlements in TARGET.

Note 12 Net result on financial operations

Note 12.1 Net realised gains/losses

- **Realised foreign exchange gains/losses on transactions in foreign currency and on transactions in gold**

Income and expenses on transactions in foreign currency and transactions in gold are recognised in the financial result on the day when the change took place, in the amount of:

- the difference between the value in domestic currency resulting from a decrease of a foreign currency holding (or a gold holding) and the value determined according to the average daily purchase cost of foreign currency (or gold) – as regards inflow and outflow of foreign currency (or gold) on a given operating day,
- the difference between the value in domestic currency resulting from a decrease of a foreign currency holding (or a gold holding) and the value determined according to the average cost of a holding of foreign currency (or gold) – as regards a surplus of outflow of foreign currency (or gold) over inflow on a given operating day (net outflow).

In the case of a short position in a given foreign currency (or gold), a reverse approach is applied.

▪ **Realised price gains/losses**

Gains or losses resulting from spot sale transactions in debt securities or in ETFs bearing the same code are recognised in the financial result on the settlement day, in the amount equal to the difference between the sale amount and the amount determined according to the average cost of holding of the debt securities or the ETFs at the end of the given operating day.

The result of the settlement of forward transactions in debt securities or in ETFs is calculated:

- in the case of a forward purchase transaction – as the difference between the market price and an agreed price, adjusted for revaluation losses recognised as at the balance sheet date,
- in the case of a forward sale transaction – as the difference between an agreed price, adjusted for revaluation losses recognised as at the balance sheet date, and the average cost of a debt securities or ETFs holding.

If more than one transaction for the forward purchase or sale of debt securities or ETFs has been entered, valuation and settlement of these transactions are carried out separately.

Daily changes in the market prices of futures are recognised in the financial result on a daily basis, including on the day of closing the open position in futures.

<i>PLN thousand</i>	2023	2022	Change
Realised foreign exchange gains/losses on transactions in foreign currency	-2,741,271.0	25,171,742.9	-27,913,013.9
Realised gains/losses on transactions in gold	359.4	281,199.1	-280,839.7
Realised price gains/losses, of which	-1,073,913.7	-9,903,279.7	8,829,366.0
- on spot transactions in debt securities	-1,825,754.9	-6,788,169.9	4,962,415.0
- on off-balance-sheet financial instruments, of which	751,841.2	-3,115,109.7	3,866,950.9
* on forward transactions in debt securities	-186,182.8	-1,263,838.0	1,077,655.2
* on forward transactions in ETFs	38.9	0.0	38.9
• on futures, of which:	937,985.1	-1,851,271.7	2,789,256.8
# on bond futures	-301,177.5	333,831.3	-635,008.8
# on depo futures	-22,893.1	-28,700.1	5,807.0
# on equity index futures	1,262,055.7	-2,156,402.9	3,418,458.6
Other income/expenses on operations*	2,489.8	-1,132.3	3,622.1
Total	-3,812,335.5	15,548,530.0	-19,360,865.5

* The item includes the result of the valuation of the balance of Account No. 2 for the IMF (PLN 2,489.8 thousand in 2023 as compared with PLN -1,132.3 thousand in 2022 – see Note 6.2).

Net result on realised foreign exchange gains/losses on transactions in foreign currency

<i>PLN thousand</i>	2023	2022	Change
USD	2,494,818.4	14,472,637.2	-11,977,818.8
EUR	-1,038,712.1	2,200,035.4	-3,238,747.5
GBP	-302,784.1	1,910,777.4	-2,213,561.5
CAD	-546,748.1	1,888,925.1	-2,435,673.2
AUD	-924,863.2	2,202,603.3	-3,127,466.5
NOK	-1,523,120.7	1,158,391.9	-2,681,512.6
NZD	-896,152.1	451,666.2	-1,347,818.3
CHF	3,611.9	882,207.5	-878,595.6
SDR	-8,807.1	3,927.9	-12,735.0
Other	1,486.1	571.0	915.1
Total	-2,741,271.0	25,171,742.9	-27,913,013.9

In 2023, the decrease in the net result stemmed mainly from developments in an average annual difference between the transaction price and the average cost of foreign currencies holding, i.e. a decrease in the positive difference for USD and the occurrence of a negative difference for all the remaining main foreign currencies (see Note 3.1 and Note 12.2).

*Net result on realised price gains/losses**Net result on realised price gains/losses on the sale of debt securities in spot transactions*

<i>PLN thousand</i>	2023	2022	Change
USD	-817,309.4	-2,233,867.7	1,416,558.3
EUR	-10,789.4	-1,358,142.5	1,347,353.1
GBP	-559,607.7	-1,190,706.5	631,098.8
CAD	-143,336.9	-694,202.4	550,865.5
AUD	-190,415.4	-848,718.2	658,302.8
NOK	-60,583.2	-295,522.4	234,939.2
NZD	-43,712.9	-167,010.2	123,297.3
Total	-1,825,754.9	-6,788,169.9	4,962,415.0

Net result on realised price gains/losses on forward transactions in debt securities

<i>PLN thousand</i>	2023	2022	Change
USD	-26,382.9	-313,587.1	287,204.2
EUR	-8,399.0	-27,166.0	18,767.0
GBP	-5,104.5	-150,766.1	145,661.6
CAD	-6,942.0	-59,910.8	52,968.8
AUD	-138,286.7	-698,808.3	560,521.6
NOK	0.0	7,265.4	-7,265.4
NZD	-1,067.7	-20,865.1	19,797.4
Total	-186,182.8	-1,263,838.0	1,077,655.2

Net result on realised price gains/losses on daily revaluation of futures contracts

<i>PLN thousand</i>	USD	EUR	GBP	CAD	AUD	Total
Bond futures						
2023	-132,125.7	-58,767.0	-58,769.7	-37,081.5	-14,433.6	-301,177.5
2022	104,201.8	254,752.3	-31,942.4	-12,658.9	19,478.5	333,831.3
Change	-236,327.5	-313,519.3	-26,827.3	-24,422.6	-33,912.1	-635,008.8
Depo futures						
2023	-25,069.8	0.0	2,176.7	0.0	0.0	-22,893.1
2022	-5,356.8	0.0	-23,343.3	0.0	0.0	-28,700.1
Change	-19,713.0	0.0	25,520.0	0.0	0.0	5,807.0
Equity index futures						
2023	724,415.7	565,886.6	-20,242.9	422.6	-8,426.3	1,262,055.7
2022	-1,800,061.2	-422,011.6	65,721.2	-6.6	-44.7	-2,156,402.9
Change	2,524,476.9	987,898.2	-85,964.1	429.2	-8,381.6	3,418,458.6

The higher net result on realised price gains/losses in 2023 was mostly related to sale transactions in securities amid the lower growth of average annual yields in foreign markets as compared with 2022, with a simultaneous positive net result on investment in equity index futures following the rise of the indices.

Note 12.2 Unrealised losses

▪ Currency revaluation losses

Currency revaluation losses are determined by comparing the average cost of foreign currency holding with the average NBP exchange rate, which is lower than the average cost (in the case of a positive foreign currency holding) or by comparing the average cost of foreign currency holding with the average NBP exchange rate, which is higher than the average cost (in the case of a negative foreign currency holding) – see Note 9.1.

▪ Price revaluation losses

Price revaluation losses on debt securities or ETFs are determined by comparing the average cost of the debt securities or ETFs holding with the average market price of these securities or ETFs, which is lower than their average market price.

Price revaluation losses on forward transactions in debt securities are determined by comparing the contract price, discounted as at the settlement date of the spot transaction, with a lower (in the case of forward purchase transactions) or a higher (in the case of forward sale transactions) current market price of the instrument.

<i>PLN thousand</i>	2023	2022	Change
Currency revaluation losses	-28,236,770.4	-1,420,869.5	-26,815,900.9
Price revaluation losses, of which	-535,927.8	-25,316,894.2	24,780,966.4
- on debt securities	-514,156.4	-25,316,842.3	24,802,685.9
- on ETFs	-21,771.4	0.0	-21,771.4
- on off-balance-sheet financial instruments	0.0	-51.9	51.9
Total	-28,772,698.2	-26,737,763.7	-2,034,934.5

Currency revaluation losses by foreign currency are presented below.

<i>PLN thousand</i>	2023	2022	Change
USD	-7,854,875.6	0.0	-7,854,875.6
EUR	-5,634,389.3	0.0	-5,634,389.3
GBP	-3,400,306.3	0.0	-3,400,306.3
CAD	-4,171,025.4	-978,211.6	-3,192,813.8
AUD	-3,633,470.5	0.0	-3,633,470.5
NOK	-2,614,809.9	-318,214.7	-2,296,595.2
NZD	-878,022.4	-124,336.8	-753,685.6
SDR	-49,567.4	0.0	-49,567.4
Other	-303.6	-106.4	-197.2
Total	-28,236,770.4	-1,420,869.5	-26,815,900.9

Price revaluation losses by NBP-held debt securities denominated in foreign currencies are presented below.

<i>PLN thousand</i>	2023	2022	Change
Debt securities in USD	-146,388.5	-9,916,207.8	9,769,819.3
Debt securities in EUR	-41,468.1	-6,572,513.3	6,531,045.2
Debt securities in GBP	-67,127.8	-3,193,475.4	3,126,347.6
Debt securities in CAD	-29,701.5	-1,906,440.6	1,876,739.1
Debt securities in AUD	-53,566.4	-2,074,134.8	2,020,568.4
Debt securities in NOK	-175,816.7	-974,462.8	798,646.1
Debt securities in NZD	-87.4	-679,607.6	679,520.2
Total	-514,156.4	-25,316,842.3	24,802,685.9

Price revaluation losses by NBP-held ETFs denominated in foreign currencies are presented below.

<i>PLN thousand</i>	2023	2022	Change
ETFs in USD	-589.2	0.0	-589.2
ETFs in EUR	-21,138.5	0.0	-21,138.5
ETFs in CAD	-43.7	0.0	-43.7
Total	-21,771.4	0.0	-21,771.4

In 2023, the decrease in unrealised price revaluation losses on debt securities denominated in foreign currencies was mainly a result of a lower growth in the yields on all markets compared with 2022 (see Note 3.1).

In 2022, price revaluation losses on off-balance-sheet financial instruments related to forward purchase transactions in debt securities denominated in USD (see Note 10.2).

Note 13 Net result on commissions and fees

<i>PLN thousand</i>	Item of the Profit and Loss Account	2023	2022	Change
Income on the execution of payment orders		40,049.7	39,036.8	1,012.9
Other commissions and fees income		10,500.4	13,908.4	-3,408.0
Commissions and fees income	P&L 3.1	50,550.1	52,945.2	-2,395.1
Expenses on fees for NBP's TARGET participation		-3,567.3	-16,280.1	12,712.8
Expenses on opening and operation of NBP accounts (including gold and securities accounts)		-17,770.7	-17,575.5	-195.2
Expenses on the execution of own payment orders		-10,410.7	-4,599.4	-5,811.3
Expenses due to substitution cash services		-2,922.7	-2,553.7	-369.0
Other commissions and fees expenses		-10,439.4	-12,385.9	1,946.5
Commissions and fees expenses	P&L 3.2	-45,110.8	-53,394.6	8,283.8
Net result on commissions and fees		5,439.3	-449.4	5,888.7

The increase in the net result on commissions and fees in 2023 was mainly the effect of:

- a change in the method of calculating fees in the TARGET system following its consolidation in the first quarter of 2023, which had an impact on, among others, a decrease in fees for NBP's participation in TARGET and a decline in other commissions and fees income.
- a decrease in other commissions and fees expenses, including in particular expenses on futures, primarily in relation with the lower trade in equity index futures (see Note 3.1, Note 10.3 and Note 12.1),
- higher income for the execution of payment orders – mainly in relation with a rise in the number of the payment orders executed.

Note 14 Income on shares and participating interests

Income on dividends from shares and participating interests held by NBP is recognised in the financial result on the day an asset originates. Dividends received in foreign currency are converted into domestic currency at the average NBP exchange rate prevailing on that day.

The item includes income on dividends from shares and participating interests in domestic and foreign entities held by NBP (see Note 3.3) and income on dividends from the ETFs held (see Note 3.1).

<i>PLN thousand</i>	2023	2022	Change
Dividends on held shares, of which	30,658.0	32,215.8	-1,557.8
- Krajowy Depozyt Papierów Wartościowych S.A.	7,175.0	9,793.0	-2,618.0
- Krajowa Izba Rozliczeniowa S.A.	11,135.6	9,256.9	1,878.7
- Bank for International Settlements	12,347.4	13,165.9	-818.5
Dividends on held equity index ETFs, of which	11,920.5	0.0	11,920.5
- ETFs in GBP	9,109.1	0.0	9,109.1
- ETFs in USD	1,609.6	0.0	1,609.6
- ETFs in CAD	1,159.3	0.0	1,159.3
- ETFs in EUR	42.5	0.0	42.5
Total	42,578.5	32,215.8	10,362.7

Note 15 Salaries

<i>PLN thousand</i>	2023	2022	Change
Expenses on salaries	-594,894.8	-534,943.5	-59,951.3
Expenses on provisions for liabilities to employees	-43,651.7	-17,291.0	-26,360.7
Expenses on social contributions, of which	-136,808.3	-121,173.8	-15,634.5
- Occupational Pension Scheme	-37,134.4	-33,232.4	-3,902.0
Total	-775,354.8	-673,408.3	-101,946.5

In 2023, the average headcount at NBP amounted to 3,289 employees and was lower by 55 employees as compared with 2022.

In 2023, higher salaries resulted mainly from the adopted HR and remuneration policy.

The increase in expenses on provisions for liabilities to employees in 2023 was mainly driven by higher expenses on the creation of the provision for retirement severance payments and jubilee awards. In 2023 and 2022, expenses on the creation of provisions for liabilities to employees by categories were as follows (see Note 7):

PLN thousand	2023		2022	
	Expenses on provisions	of which actuarial gains/losses*	Expenses on provisions	of which actuarial gains/losses*
Expenses on provisions for liabilities to employees, of which	-43,651.7	-19,220.6	-17,291.0	1,193.2
- due to retirement severance payments	-21,204.2	-9,946.5	-6,469.4	1,826.2
- due to disability severance payments	-373.9	31.8	-88.2	223.5
- due to jubilee awards	-18,825.2	-9,305.9	-8,180.3	-856.5
- due to untaken leaves	-3,248.4	-	-2,553.1	-

* Actuarial gains and losses result from changes in the actuarial assumptions, such as the probability of an employee quitting job, death rate, discount rate or the level of future remunerations. Actuarial gains are presented with a (+) sign, while actuarial losses with a (-) sign.

Note 16 Administrative expenses

PLN thousand	2023	2022	Change
Materials and energy used	-101,843.3	-34,021.6	-67,821.7
Benefits for employees and other eligible persons	-17,768.0	-24,660.2	6,892.2
Business travel	-2,562.1	-2,277.3	-284.8
Services from third parties	-290,774.2	-254,121.6	-36,652.6
Taxes and fees	-12,955.8	-11,831.1	-1,124.7
Transfers to Employee Benefit Fund	-6,990.6	-6,628.2	-362.4
Other administrative expenses	-12,002.2	-9,314.6	-2,687.6
Total	-444,896.2	-342,854.6	-102,041.6

The increase in administrative expenses in 2023 was mainly a result of:

- an increase in expenses on materials and energy used – mainly electricity and heating,
- an increase in expenses on services from third parties – mainly related to the maintenance of IT systems and IT infrastructure, repairs and maintenance of tangible fixed assets and information services,
- an increase in other administrative expenses – mainly on NBP's educational activity.

with a simultaneous

- decrease in expenses on benefits for employees and other eligible persons – mainly due to the change in the provisions for liabilities arising from additional benefits for employees (see Note 7 and Note 15).

Note 17 Depreciation and amortisation expenses

<i>PLN thousand</i>	2023	2022	Change
Tangible fixed assets depreciation expenses	-57,196.6	-59,007.6	1,811.0
Right-of-use assets depreciation expenses	-15,052.3	-13,629.2	-1,423.1
Intangible assets amortisation expenses	-18,347.0	-22,847.2	4,500.2
Total	-90,595.9	-95,484.0	4,888.1

The decrease in depreciation and amortisation expenses in 2023 was mainly related to lower intangible assets amortisation expenses – in particular IT systems (see Note 4).

Note 18 Expenses on issue of banknotes and coins

Expenses on the issue of banknotes and coins are recognised in the financial result on the date a liability arose, regardless of the date the banknotes and coins are put into circulation.

The item comprises expenses on the issue of banknotes and coins, including collector banknotes and coins.

In 2023, the item amounted to PLN 513,290.1 thousand and was by PLN 123,326.8 thousand higher as compared with 2022. The increase in the item resulted mainly from higher expenses on the issue of general circulation and collector banknotes and coins as a result, among others, of:

- higher prices of general circulation coins and banknotes, a rise in the overall number of ordered coins and a fall in the number of ordered banknotes,
- higher expenses on the purchase of bullion for the production of collector coins.

Note 19 Other income and other expenses

Other income/expenses include mainly income on the sale of collector coins and banknotes, and expenses corresponding to the nominal value of collector coins and banknotes sold. The increase in the balance of surplus of other income over expenses was mainly the result of an increase in the resale of goods, materials and services, with a simultaneous decrease in income/expenses from the sale of collector banknotes and coins.

6. Other explanatory notes

Note 20 Other issues

The Russia's military aggression against Ukraine

Narodowy Bank Polski has carefully analysed the impact of the Russia's military aggression against Ukraine on the economic situation in Poland, standing ready to immediately take preventive actions against possible negative trends on the financial and FX markets.

Both as at 31 December 2023 and as at 31 December 2022, NBP did not have direct exposures to Russian or Belarussian entities which were subject to the economic sanctions arising from the above-mentioned military aggression. None of NBP's counterparties which cooperate with NBP under the foreign currency reserves management (including issuers of securities) had its seat in the territory of Ukraine. NBP monitored, on an ongoing basis, the adverse effects of the military aggression on risk in the foreign currency reserves management and in monetary policy operations. It specifically analysed the credit risk and the financial standing of commercial banks in which funds are deposited under the foreign currency reserves management, as well as issuers of corporate bonds held in NBP's portfolio. The analyses (including the analyses of entities' ratings) did not indicate that the credit risk has grown significantly.

Moreover, NBP monitored, on an ongoing basis, the level of operational and cybersecurity risk. The Bank had contingency procedures, including a business continuity plan, in place.

Swap arrangements

In 2023 and 2022, NBP was party to a swap arrangement with the Swiss National Bank (SNB), the European Central Bank (ECB), the National Bank of Ukraine (NBU) and one of the international financial organisations.¹⁸ No transactions were carried out under these arrangements, therefore they had no impact on the NBP balance sheet and profit and loss account in 2023 and 2022.

Note 21 Events after the balance sheet date

Adjustment of the subscription key of the ECB capital

On 1 January 2024, there was an adjustment of the subscription key of the ECB capital, which in line with Article 29 of the Statute of the European System of Central Banks and the European Central Bank takes place regularly every five years, based on the data on the population and the GDP of EU member states provided to the ECB by the European Commission. Following this adjustment, the share of NBP in the ECB's subscribed capital increased from 6.0335% to 6.0968%, which corresponds to an increase in participating interest from EUR 653,126.8 thousand to EUR 659,979.0 thousand. Therefore, the capital paid up by NBP to the ECB increased from EUR 24,492.3 thousand to EUR 24,749.2 thousand. The respective payment in favour of the ECB in the amount of EUR 257.0 thousand was made by NBP on 2 January 2024 (see Note 3.3).

7. Financial, operational and tax risk

Narodowy Bank Polski operates a risk management system which is a continuous and repeatable decision-making process that supports the attainment of NBP goals, while using appropriate organisational, procedural and technical solutions. It includes:

¹⁸ The swap arrangement with SNB was concluded in 2012, the arrangements with the ECB and NBU in 2022, whereas the arrangement with one of international financial organisations in 2023.

- as relates to financial risk – the activity of the NBP Head Office department responsible for financial risk management;
- as relates to operational risk (see Chapter 7.2) – management at the following levels:
 - decentralised operational risk management by directors of the Head Office departments and NBP regional branches who, on an ongoing basis, monitor operational risk, perform the assessment of its level and take measures mitigating risk occurrence in their units and report such incidents in accordance with internal regulations,
 - the activity of the NBP Head Office Department, which – on an ongoing basis – monitors and analyses operational risk in NBP as a whole, prepares regulations and draft measures related to changes to operational risk management. It also prepares reports on operational risk for the Commission for Operational Risk Management and the Management Board of NBP,
 - operational risk management effectiveness assessed by the Commission for Operational Risk Management which monitors the current level of operational risk, performs analysis of the causes underlying materialisation of risk assessed as high or unacceptable, and also submits proposed solutions and changes in this area to the Management Board of NBP,
 - strategic decision-making by the NBP Management Board.

The tasks carried out as part of risk management include:

- on-going identification and analysis of individual types of risk,
- measurement of risk level and its acceptance or non-acceptance,
- selection of the risk mitigation mechanisms,
- monitoring and day-to-day control of the efficiency of the risk mitigation mechanisms applied,
- provision of periodical information about the results of risk management.

7.1. Financial risk

The main types of financial risk underlying the activities of NBP are: credit risk, liquidity risk and market risk, i.e. interest rate risk, foreign exchange rate risk, risk of changes in the prices of ETFs replicating stock indices or risk of changes in the prices of equity index futures. The accepted level of financial risk is set through the system of investment limits, determination of which takes also into account mitigation of concentration risk. NBP's exposure to individual types of risk stems from its performance of statutory tasks of the central bank, i.e. managing the foreign currency reserves and implementing monetary policy, including regulating the liquidity of banks and providing them with refinancing facilities. The Financial Risk Management Department monitors, on an ongoing basis, the Bank's exposure to financial risk and presents financial risk analysis to the Management Board of NBP.

7.1.1. Credit risk

Credit risk is related to potential financial losses arising from counterparty default (in particular, failure to repay, in full or in part, principal or interest within the agreed time), or due to a decline in the market value of investment instruments arising from a deterioration in the issuer's creditworthiness.

7.1.1.1. Credit risk in foreign currency reserve management

Exposure to credit risk in the process of NBP foreign exchange reserve management is mitigated using the following methods:

- limiting the share of term deposit transactions and non-government securities,
- counterparty selection criteria and on-going monitoring of their creditworthiness,
- limits imposed on counterparties of term deposit transactions and foreign currency transactions,
- limitation of the maturity of term deposit transactions,
- selection criteria for issuers of securities,
- limits for issuers of securities,
- entering into master agreements with counterparties,
- collateral in repo/reverse repo transactions.

Credit risk analysis is conducted by NBP using both data related to the financial position of counterparties and assignments of rating agencies as well as risk valuation reflected in market quotations.

Narodowy Bank Polski's exposure to credit risk due to the main investment instruments of foreign currency reserves is presented below.¹⁹

<i>PLN thousand</i>	31.12.2023	31.12.2022	Balance sheet item	Note
Current account in gold	39,020,304.0	0.0	A.1	1
Term deposits in gold	27,211,360.6	31,755,510.9	A.1	1
Current accounts in foreign currency*	18,971,922.1	20,345,541.1	A.2.2	3.1
Term deposits in foreign currency	44,777,916.0	37,562,191.4	A.2.2	3.1
Reverse repo transactions	66,812,921.8	53,550,113.6	A.2.2	3.1
Debt securities denominated in foreign currency	499,316,527.3	516,089,683.1	A.2.2	3.1
Margins related to futures transactions	270,501.3	1,088,239.0	A.2.2	3.1
Interest on term deposits in gold	2,066.7	3,888.1	A.2.2	3.1
Total	696,383,519.8	660,395,167.2		

* Current accounts excluding the current accounts in the ECB used for settlements in TARGET (see Note 3.1).

The dominant portion of foreign currency reserves is invested in government debt securities of high rating countries characterised by the highest level of safety and liquidity. Non-government debt securities held in the investment portfolios are issued primarily by international institutions and government agencies. The scale of investment in the corporate bond market is small. Around 1% of debt securities held by NBP is classified as green bonds and sustainable bonds.²⁰ The share of term deposits in foreign currency reserves is low – transactions are concluded for short periods with banks of high

¹⁹ It is assumed that the exposure to the IMF (receivables from the IMF – see Note 2) does not generate credit risk.

²⁰ Green bonds or sustainable bonds are issues whose proceeds are used to finance or re-finance green projects or in the case of the latter – social projects. These may include projects linked to energy efficiency, renewable energy, prevention of environment pollution, sustainable management of natural resources, biodiversity, provision of essential infrastructure and services or food security, and support for socio-economic progress.

creditworthiness. NBP also holds funds in current accounts, mainly operated by central banks, in the process of foreign currency reserves management.

The creditworthiness ratings of the country of the debt securities issuer are, among others, used for estimating the credit quality of debt securities issued by governments and central banks. The credit quality of issuers of other debt securities, as well as counterparties with which term deposits are concluded (except for central banks), is assessed based on the scoring models that take into account, among others, ratings assigned by rating agencies and individual issuer's financial data. The financial standing of issuers and NBP's counterparties is subject to on-going monitoring based on daily information about changes in creditworthiness ratings and rating forecasts provided by rating agencies, as well as implied ratings derived from CDS (Credit Default Swap).

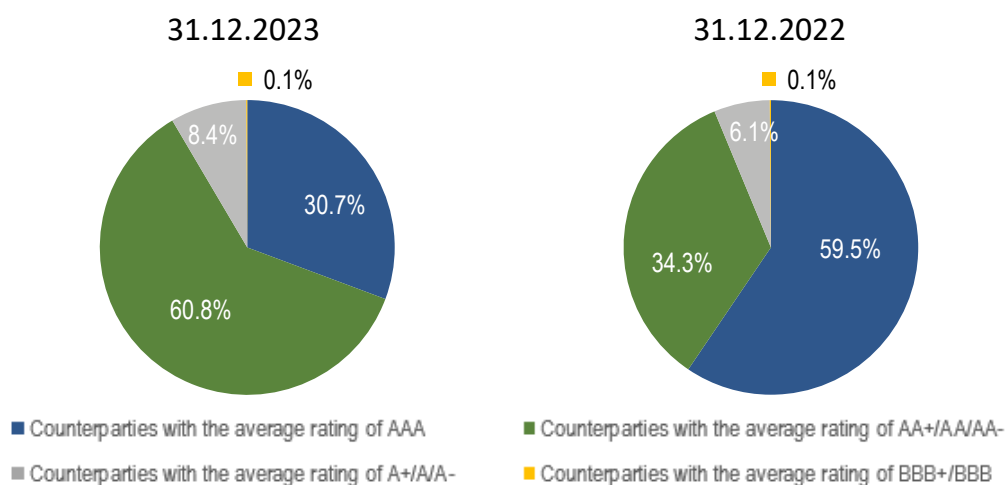
The results of an analysis of data as of 31 December 2023 indicate that no cases of impairment of held-to-maturity debt securities have occurred.

Exposure to credit risk of deposits and debt securities related to foreign exchange reserve management, by issuer/counterparty's sector, geographical location and credit rating, is presented below.²¹

<i>PLN thousand</i>	31.12.2023	31.12.2022
General government institutions	459,175,760.2	470,891,051.9
- <i>Foreign central government institutions</i>	441,881,609.2	431,788,496.2
- <i>Other</i>	17,294,151.0	39,102,555.7
Monetary financial institutions	89,265,353.0	94,487,430.2
- <i>Foreign credit institutions</i>	72,522,858.8	75,930,741.1
- <i>Central banks</i>	16,742,494.2	18,556,689.1
International financial organisations	1,770,175.8	3,304,973.3
Non-monetary financial institutions	11,020,515.5	8,799,728.9
Non-financial sector	10,076,066.2	7,928,089.2
Total	571,307,870.7	585,411,273.5

²¹ The change in the structure of ratings in 2023 was mainly the result of a change in the average rating of the USA.

<i>PLN thousand</i>	31.12.2023	31.12.2022
United States	185,595,310.5	174,506,217.4
Euro area	142,525,281.4	170,912,123.0
United Kingdom	77,539,901.3	78,903,375.8
Canada	58,898,497.7	55,845,278.2
Australia	46,290,989.2	45,767,385.6
Norway	25,864,743.6	27,612,796.8
Asian countries	12,201,944.9	12,533,835.8
New Zealand	11,435,885.1	10,805,626.5
Switzerland	7,436,570.0	5,219,661.0
Denmark	1,666,143.3	0.0
Sweden	62,464.9	0.0
Other	1,790,138.8	3,304,973.4
Total	571,307,870.7	585,411,273.5



7.1.1.2. Credit risk underlying domestic operations

7.1.1.2.1. Debt securities

As a result of purchase operations in Treasury debt securities conducted in the years 2020-2021 on the secondary market as part of its structural open market operations, as of 31 December 2023 NBP held Treasury debt securities in zloty and debt securities guaranteed by the State Treasury in zloty for a total accounting book value of PLN 138,887,605.0 thousand (PLN 140,673,185.5 thousand as of 31 December 2022 – see Note 3.2). Purchased debt securities denominated in domestic currency are held for monetary policy purposes and valued according to their clean price adjusted for the accrued discount and premium, less impairment.

Debt securities held for monetary policy purposes were issued or fully guaranteed by the State Treasury. The results of the analysis performed as at 31 December 2023 show that no indications of their impairment have occurred.

7.1.1.2.2. Claims on credit operations

To support financial system liquidity, NBP may grant a refinancing loan in zloty to banks to supplement their financial resources. Specifically, banks use intraday credit and marginal lending facility (Lombard credit). Banks also use intraday credit in euro. On request by a bank, NBP may also grant a refinancing loan in another form specified by the Management Board of NBP.

The total drawing on the credit in annual terms*

PLN million / EUR	2023	2022	Change
Lombard credit	89.0	62.2	26.8
Intraday credit	19,889,150.3	18,564,907.0	1,324,243.3
Intraday credit in EUR	55,163.0	51,011.9	4,151.1

* The values of credits are the sum total of their daily drawing and result from banks' individual liquidity needs.

The risk underlying these operations is mitigated through the use of eligible collateral that meets the criteria set by NBP. When setting the required level of collateral, the haircut rate is applied, with the purpose to take into account the risk of unfavourable changes of the market value of collateral, in particular of market prices and exchange rates.

Treasury and NBP securities denominated in PLN and debt securities guaranteed by the State Treasury in zloty are the primary collateral presented by banks. The list of assets accepted as collateral also comprises other debt securities deposited with the Central Securities Depository of Poland [Krajowy Depozyt Papierów Wartościowych S.A.]: covered bonds, municipal bonds, corporate bonds, bonds issued by the European Investment Bank denominated in PLN, as well as – in the case of Lombard credit – EUR-denominated Treasury bonds.

In the case of a refinancing loan granted in another form specified by the Management Board of NBP, a wider range of collateral may apply.

Intraday credit in euro is extended in accordance with the principles laid down in the Agreement on the terms of opening and maintaining an account in euro in the TARGET-NBP system, and it may be collateralised by Treasury bonds participating in BondSpot S.A. fixing and accepted by the ECB (in addition, haircut related to the exchange rate risk is taken into account).

7.1.2. Liquidity risk

Liquidity risk is associated with the possibility of incurring additional expenses, if an urgent need arises to raise liquid funds.

As NBP has the exclusive right to issue banknotes and coins of the Republic of Poland, NBP is capable of creating liquidity in domestic currency. This is, however, constrained by the responsibility of NBP for the stability of domestic currency. The assumptions of monetary policy are set annually by the MPC, which, based on the above assumptions, also approves the financial plan of NBP.

In the process of foreign currency reserves management, NBP provides adequate liquidity of funds by matching current and expected cash flows. Investments are made in the markets that ensure immediate availability of funds – reserve currencies and investment instruments are principally characterised by high liquidity.

7.1.2.1. Maturity analysis for financial liabilities in foreign currency

The table below presents the maturity analysis for financial liabilities of NBP denominated in foreign currency as at 31 December 2023 and 31 December 2022.²²

Moreover, when joining the IMF borrowing programmes (see Note 2), NBP committed to grant foreign-currency-denominated loans to the IMF under, respectively:

- NAB agreement – up to the amount of SDR 2,570,800.0 thousand (SDR 2,570,800.0 thousand as at 31 December 2022), of which the outstanding amount of the NBP's commitment as at 31 December 2023 was SDR 2,568,225.0 thousand (SDR 2,558,525.0 thousand as at 31 December 2022),
- bilateral borrowing agreements – up to the amount of EUR 2,701,000.0 thousand (EUR 2,701,000.0 thousand as at 31 December 2022), of which the outstanding amount of the NBP's commitment as at 31 December 2023 was EUR 2,701,000.0 thousand (EUR 2,701,000.0 thousand as at 31 December 2022).

31.12.2023	TOTAL	Avista	From 1 day to 1 month	Over 1 month to 3 months	Over 3 months	Balance-sheet value	L.7 Liabilities to residents denominated in foreign currency	L.8 Liabilities to non-residents denominated in foreign currency	L.9 SDR allocation	L.11 Other liabilities
<i>PLN thousand</i>										
Current/auxiliary accounts in foreign currency operated by NBP	37,763,084.3	37,763,084.3	0.0	0.0	0.0	37,763,084.3	37,690,701.8	72,382.5	0.0	0.0
Term deposit accounts in foreign currency operated by NBP	7,764,387.9	0.0	7,764,387.9	0.0	0.0	7,745,254.9	7,745,254.9	0.0	0.0	0.0
Repo transactions	66,950,080.2	0.0	54,707,567.5	9,978,453.4	2,264,059.3	66,800,236.4	0.0	66,800,236.4	0.0	0.0
Other financial liabilities denominated in foreign currency	853,764.9	0.0	853,664.5	100.4	0.0	853,764.9	209,571.9	642,438.9	0.0	1,754.1
SDR allocation	27,974,317.7	0.0	288,292.1	0.0	27,686,025.6	27,878,502.6	0.0	0.0	27,878,502.6	0.0
TOTAL	141,305,635.0	37,763,084.3	63,613,912.0	9,978,553.8	29,950,084.9	141,040,843.1	45,645,528.6	67,515,057.8	27,878,502.6	1,754.1

31.12.2022	TOTAL	Avista	From 1 day to 1 month	Over 1 month to 3 months	Over 3 months	Balance-sheet value	L.7 Liabilities to residents denominated in foreign currency	L.8 Liabilities to non-residents denominated in foreign currency	L.9 SDR allocation	L.11 Other liabilities
<i>PLN thousand</i>										
Current/auxiliary accounts in foreign currency operated by NBP	45,773,861.4	45,773,861.4	0.0	0.0	0.0	45,773,861.5	45,698,674.5	75,187.0	0.0	0.0
Term deposit accounts in foreign currency operated by NBP	13,188,279.9	0.0	4,153,300.6	9,034,979.3	0.0	13,132,527.1	13,132,527.1	0.0	0.0	0.0
Repo transactions	53,677,589.8	0.0	41,197,628.7	6,892,926.7	5,587,034.4	53,539,855.3	0.0	53,539,855.3	0.0	0.0
Other financial liabilities denominated in foreign currency	194,142.5	0.0	193,996.6	145.9	0.0	194,142.5	178,870.7	10,093.8	0.0	5,178.0
SDR allocation	30,952,859.7	0.0	221,788.5	0.0	30,730,871.2	30,871,510.9	0.0	0.0	30,871,510.9	0.0
TOTAL	143,786,533.3	45,773,861.4	45,766,714.4	15,928,051.9	36,317,905.6	143,511,897.3	59,010,072.3	53,625,136.1	30,871,510.9	5,178.0

²² Liabilities due to FX spot transactions recognised on off-balance-sheet accounts are presented in Note 10.1. Liabilities due to NBP's own administrative activities were not included, as bearing no material impact.

In the case of liabilities denominated in foreign currency due to current and auxiliary accounts, NBP generally holds liquid funds in current accounts and overnight term deposits on the assets side. For liabilities due to accepted term deposits, appropriate funds on the assets side are invested in term deposits of the same maturity date. On the other hand, repo transactions are executed simultaneously with reverse repo transactions of the same maturity date (see Note 3.1).

7.1.3. Interest rate risk

Interest rate risk is related to a potential decline in the market value of financial instruments due to an unfavourable change in their yields.

The primary measure of interest rate risk applied by NBP is modified duration, hereinafter referred to as “MD”, which specifies the sensitivity of investment portfolio values to changes in the yield on financial instruments.

To mitigate the interest rate risk in the process of managing foreign currency reserves, NBP defines the benchmark level of MD of foreign currency reserves, along with admissible fluctuation bands. In 2023, the MD of the reserves remained at the level close to its level in the preceding year.

Sensitivity analysis, conducted based on MD²³, has shown that a change in interest rates by 100 basis points (for each foreign exchange portfolio, evenly distributed along the yield curve) would result in a change of the value of securities portfolios by PLN 14,719.0 million as at 31 December 2023 (as at 31 December 2022 – by PLN 14,138.7 million). The change in value of securities portfolios in individual currencies in response to a 100 bps change in interest rates, as estimated based on MD analysis, is presented below.

MD-based estimate of a change in values of securities portfolios in individual currencies in response to a 100 bps change in interest rates

PLN million	31.12.2023	31.12.2022	Change
USD	4,947.2	4,946.2	1.0
EUR	3,194.3	2,946.5	247.8
GBP	1,775.0	1,787.1	-12.1
CAD	1,564.4	1,468.4	96.0
AUD	1,837.3	1,738.3	99.0
NOK	953.5	876.9	76.6
NZD	447.3	375.3	72.0
Total	14,719.0	14,138.7	580.3

²³ In its sensitivity analysis NBP applied the MD ratio for individual foreign-currency securities portfolios as at 31 December 2023 and as at 31 December 2022 (in both cases, excluding the portfolio of held-to-maturity debt securities) as a linear measure of the relationship between price and yield, as well as the holding of securities portfolios as at 31 December 2023 and as at 31 December 2022 (in both cases, excluding the portfolio of held-to-maturity debt securities) based on values used in the monitoring of MD.

In accordance with the accounting principles of NBP, price revaluation gains on securities denominated in foreign currency at the end of the year are recorded as revaluation accounts on the liabilities side of the balance sheet, while losses on price revaluation of these securities are debited to NBP's financial result.

Debt securities denominated in foreign currency held to maturity and debt securities denominated in domestic currency held for monetary policy purposes are valued at clean price adjusted for the accrued discount and premium, less impairment (see Note 3.1 and Note 3.2).

7.1.4. Foreign exchange rate risk and gold price risk

Foreign exchange rate risk arises out of a potential decline in the value of foreign currency holdings as a result of fluctuations of foreign currency rates in the foreign exchange market.

The assessment of exposure to foreign exchange rate risk is carried out based on the parametric Value at Risk (VaR) methodology. The level of VaR calculated as at the balance sheet date is taken into account for calculating the amount of the FX risk provision (see Chapter 4 and Note 9).

In the process of foreign currency reserves management, NBP defines the currency structure of the strategic benchmark²⁴ alongside admissible fluctuation band (see Note 3.1 and Note 12.1).

As at 31 December 2023 and 31 December 2022, the currency composition of the strategic benchmark included:

Currency composition of the strategic benchmark		
Currency	31.12.2023	31.12.2022
	% share	
USD	36%	36%
EUR	22%	22%
GBP	13%	13%
CAD	11%	11%
AUD	9%	9%
NOK	6%	6%
NZD	3%	3%

The risk of a change in the price of gold (see Note 1) arises out of a potential decline in the value of gold as a result of changes in the market price of gold.

²⁴ The strategic currency benchmark is a reference portfolio for a portion of actively managed foreign currency reserves, mirroring long-term assumptions for the investment strategy by setting the foreign currency composition and the level of modified duration. The strategic benchmark does not include the portfolio of held-to-maturity debt securities, as it is not actively managed.

The impact of a decline in the price of gold on the financial result is limited by unrealised gold revaluation gains and gold revaluation account (see Note 9.1).

The balance-sheet values of foreign currency holdings and gold holding of NBP as at 31 December 2023 and 31 December 2022 by currency are presented below, wherein items in foreign currency related to own administrative activities are presented as part of PLN holdings since they are immaterial.

31.12.2023	PLN thousand	USD	EUR	GBP	CAD	AUD	NOK	NZD	SDR	Gold	Other currencies	Total
ASSETS												
1. Gold and gold receivables	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93,591,432.7	0.0	93,591,432.7
2. Claims on non-residents denominated in foreign currency	0.0	246,735,949.9	165,045,579.4	77,572,725.4	60,871,630.5	44,228,374.5	29,523,507.7	14,827,926.6	28,497,233.9	0.0	2,374,078.5	669,677,006.4
6. Other claims on credit institutions denominated in domestic currency	7.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.8
7. Debt securities of residents denominated in domestic currency	138,887,605.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	138,887,605.0
10. Other assets	1,261,444.3	21,471.8	132,917.6	2,755.1	164.4	6,734.4	10,546.2	0.0	52,939.0	0.0	62.6	1,489,034.4
TOTAL ASSETS	140,149,087.1	246,757,421.7	165,178,497.0	77,575,480.5	60,871,794.9	44,235,108.9	29,534,053.9	14,827,926.6	28,550,171.9	93,591,432.7	2,374,141.1	903,645,086.3
LIABILITIES												
1. Banknotes and coins in circulation	377,521,375.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	377,521,375.0
2. Liabilities to credit institutions related to monetary policy operations denominated in domestic currency	74,421,141.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74,421,141.6
3. Other liabilities to credit institutions denominated in domestic currency	2,591,882.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,591,882.6
4. Liabilities due to issued debt securities denominated in domestic currency	303,071,103.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	303,071,103.1
5. Liabilities to other residents denominated in domestic currency	11,946,940.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11,946,940.4
6. Liabilities to non-residents denominated in domestic currency	4,081,562.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4,081,562.3
7. Liabilities to residents denominated in foreign currency	0.0	9,431,956.6	33,858,186.0	37.6	0.0	2.4	0.0	0.0	0.0	0.0	2,355,706.0	45,646,528.6
8. Liabilities to non-residents denominated in foreign currency	0.0	19,695,570.4	25,811,946.6	14,511,011.4	7,496,529.4	0.0	0.0	0.0	0.0	0.0	0.0	67,515,057.8
9. SDR allocation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11. Other liabilities	399,097.9	16,964.5	14,638.5	4,198.7	79.2	6,626.5	10,761.4	0.0	27,878,802.6	0.0	0.0	27,878,802.6
12. Provisions	213,806.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	213,806.0
13. Revaluation accounts	29,927,385.1	1,255,781.3	1,646,795.2	916,974.9	514,345.0	534,747.3	83,762.1	138,669.5	0.0	0.0	0.0	35,017,440.4
14. Capital and reserves	1,500,000.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,500,000.0
15. Financial result	-48,201,704.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-48,201,704.0
TOTAL LIABILITIES	757,462,570.0	30,399,912.8	61,330,566.3	15,432,222.6	8,010,953.6	541,376.2	94,525.5	138,669.5	27,878,802.6	0.0	2,355,706.2	903,645,086.3
ASSETS												
1. Gold and gold receivables	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58,650,238.7	0.0	58,650,238.7
2. Claims on non-residents denominated in foreign currency	0.0	243,916,250.5	176,045,972.3	78,263,570.9	53,553,959.1	47,918,333.6	29,497,576.7	14,776,073.4	31,411,666.6	0.0	23,934.0	675,407,337.1
6. Other claims on credit institutions denominated in domestic currency	169.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	169.2
7. Debt securities of residents denominated in domestic currency	140,673,185.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	140,673,185.5
10. Other assets	1,274,579.2	20,331.6	131,547.4	494.1	6,082.7	4,195.1	1,189.2	0.0	58,760.0	0.0	0.0	1,497,159.3
Total assets	141,947,933.9	243,936,882.1	176,177,519.7	78,264,065.0	53,560,021.8	47,922,528.7	29,498,765.9	14,776,073.4	31,470,426.6	58,650,238.7	23,934.0	876,228,089.8
LIABILITIES												
1. Banknotes and coins in circulation	368,611,663.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	368,611,663.5
2. Liabilities to credit institutions related to monetary policy operations denominated in domestic currency	55,112,907.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55,112,907.5
3. Other liabilities to credit institutions denominated in domestic currency	940,440.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	940,440.8
4. Liabilities due to issued debt securities denominated in domestic currency	252,181,174.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	252,181,174.3
5. Liabilities to other residents denominated in domestic currency	11,883,806.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11,883,806.3
6. Liabilities to non-residents denominated in domestic currency	4,124,197.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4,124,197.2
7. Liabilities to residents denominated in domestic currency	0.0	13,385,064.0	45,644,484.6	382.0	21.2	0.0	2.5	0.0	0.0	0.0	118.0	59,010,072.3
8. Liabilities to non-residents denominated in foreign currency	0.0	8,036,142.9	26,476,740.5	14,973,691.8	0.0	4,078,560.8	0.0	0.0	0.0	0.0	0.0	53,625,136.0
9. SDR allocation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11. Other liabilities	387,827.4	18,021.2	14,799.6	131.0	6,224.1	2,398.2	1,190.2	0.0	30,871,510.9	0.0	30.0	430,821.7
12. Provisions	15,281,500.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15,281,500.7
13. Revaluation accounts	50,011,393.8	37,808.1	275.0	686.8	4,775.5	1,799.4	0.0	0.0	0.0	0.0	0.0	50,066,738.6
14. Capital and reserves	1,500,000.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,500,000.0
15. Financial result	-27,401,680.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-27,401,680.0
TOTAL LIABILITIES	732,633,231.5	21,517,036.2	72,136,299.7	14,974,891.6	11,020.8	4,082,758.4	1,192.7	0.0	30,871,510.9	0.0	148.0	876,228,089.8

7.1.5. Equity (equity indices) price risk

In 2023, NBP had an exposure to risk of stock price changes through its investment in ETFs that replicate equity indices and in equity index futures. The risk of a change in the prices of ETFs is related to a potential loss of their value, arising mainly from unfavourable changes in the prices of replicated equity indices. The risk of a change in the price of equity index futures is related to a potential loss of value of these contracts, arising mainly from unfavourable changes in the prices of the underlying instrument (equity index). Limits of investment in equity index futures and ETFs, and the criteria of their choice, serve the mitigation of risk related to a change in the value of equity indices.

Daily changes in the market prices of futures are recognised in the financial result on a daily basis, including also on the day of closing the open position in futures, as realised price gains/losses (see Note 12.1).

As at the balance sheet date, ETFs are valued at market price, separately for each ETF holding. In accordance with the accounting principles of NBP, price revaluation gains on ETFs at the end of the year are recorded as revaluation gains on the liabilities side of the balance sheet, while losses on price revaluation of these instruments are debited to NBP's financial result.

In 2023, NBP invested in ETFs on the markets of the United States, euro area, the United Kingdom, Canada and Australia. In 2023 and 2022, NBP invested in equity index futures on the markets of the United States, euro area, the United Kingdom, Canada and Australia.

7.1.6. Risk related to market value of financial assets and liabilities and off-balance-sheet financial instruments

Narodowy Bank Polski values financial assets and liabilities and off-balance-sheet financial instruments using market prices (mark-to-market valuation) or valuation models accepted in market practice (mark-to-model valuation) with prices or market parameters as input factors, with the exception of:

- claims and liabilities due to bank accounts, including deposits and term deposits,
- credits and loans granted,
- held-to-maturity debt securities²⁵,
- debt securities held for monetary policy purposes²⁵,
- banknotes and coins in circulation,
- debt securities issued by NBP,
- other financial assets and liabilities (presented in items A.10 and L.11).

As regards other financial instruments, bearing in mind their nature (e.g. short-term character, uniqueness of the instrument), it was assumed that their balance sheet value approximately equals their market/current value.

²⁵ Debt securities held to maturity and debt securities denominated in domestic currency held for monetary policy purposes are valued at clean price adjusted for the accrued discount and premium, less impairment.

Financial assets and liabilities as well as off-balance-sheet financial instruments are classified into one of the following three levels based on the methods of determining the market value for price valuation used by NBP:

Level 1	Level 2	Level 3
<p>Financial assets and liabilities and off-balance-sheet financial instruments whose market value is determined directly on the basis of (unadjusted) prices quoted on active markets for identical assets, liabilities or off-balance-sheet financial instruments.</p> <p>NBP has classified into this category debt securities and ETFs denominated in foreign currency purchased by NBP, except for debt securities valued by reference to yield curve values.*</p>	<p>Financial assets and liabilities and off-balance-sheet financial instruments whose market value is determined on the basis of valuation models, for which all significant input data are observable in the market directly (as prices) or indirectly (as based on prices).</p> <p>NBP has classified into this category :</p> <ul style="list-style-type: none"> ▪ debt securities priced based on the yield curve values for a given type of securities having the same credit risk of the issuer, ▪ forward transactions in debt securities for the revaluation of which it uses the model with input parameters coming directly from the market. 	<p>Financial assets and liabilities as well as off-balance-sheet financial instruments whose market value is estimated using valuation models for which input data are not based on data observable in the market.</p> <p>As at 31 December 2023 and 31 December 2022, NBP did not classify any financial assets and liabilities and off-balance-sheet financial instruments into this category.</p>

* Gold is also subject to revaluation according to market prices. To measure its value, NBP uses the average market price of gold which is converted into domestic currency at the average NBP exchange rate of the US dollar prevailing as at the balance sheet date.

Financial assets and liabilities and off-balance-sheet financial instruments that are presented in the balance sheet as at 31 December 2023 and 31 December 2022 according to market value, assigned to individual levels, are presented below.

31.12.2023 PLN thousand	Level 1	Level 2	Level 3	Balance-sheet value	Balance sheet item
ASSETS					
Debt securities purchased by NBP	439,229,044.4	20,344,451.8	0.0	459,573,496.2	A.2.2
ETFs	7,884,375.5	0.0	0.0	7,884,375.5	A.2.2
Forward transactions in debt securities (revaluation gains)	0.0	13.0	0.0	13.0	A.10.3
LIABILITIES					
Forward transactions in debt securities (revaluation losses)	0.0	0.0	0.0	0.0	L.11.1

31.12.2022 PLN thousand	Level 1	Level 2	Level 3	Balance-sheet value	Balance sheet item
ASSETS					
Debt securities purchased by NBP	431,279,628.9	40,237,699.8	0.0	471,517,328.7	A.2.2
ETFs	0.0	0.0	0.0	0.0	A.2.2
Forward transactions in debt securities (revaluation gains)	0.0	1,799.4	0.0	1,799.4	A.10.3
LIABILITIES					
Forward transactions in debt securities (revaluation losses)	0.0	51.9	0.0	51.9	L.11.1

In 2023 and 2022 there were no transfers between Level 1 and Level 2.

Narodowy Bank Polski also invests in futures transactions. These contracts are marked to market (Level 1) and settled on a daily basis (see Chapter 2.4 and Note 12.1).

7.2. Operational risk

The concept of operational risk in NBP includes the possibility of incurring financial or non-financial damages, including failure to carry out tasks or a negative impact on the reputation of NBP, both resulting from inadequate or failed internal processes and systems as well as personnel or external events.

In 2023, the operational risk in NBP was divided into five sub-categories: safety risk, personnel risk, legal risk, cybersecurity risk and technological risk, which includes ICT technological risk (related, inter alia, to IT and ICT systems, IT software and hardware) and non-ICT technological risk (related, inter alia, to construction facilities and elements of mobile equipment).

The operational risk mitigation mechanisms used at NBP include, in particular:

- external and internal regulations,
- the scope of job responsibilities and division of duties,
- data reconciliation, and the “four-eyes” principle,
- the system of (financial, time) limits and restrictions,
- introduction of access control system as well as IT and telecommunications, physical and electronic safeguards,
- generation of back-up copies of electronic files,
- development of contingency and evacuation plans as well as training and tests related to securing business continuity in NBP,
- insurance,
- control and internal audit.

In 2023, operational risks in NBP activity were monitored on an ongoing basis. In 2023, the Commission for Operational Risk Management held 12 sessions during which topics were discussed related to the assessment of the current activities aimed to ensure the proper execution of NBP tasks, including

risks related to cybersecurity contingency plans. The level of risk at NBP in 2023 was monitored on an ongoing basis and mitigating measures were also systematically adopted.

7.3. Tax risk

Due to the legal status of NBP and its specificity resulting from the functions it performs as a central bank, the scope of the provisions of tax law and provisions relating to other public levies applicable to NBP includes, under:

- the Tax on Goods and Services (VAT) – splitting the activity of NBP into activity not subject to regulations on VAT in respect of which NBP engages as public authority and is bound by provisions of law, in particular: Constitution of the Republic of Poland, the Act on NBP, the Public Finance Act²⁶, the Foreign Exchange Law²⁷ and the Banking Law Act²⁸, and, in the remaining scope, the activity subject to regulations on VAT, in respect of which NBP usually acts as VAT taxpayer,
- the Corporate Income Tax (CIT)²⁹ – benefiting from full personal exemption as CIT taxpayer and being subject to obligations as a tax remitter of withholding tax on general terms,
- the Personal Income Tax (PIT) – being subject to obligations as a tax remitted, including with respect to withholding tax, on general terms,
- the Tax on Civil Law Activities and the Stamp Duty – benefiting from full personal exemption from this tax and this duty, on a par with budgetary units,
- the Immovable Property Tax – being subject to obligations as a taxpayer of this tax on general terms,
- the Tax on Certain Financial Institutions – NBP is not subject to this tax.

At NBP, internal rules apply which define, taking into account the above legal context, the scope of responsibilities for NBP's tax settlements. The monitoring and management of tax risk are centralised at the Accounting and Finance Department. At NBP, the set action framework is oriented towards ensuring security, transparency, predictability and rationality of tax settlements. Accuracy, timeliness and completeness of tax settlements is subject to periodic verification (at least every 3 years) by an external, professional entity through tax review.

Warsaw, 21 March 2024

Director of the Accounting
and Finance Department
of Narodowy Bank Polski

/-/ Krzysztof Kruszewski

Management Board
of Narodowy Bank Polski

/-/ Adam Glapiński
/-/ Marta Kightley
/-/ Adam Lipiński
/-/ Marta Gajęcka
/-/ Paweł Mucha
/-/ Piotr Pogonowski
/-/ Artur Soboń
/-/ Rafał Sura
/-/ Paweł Szalamacha

²⁶ The Public Finance Act of 27 August 2009 (Journal of Laws of 2023, item 1270, as amended).

²⁷ The Act of 27 July 2022 – Foreign Exchange Law (Journal of Laws of 2022, item 309).

²⁸ The Act of 29 August 1997 – Banking Law (Journal of Laws of 2023, item 2488, as amended).

²⁹ In accordance with the Act on NBP, 95% of NBP's profit is remitted to the State budget (see Note 9).



This document is a free translation of the Polish original. Terminology current in Anglo-Saxon countries has been used where practicable for the purposes of this translation in order to aid understanding. The binding Polish original should be referred to in matters of interpretation.

Independent Auditor's Report

To the Monetary Policy Council of Narodowy Bank Polski

Opinion

We have audited the accompanying annual financial statements of Narodowy Bank Polski (“NBP”), which comprise:

- the balance sheet of NBP as at 31 December 2023;
- the profit and loss account of NBP for the year ended 31 December 2023;
- the notes

(all together “financial statements”).

In our opinion, the accompanying financial statements of NBP:

- give a true and fair view of the financial position of NBP as at 31 December 2023 and of its financial performance for the financial year then ended in accordance with the act on Narodowy Bank Polski of 29 August 1997 (the “Act on NBP”), Resolution No. 13/2020 of the Monetary Policy Council of 6 November 2020 on the accounting principles of Narodowy Bank Polski, specimen balance sheet, profit and loss account and contents of notes, Resolution No. 6/2019 of the Monetary Policy Council of 5 November 2019 on the principles for creating and releasing the provision against the foreign exchange rate risk of the zloty at Narodowy Bank Polski and Resolution No. 64/2020 of the Management Board of Narodowy Bank Polski of 21 December 2020 on the principles for organization of accounting in Narodowy Bank Polski (all together “the legal basis for preparation of the financial statements of NBP”);
- respects, with regard to form and content, with applicable laws and the provisions of the NBP's articles of association;
- have been prepared, in all material respects, on the basis of properly maintained accounting records in accordance with Resolution No. 64/2020 of the Management Board of Narodowy Bank Polski of 21 December 2020 on the principles for organization of accounting in Narodowy Bank Polski.

KPMG Audyt spółka z ograniczoną odpowiedzialnością sp.k.

ul. Inflancka 4A, 00-189 Warsaw, Poland
tel. +48 (22) 528 11 00, fax +48 (22) 528 10 09, kpmg@kpmg.pl

KPMG Audyt Spółka z ograniczoną odpowiedzialnością sp.k., a Polish limited partnership and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee.

Company registered at the District Court for the capital city of Warsaw in Warsaw, 12th Commercial Division of the National Business Register.

KRS 0000339379
NIP: 527-26-15-362
REGON: 142078130



Basis for Opinion

We conducted our audit in accordance with:

- International Standards on Auditing as adopted by the National Council of Statutory Auditors and the Council of Polish Agency for Audit Oversight as National Standards on Auditing (the “NSA”); and
- the act on statutory auditors, audit firms and public oversight dated 11 May 2017 (the “Act on statutory auditors”).

Our responsibilities under those standards and regulations are further described in the Auditor’s Responsibility for the Audit of the Financial Statements section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence and Ethics

We are independent of NBP in accordance with International Ethics Standards Board for Accountants International Code of Ethics for Professional Accountants (including International Independence Standards) (“IESBA Code”) as adopted by the resolution of the National Council of Statutory Auditors, together with the ethical requirements that are relevant to our audit of the financial statements in Poland and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. During our audit the key statutory auditor and the audit firm remained independent of NBP in accordance with requirements of the Act on statutory auditors.

Responsibility of the Management Board of NBP for the Financial Statements

The Management Board of NBP is responsible for the preparation, on the basis of properly maintained accounting records, of financial statements that give a true and fair view in accordance with the legal basis for the preparation of the financial statements of NBP and with the adopted accounting principles (policy), with laws applicable to NBP and for such internal control as the Management Board of NBP determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Management Board of NBP is responsible for assessing the NBP’s ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting principles in accordance with applicable laws, in particular Article 58 of the Act on NBP.

Auditor’s Responsibility for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors’ report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with NSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

The scope of audit does not include assurance on the future viability of NBP or on the efficiency or effectiveness with which the Management Board of NBP has conducted or will conduct the affairs of NBP.

As part of an audit in accordance with NSAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit



evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;

- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the NBP's internal control;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Management Board of NBP;
- conclude on the appropriateness of the Management Board of NBP's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the NBP's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report on the audit of the financial statements to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report on the audit of the financial statements, including those related to Article 58 of the Act on NBP;
- evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the Management Board of NBP regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

On behalf of audit firm

KPMG Audyt Spółka z ograniczoną odpowiedzialnością sp.k.

Registration No. 3546

Signed on the Polish original

Marcin Podsiadły

Key Statutory Auditor

Registration No. 12774

Limited Partner, Proxy

Signed on the Polish original

Tadeusz de Ville

Proxy

Warsaw, 25 March 2024

Statistical annex

Table I. Main indicators

Period	1. Sold production of industry			2. Sale of construction and assembly production			3. Price indices of sold production of industry		4. Price indices of construction and assembly production		5. Price indices of consumer goods and services	
	current prices	constant prices		current prices	constant prices		corresponding period of previous year = 100	previous month = 100	corresponding period of previous year = 100	previous month = 100	corresponding period of previous year = 100	previous month = 100
	PLN million	corresponding period of previous year = 100	previous month = 100	PLN million	corresponding period of previous year = 100	previous month = 100						
	1	2	3	4	5	6	7	8	9	10	11	12
December 2022	211 915.9	100.6	93.6	16 507.6	99.1	117.2	120.5	100.6	114.4	100.6	116.6	100.1
January 2023	210 884.9	101.4	97.0	7 419.3	102.0	44.7	120.1	102.1	113.6	100.4	116.6	102.5
February	209 501.9	98.4	100.4	8 228.9	106.6	110.6	118.2	99.5	112.9	100.6	118.4	101.2
March	234 908.9	96.3	113.8	10 818.0	98.4	130.6	110.3	99.4	112.0	100.5	116.1	101.1
April	198 009.2	93.6	85.8	10 512.8	101.1	96.4	106.2	98.7	111.4	100.7	114.7	100.7
May	202 181.0	96.6	104.7	11 905.4	99.4	112.2	102.8	98.1	110.9	100.9	113.0	100.0
June	202 138.9	98.4	101.4	12 944.6	101.6	107.7	100.3	99.2	110.3	100.9	111.5	100.0
July	185 620.8	97.3	92.2	12 136.0	101.1	93.1	97.9	98.9	110.0	100.7	110.8	99.8
August	188 142.7	97.8	101.2	13 139.9	103.5	107.5	97.1	99.9	109.7	100.7	110.1	100.0
September	202 560.7	96.7	108.0	14 730.0	111.5	111.4	97.3	100.3	108.9	100.7	108.2	99.6
October	211 919.7	102.0	104.4	15 190.9	109.8	102.5	95.8	99.4	108.2	100.6	106.6	100.3
November	210 896.0	99.7	100.3	15 703.8	103.9	103.1	94.9	98.8	108.0	100.5	106.6	100.7
December	191 052.1	96.5	90.5	20 329.7	114.0	128.6	93.1	98.6	107.5	100.3	106.2	100.1

Period	6. Retail sales of commodities constant prices	7. Industrial new orders	8. Dwellings in which construction has begun	9. Dwellings completed	10. Employed persons in the enterprise sector	11. Average paid employment in the enterprise sector	12. Average monthly gross wages and salaries in the enterprise sector	13. Registered unemployed	14. Registered unemployment rate
	corresponding period of previous year = 100	corresponding period of previous year = 100	thousands	thousands	persons in thousands	persons in thousands	PLN	persons in thousands	%
	13	14	15	16	17	18	19	20	21
December 2022	100.2	92.1	9.9	23.5	6 846	6 505	7 330	812	5.2
January 2023	100.1	115.4	9.4	19.1	6 836	6 530	6 884	858	5.5
February	95.0	97.8	10.9	15.8	6 829	6 526	7 066	865	5.6
March	92.7	108.8	18.3	20.5	6 834	6 517	7 508	847	5.4
April	92.7	95.5	14.5	20.8	6 835	6 524	7 431	822	5.3
May	93.2	91.4	16.4	17.7	6 833	6 518	7 182	802	5.1
June	95.3	94.9	16.1	18.2	6 833	6 513	7 335	784	5.1
July	96.0	81.9	16.2	14.9	6 828	6 514	7 485	782	5.0
August	97.3	80.8	18.0	17.8	6 820	6 502	7 369	783	5.0
September	99.7	77.2	19.1	16.3	6 820	6 496	7 380	776	5.0
October	102.8	87.9	19.7	20.7	6 825	6 494	7 545	770	5.0
November	99.7	82.7	16.1	18.2	6 831	6 494	7 670	773	5.0
December	97.7	89.4	14.4	21.3	6 824	6 495	8 033	788	5.1

Table I. Main indicators, cont'd

Period	15. Consumer confidence indicators		16. General business climate indicator			17. The state budget			
	current	leading	manufacturing	construction	trade and repair of motor vehicles	revenue	expenditure	budget result	balance of foreign financing
	balance					PLN million	PLN million	PLN million	PLN million
	22	23	24	25	26	27	28	29	30
December 2022	-41.9	-30.7	-19.5	-23.9	-11.3	504 820.8	517 398.9	-12 578.1	14 870.3
January 2023	-38.1	-27.6	-18.2	-21.7	-9.4	54 542.7	43 310.3	11 232.3	5 046.0
February	-36.0	-25.3	-14.0	-20.4	-8.6	93 140.1	93 187.5	-47.4	12 011.9
March	-35.6	-22.6	-12.9	-16.9	-5.5	124 691.1	136 719.6	-12 028.4	21 952.1
April	-32.2	-19.7	-10.8	-12.5	-2.4	173 652.0	183 678.8	-10 026.8	24 661.6
May	-29.9	-15.3	-12.2	-11.4	-3.1	216 356.1	237 207.6	-20 851.5	28 132.7
June	-28.2	-14.8	-11.9	-9.7	-1.9	270 606.3	283 288.5	-12 682.2	26 903.5
July	-24.9	-10.9	-14.0	-7.9	-2.3	324 012.5	337 103.3	-13 090.8	27 244.6
August	-22.3	-10.5	-12.0	-8.0	-2.9	373 759.2	390 369.7	-16 610.5	26 911.3
September	-20.3	-9.4	-12.8	-9.5	-3.5	417 988.3	452 682.6	-34 694.3	27 877.8
October	-17.9	-8.1	-12.9	-10.4	-3.3	475 392.8	511 812.3	-36 419.5	25 176.1
November	-15.1	-7.4	-12.1	-10.2	-0.2	530 330.5	572 973.7	-42 643.2	18 063.4
December	-15.2	-6.4	-14.4	-13.2	-1.9	574 121.5	659 687.1	-85 565.6	18 927.8

Table II. Non-financial enterprises statistics

Period ¹	2. Financial results of non-financial enterprises								
	1. Non-financial corporations	Total revenues		Total costs		Gross financial result (balance)	Net financial result (balance)	Cost level indicator	Net turnover profitability indicator
		total	net revenues from sale of goods and materials	total	costs of products sold				
	number of enterprises	PLN million	PLN million	PLN million	PLN million	PLN million	PLN million	%	%
1	2	3	4	5	6	7	8	9	
January–December 2022	17 713	5 046 969.6	2 978 854.8	4 742 003.3	3 000 974.5	304 966.2	251 429.1	94.0	5.0
January–March 2023	17 036	1 333 911.9	786 023.2	1 260 926.0	797 462.9	72 985.9	58 785.9	94.5	4.4
January–June 2023	17 360	2 647 610.6	1 542 422.4	2 484 990.0	1 570 213.1	162 620.6	134 080.8	93.9	5.1
January–September 2023	17 587	3 910 184.1	2 287 525.9	3 686 073.2	2 337 006.8	224 110.9	185 002.2	94.3	4.7
January–December 2023	17 808	5 289 216.3	3 102 733.3	5 005 122.7	3 174 331.1	284 093.6	228 567.9	94.6	4.3

Period ¹	3. Current assets and short-term liabilities of non-financial enterprises (end of period)						
	Current assets				Short-term liabilities		Second degree financial liquidity indicator
	total	short-term receivables		short-term investments	total	resulting from deliveries and services	
		total	resulting from deliveries and services				
PLN million	PLN million	PLN million	PLN million	PLN million	PLN million	%	
10	11	12	13	14	15	16	
January–December 2022	1 766 606.0	751 175.1	525 841.6	441 889.9	1 131 884.6	556 044.2	105.4
January–March 2023	1 902 719.3	845 612.8	553 702.6	454 070.6	1 209 541.5	552 294.3	107.5
January–June 2023	1 864 172.3	836 776.4	546 666.8	454 833.4	1 220 475.9	524 268.4	105.8
January–September 2023	1 908 118.1	853 008.0	543 332.3	483 259.6	1 247 275.2	540 460.9	107.1
January–December 2023	1 939 915.8	867 067.0	538 206.3	509 382.0	1 283 434.4	550 026.0	107.2

¹ Data on accrued base.

Table III. Financial market – basic information

Period	1. NBP interest rates				
	reference rate	lombard rate	deposit rate	rediscount rate	discount rate
	%	%	%	%	%
	1	2	3	4	5
December 2022	6.75	7.25	6.25	6.80	6.85
January 2023	6.75	7.25	6.25	6.80	6.85
February	6.75	7.25	6.25	6.80	6.85
March	6.75	7.25	6.25	6.80	6.85
April	6.75	7.25	6.25	6.80	6.85
May	6.75	7.25	6.25	6.80	6.85
June	6.75	7.25	6.25	6.80	6.85
July	6.75	7.25	6.25	6.80	6.85
August	6.75	7.25	6.25	6.80	6.85
September	6.00	6.50	5.50	6.05	6.10
October	5.75	6.25	5.25	5.80	5.85
November	5.75	6.25	5.25	5.80	5.85
December	5.75	6.25	5.25	5.80	5.85

Period	2. Minimum reserve requirements						
	reserve ratio for PLN deposits		reserve ratio for foreign currency deposits		reserve ratio for repo operations	remuneration of holdings of minimum reserves ¹	minimum reserves
	overnight	with agreed maturity	overnight	with agreed maturity			
	%	%	%	%	%	%	PLN million
	6	7	8	9	10	11	12
December 2022	3.5	3.5	3.5	3.5	0.0	6.75	65 569.9
January 2023	3.5	3.5	3.5	3.5	0.0	6.75	65 769.9
February	3.5	3.5	3.5	3.5	0.0	6.75	65 289.4
March	3.5	3.5	3.5	3.5	0.0	6.75	66 078.3
April	3.5	3.5	3.5	3.5	0.0	6.75	66 078.3
May	3.5	3.5	3.5	3.5	0.0	6.75	67 143.3
June	3.5	3.5	3.5	3.5	0.0	6.75	67 409.1
July	3.5	3.5	3.5	3.5	0.0	6.75	67 620.6
August	3.5	3.5	3.5	3.5	0.0	6.75	68 821.5
September	3.5	3.5	3.5	3.5	0.0	6.00	68 821.5
October	3.5	3.5	3.5	3.5	0.0	5.75	70 228.3
November	3.5	3.5	3.5	3.5	0.0	5.75	71 051.2
December	3.5	3.5	3.5	3.5	0.0	5.75	71 051.2

¹ From April 2020 interest on reserve requirement is at the level of the NBP reference rate.

Table III. Financial market – basic information, cont'd

Period	3. Bills sale auctions					
	Number of tenders during the month	Bids offered for sale	Demand declared by bidders	Bids accepted	Yield average	Bills outstanding from tender sales at the end of the month at purchase prices
	–	PLN million	PLN million	PLN million	%	PLN million
13	14	15	16	17	18	
December 2022	0	0.0	0.0	0.0	0.0	0.0
January 2023	0	0.0	0.0	0.0	0.0	0.0
February	0	0.0	0.0	0.0	0.0	0.0
March	0	0.0	0.0	0.0	0.0	0.0
April	0	0.0	0.0	0.0	0.0	0.0
May	0	0.0	0.0	0.0	0.0	0.0
June	0	0.0	0.0	0.0	0.0	0.0
July	0	0.0	0.0	0.0	0.0	0.0
August	0	0.0	0.0	0.0	0.0	0.0
September	0	0.0	0.0	0.0	0.0	0.0
October	0	0.0	0.0	0.0	0.0	0.0
November	0	0.0	0.0	0.0	0.0	0.0
December	0	0.0	0.0	0.0	0.0	0.0

Period	4. NBP bills sale auctions					
	Number of tenders during the month	Bids offered for sale	Demand declared by bidders	Bids accepted	Yield average	Bills outstanding from tender sales at the end of the month at purchase prices
	–	PLN million	PLN million	PLN million	%	PLN million
19	20	21	22	23	24	
December 2022	8	1 390 000.0	1 152 103.0	1 152 103.0	6.75	252 086.8
January 2023	9	1 241 000.0	1 105 059.1	1 105 059.1	6.75	238 012.6
February	6	1 144 000.0	1 063 934.7	1 063 934.7	6.75	242 611.2
March	9	1 537 000.0	1 392 302.3	1 392 302.3	6.75	259 457.8
April	9	1 312 000.0	1 149 327.3	1 149 327.3	6.75	290 847.2
May	8	1 286 000.0	1 207 374.6	1 207 374.6	6.75	285 445.0
June	9	1 623 000.0	1 515 399.9	1 514 679.9	6.75	284 916.2
July	7	1 329 000.0	1 215 367.6	1 215 367.6	6.75	274 937.6
August	9	1 392 000.0	1 270 417.8	1 270 417.8	6.75	272 373.7
September	10	1 684 000.0	1 479 680.7	1 479 680.7	6.15	304 681.3
October	6	1 258 000.0	1 202 051.9	1 202 051.9	5.76	276 037.6
November	8	1 333 000.0	1 241 337.6	1 241 337.6	5.75	278 838.3
December	9	1 744 000.0	1 458 694.1	1 458 694.1	5.75	302 925.6

Table III. Financial market – basic information, cont'd

Period	5. Warsaw Stock Exchange (WSE) – trading session data										
	domestic and foreign equities on WSE	turnover value	turnover ratio	domestic equities		WIG20		mWIG40		sWIG80	
				market capitalization	PE ratio	index value	turnover value	index value	turnover value	index value	turnover value
	–	PLN million	%	PLN million	–	–	–	–	–	–	–
	25	26	27	28	29	30	31	32	33	34	35
December 2022	415	17 037.8	33.3	574 669.5	7.1	1 792.0	14 137.2	4 154.3	1 886.9	17 496.2	686.7
January 2023	418	26 512.5	46.6	610 021.6	7.1	1 902.3	22 106.4	4 412.0	2 842.9	19 384.5	1 030.5
February	418	18 639.9	35.6	599 690.0	6.9	1 847.9	15 210.6	4 421.5	2 077.1	19 586.5	876.8
March	416	24 648.4	43.9	583 902.8	6.5	1 758.6	20 247.8	4 504.0	2 708.0	20 248.1	1 214.5
April	417	17 552.8	38.7	621 486.6	6.7	1 923.1	13 601.6	4 600.4	2 401.8	21 140.8	1 213.2
May	417	22 173.3	37.9	609 722.2	6.3	1 894.5	17 655.1	4 549.8	2 781.6	20 990.9	1 321.0
June	415	24 859.2	41.5	663 771.3	6.8	2 060.4	20 725.1	4 852.0	2 688.5	21 701.3	1 048.1
July	415	19 336.8	31.6	705 637.5	7.2	2 193.6	14 791.5	5 350.4	2 971.4	21 948.8	980.8
August	414	20 035.6	32.9	663 098.7	6.9	2 027.4	15 252.7	5 190.7	3 473.3	21 064.7	807.4
September	412	22 105.0	38.5	631 000.7	6.8	1 915.6	18 552.9	4 936.4	2 458.9	20 674.1	665.7
October	414	30 118.2	48.2	696 371.7	7.1	2 149.7	26 339.5	5 167.2	2 814.8	20 849.9	563.1
November	412	24 714.2	38.4	724 771.5	7.5	2 215.3	21 021.0	5 538.3	2 532.4	21 494.6	662.8
December	413	23 748.3	39.0	760 213.1	7.6	2 343.0	19 718.0	5 785.2	2 569.5	22 904.5	941.7

Table IV. Average exchange rates of USD and EUR (in PLN)

Period	1. Average exchange rates – end of the month			2. Weighted average exchange rates – monthly average	
	PLN / 1 USD	PLN / 1 EUR	USD / EUR ratio	PLN / 1 USD	PLN / 1 EUR
	PLN	PLN	PLN	PLN	PLN
	1	2	3	4	5
December 2022	4.4018	4.6899	1.0655	4.4209	4.6798
January 2023	4.3480	4.7089	1.0830	4.3571	4.6968
February	4.4475	4.7170	1.0606	4.4264	4.7427
March	4.2934	4.6755	1.0890	4.3914	4.6925
April	4.1753	4.5889	1.0991	4.2333	4.6414
May	4.2559	4.5376	1.0662	4.1791	4.5411
June	4.1066	4.4503	1.0837	4.1215	4.4648
July	3.9995	4.4135	1.1035	4.0273	4.4455
August	4.1074	4.4684	1.0879	4.0888	4.4599
September	4.3697	4.6356	1.0609	4.2974	4.5940
October	4.1684	4.4475	1.0670	4.2758	4.5186
November	3.9810	4.3492	1.0925	4.0787	4.4033
December	3.9350	4.3480	1.1050	3.9672	4.3323

Table V. Average MFI interest rates on outstanding amounts, PLN denominated (in %)

Category	Deposits and other liabilities					
Sector	Households and non-profit institutions serving households			Non-financial corporations		Total
Original maturity	overnight	with agreed maturity	overnight	with agreed maturity		
Period	1	2	3	4	5	
December 2022	0.8	5.2	1.2	5.7	2.3	
January 2023	0.9	5.3	1.1	5.7	2.3	
February	0.9	5.4	1.2	5.6	2.4	
March	0.9	5.4	1.2	5.6	2.5	
April	0.9	5.3	1.3	5.5	2.5	
May	0.9	5.5	1.2	5.4	2.5	
June	0.9	5.4	1.1	5.4	2.5	
July	0.9	5.5	1.2	5.4	2.5	
August	0.8	5.4	1.3	5.4	2.5	
September	0.8	5.3	1.2	5.1	2.4	
October	0.8	5.1	1.1	4.7	2.3	
November	0.7	5.0	1.0	4.5	2.2	
December	0.7	4.8	1.1	4.3	2.1	

Category	Loans and other claims								
Sector	Households and non-profit institutions serving households					Non-financial corporations			Total
Original maturity	revolving loans and overdrafts	credit cards	for consumption ¹	for house purchases	total, overdrafts included	revolving loans and overdrafts	credit cards	with original maturity	
Period	6	7	8	9	10	11	12	13	14
December 2022	13.4	14.0	11.3	5.3	7.7	8.5	8.3	9.2	8.1
January 2023	13.4	14.5	11.3	5.1	7.6	8.6	9.5	9.2	8.0
February	13.5	14.1	11.6	7.9	9.4	8.6	8.7	9.1	9.3
March	13.4	14.2	11.3	7.4	9.0	8.4	8.1	9.0	9.0
April	13.2	13.9	11.4	5.6	7.9	8.4	8.7	9.0	8.2
May	13.4	14.3	11.3	7.6	9.1	8.4	8.2	9.1	9.1
June	13.4	14.1	11.4	7.3	9.0	8.5	8.0	9.1	9.0
July	13.3	14.0	11.4	5.2	7.7	8.5	8.1	9.1	8.0
August	13.4	14.3	11.4	7.5	9.1	8.5	8.0	9.0	9.0
September	13.1	13.6	11.3	7.4	9.0	8.3	7.8	8.9	8.9
October	12.7	13.5	11.1	5.4	7.7	7.7	7.0	8.4	7.8
November	12.6	13.1	11.0	7.3	8.7	7.5	7.4	8.1	8.5
December	12.4	12.8	10.8	6.5	8.2	7.4	6.8	8.1	8.1

¹ Overnight excluded.

Table VI. Average MFI interest rates on new and renegotiated business, PLN denominated (in %)**A. Deposits and other liabilities**

Sector	Deposits and other liabilities											
	Households and non-profit institutions serving households						Non-financial corporations					
Category	with agreed maturity						with agreed maturity					
	up to 1 month	over 1 and up to 3 months	over 3 and up to 6 months	over 6 months and up to 1 year	over 1 year	total	up to 1 month	over 1 and up to 3 months	over 3 and up to 6 months	over 6 months and up to 1 year	over 1 year	total
Period	1	2	3	4	5	6	7	8	9	10	11	12
December 2022	6.2	6.3	6.4	6.5	n/a	6.3	5.4	6.0	6.5	5.9	4.5	5.5
January 2023	5.0	6.2	6.4	6.4	n/a	6.0	5.3	5.9	6.1	6.0	5.3	5.5
February	4.8	6.1	5.9	6.1	4.2	5.8	5.3	5.9	5.9	5.7	2.9	5.4
March	4.9	6.0	5.8	5.9	5.5	5.8	5.2	5.7	5.9	5.9	5.3	5.3
April	5.0	5.8	6.0	5.7	4.9	5.7	5.1	5.7	5.6	5.5	5.0	5.3
May	5.0	5.8	6.0	5.7	4.9	5.7	5.2	5.7	5.7	5.7	4.8	5.3
June	5.1	5.6	6.7	5.8	5.1	5.8	5.3	5.7	5.8	5.4	4.8	5.4
July	4.9	5.6	5.8	5.9	4.9	5.5	5.3	5.7	5.6	5.4	3.7	5.4
August	4.9	5.1	5.7	5.8	5.0	5.3	5.2	5.6	5.3	5.2	n/a	5.3
September	4.7	4.8	5.4	5.4	4.7	5.0	4.5	4.9	4.8	4.3	2.8	4.6
October	4.4	4.5	5.1	5.0	3.9	4.6	4.2	4.5	4.5	4.2	3.9	4.3
November	4.2	4.4	5.0	4.7	3.8	4.5	4.1	4.6	4.4	4.1	3.1	4.2
December	4.3	4.3	4.8	4.6	4.1	4.4	3.9	4.3	4.4	3.9	3.6	4.0

n/a – category not available due to confidentiality issues.

Table VI. Average MFI interest rates on new and renegotiated business, PLN denominated (in %)**B. Loans and other claims**

Sector	Loans and other claims											
	Households and non-profit institutions serving households							Non-financial corporations				
Category	for consumption		for house purchases		for individual entrepreneurs	for other purposes	Total	Loans			Total	Total
								up to PLN 1 million, overdrafts excluded	over PLN 1 million up to 4 million, overdrafts excluded	over PLN 4 million, overdrafts excluded		
Interest rate type ¹	NDER	APRC	NDER	APRC	NDER	NDER	NDER	NDER	NDER	NDER	NDER	NDER
Period	13	14	15	16	17	18	19	20	21	22	23	24
December 2022	11.6	15.5	9.2	10.0	11.9	10.4	11.0	8.4	9.1	9.0	8.7	9.7
January 2023	12.1	16.1	8.9	9.7	11.5	9.8	11.2	8.3	8.7	9.6	9.2	10.0
February	12.0	15.8	8.7	9.4	11.8	10.1	11.1	8.2	8.9	8.9	8.6	9.8
March	11.9	15.5	8.7	9.4	11.4	10.2	10.9	8.2	8.7	9.3	8.8	9.9
April	12.1	16.0	8.7	9.5	11.5	10.3	11.0	8.2	8.9	9.2	8.7	9.9
May	12.3	16.4	8.6	9.4	11.5	10.2	11.0	8.3	8.9	9.7	9.2	10.0
June	12.3	16.0	8.6	9.4	11.5	10.0	11.0	8.5	8.8	9.3	8.9	10.0
July	12.3	16.3	8.5	9.3	11.5	9.8	10.9	8.3	9.1	9.1	8.8	9.9
August	11.8	15.6	8.2	8.8	11.3	9.7	10.4	8.2	8.9	8.9	8.6	9.7
September	12.0	15.6	8.0	8.6	10.9	9.6	10.1	7.7	8.3	8.3	8.1	9.2
October	12.0	15.5	7.7	8.4	10.2	9.3	9.8	7.3	7.8	7.9	7.6	9.0
November	11.2	14.2	7.7	8.4	10.6	9.5	9.5	7.1	7.8	8.0	7.6	8.8
December	11.5	14.5	7.7	8.3	10.1	10.0	9.6	7.3	7.8	8.0	7.8	8.7

¹ Narrowly Defined Effective Rate (NDER) or Annual Percentage Rate of Charge (APRC).

Table VII. Average MFI interest rates on new and renegotiated business, EUR denominated (in %)**A. Deposits and other liabilities**

Sector	Deposits											
	Households and non-profit institutions serving households						Non-financial corporations					
Category	with agreed maturity						with agreed maturity					
	up to 1 month	over 1 and up to 3 months	over 3 and up to 6 months	over 6 months and up to 1 year	over 1 year	total	up to 1 month	over 1 and up to 3 months	over 3 and up to 6 months	over 6 months and up to 1 year	over 1 year	total
Period	1	2	3	4	5	6	7	8	9	10	11	12
December 2022	0.5	0.3	1.0	1.3	n/a	0.6	n/a	1.1	n/a	1.0	0.1	n/a
January 2023	0.6	0.4	0.6	1.2	2.7	0.6	n/a	1.4	n/a	1.7	0.0	n/a
February	0.6	0.6	1.0	1.3	n/a	0.7	1.2	1.6	1.5	2.2	0.0	1.3
March	0.6	0.6	0.8	1.2	n/a	0.7	1.2	1.2	1.4	1.3	0.6	1.2
April	0.7	0.6	0.9	1.4	0.9	0.7	1.0	1.3	1.4	1.9	0.2	1.1
May	0.7	0.9	1.5	1.2	1.7	1.0	1.1	1.7	1.9	1.9	0.0	1.2
June	0.7	0.7	1.2	1.4	1.4	0.8	1.3	1.8	2.1	1.9	n/a	1.3
July	0.8	0.6	1.0	1.8	n/a	0.8	1.4	1.7	1.4	1.9	0.4	1.4
August	0.7	0.9	1.3	2.4	1.7	1.1	1.5	2.1	1.9	1.7	n/a	1.6
September	0.7	0.7	1.2	1.8	1.7	0.9	1.4	1.9	2.2	2.5	n/a	1.5
October	0.8	0.9	1.9	2.4	n/a	1.1	1.8	2.1	2.1	2.6	n/a	1.8
November	0.7	0.9	1.4	2.4	n/a	1.1	1.7	2.0	2.3	1.9	n/a	1.7
December	0.9	1.1	1.9	2.5	0.8	1.3	1.6	1.7	2.9	n/a	n/a	1.6

n/a – category not available due to confidentiality issues.

Table VII. Average MFI interest rates on new and renegotiated business, EUR denominated (in %)**B. Loans and other claims**

Sector	Loans											
	Revolving loans and overdrafts ¹	Households and non-profit institutions serving households						Non-financial corporations				
		For consumption		For house purchases		For other purposes	total, overdrafts excluded	revolving loans and overdrafts ¹	up to EUR 1 million, overdrafts excluded	over EUR 1 million, overdrafts excluded	total, overdrafts excluded	total, overdrafts excluded
total	annual percentage rate of charge (APRC)	total	annual percentage rate of charge (APRC)									
Period	13	14	15	16	17	18	19	20	21	22	23	24
December 2022	2.7	n/c	n/c	6.2	10.0	3.8	4.8	2.9	3.5	4.2	4.0	4.0
January 2023	3.1	n/c	n/c	6.6	11.0	4.5	5.4	3.3	3.6	4.4	4.1	4.2
February	3.4	n/a	n/a	7.0	12.0	4.5	5.5	3.6	4.1	4.9	4.6	4.7
March	3.7	n/c	n/c	7.1	12.1	4.5	6.0	3.9	4.2	5.2	5.0	5.0
April	4.0	n/c	n/c	6.8	11.8	4.6	5.5	4.2	4.6	5.6	5.3	5.3
May	4.2	n/a	n/a	7.6	13.3	n/a	5.5	4.3	4.6	5.7	5.5	5.5
June	4.5	n/c	n/c	8.0	13.7	5.4	6.2	4.6	5.0	5.9	5.6	5.7
July	4.6	n/c	n/c	n/a	n/a	6.3	7.2	4.8	5.2	5.8	5.7	5.7
August	4.9	n/c	n/c	7.6	13.8	6.0	6.9	5.0	5.2	6.2	5.9	6.0
September	5.0	n/c	n/c	7.9	15.7	6.1	7.2	5.1	5.4	5.9	5.8	5.8
October	5.2	n/c	n/c	7.7	14.6	6.3	7.2	5.2	5.4	6.4	6.1	6.2
November	5.3	n/c	n/c	8.0	15.4	6.1	7.6	5.3	5.2	6.6	6.2	6.2
December	5.3	n/c	n/c	n/a	n/c	6.3	7.7	5.2	5.3	6.0	6.0	6.0

¹ Category calculated on the basis of outstanding amounts. Excluded from “total” average.

n/c – category not collected.

n/a – category not available due to confidentiality issues.

Table VIII. Aggregated balance sheet of other monetary financial institutions
(stocks in PLN million)

A. Assets

Period	Assets					Liabilities			
	Cash in other monetary financial institutions' vaults	Loans and other claims on domestic residents	Monetary financial institutions	General government	Other domestic residents ¹	Debt securities	Monetary financial institutions	General government	Other domestic residents ¹
	1	2	3	4	5	6	7	8	9
December 2022	14 581.3	1 554 368.2	143 143.6	97 031.5	1 314 193.2	759 884.3	308 924.9	388 770.3	62 189.2
January 2023	13 895.6	1 586 026.1	162 061.0	107 816.7	1 316 148.5	738 177.0	295 602.7	381 449.3	61 124.9
February	13 492.3	1 591 219.2	161 339.9	107 677.4	1 322 202.0	754 807.5	300 160.0	393 101.2	61 546.3
March	13 588.8	1 584 341.2	160 331.0	96 173.2	1 327 837.0	779 913.7	317 423.7	400 883.2	61 606.7
April	14 386.4	1 543 979.3	126 245.5	94 742.0	1 322 991.7	819 188.7	352 017.6	406 972.3	60 198.8
May	13 859.5	1 558 145.2	142 208.7	94 513.2	1 321 423.3	817 498.5	350 524.9	407 641.0	59 332.6
June	14 014.0	1 566 450.4	149 778.1	93 538.1	1 323 134.2	830 418.0	349 500.7	422 074.9	58 842.4
July	13 738.9	1 576 027.7	160 966.4	93 379.2	1 321 682.1	822 946.8	339 608.1	424 553.5	58 785.3
August	14 007.4	1 572 044.6	162 678.6	93 985.1	1 315 380.9	828 018.8	339 086.7	430 016.0	58 916.1
September	13 696.5	1 562 977.2	134 884.8	95 866.7	1 332 225.7	878 863.5	375 783.7	443 657.3	59 422.5
October	14 162.5	1 575 564.0	162 499.9	95 069.8	1 317 994.3	855 706.4	348 489.3	447 499.7	59 717.5
November	13 722.5	1 572 975.3	166 278.4	95 590.7	1 311 106.2	878 466.4	357 916.2	459 503.7	61 046.5
December	14 587.7	1 564 133.0	152 776.7	102 989.4	1 308 367.0	919 518.2	380 966.0	473 803.8	64 748.4

Period	Assets				Liabilities			Total assets
	Money market fund shares	Equity and non-money market fund shares investment fund shares or units	Monetary financial institutions	Other domestic residents ¹	External assets	Fixed assets ²	Remaining assets	
	10	11	12	13	14	15	16	
December 2022	0.0	22 188.0	8 041.8	14 146.3	218 215.5	64 559.7	202 490.9	2 836 288.0
January 2023	0.0	22 283.4	8 118.8	14 164.5	237 584.1	64 674.9	188 957.3	2 851 598.4
February	0.0	22 309.9	8 116.2	14 193.7	265 870.2	64 821.8	191 409.0	2 903 929.9
March	0.0	22 430.1	8 026.8	14 403.4	254 187.4	65 143.7	202 802.2	2 922 407.1
April	0.0	22 747.7	8 257.9	14 489.8	255 857.1	65 622.0	211 177.0	2 932 958.2
May	0.0	22 549.9	8 065.6	14 484.2	266 129.5	65 987.9	213 771.4	2 957 941.9
June	0.0	22 740.3	8 222.7	14 517.6	268 984.6	66 405.5	212 564.5	2 981 577.3
July	0.0	22 848.4	8 332.4	14 515.9	288 003.3	66 715.5	211 518.4	3 001 799.0
August	0.0	22 851.4	8 281.8	14 569.6	295 886.7	66 801.8	212 198.2	3 011 809.0
September	0.0	22 652.4	8 214.3	14 438.1	312 743.9	67 445.5	214 610.3	3 072 989.2
October	0.0	22 010.4	8 445.5	13 564.9	308 117.7	67 763.7	218 192.9	3 061 517.6
November	0.0	22 217.6	8 763.6	13 454.0	302 229.2	68 232.5	224 125.6	3 081 969.3
December	0.0	22 481.0	8 858.4	13 622.6	294 210.3	69 067.7	220 045.0	3 104 042.9

¹ Non-monetary financial institutions and non-financial sector.

² Excluding financial fixed assets, included in column 11.

Table VIII. Aggregated balance sheet of other monetary financial institutions
(stocks in PLN million)**B. Liabilities**

Period	Liabilities						
	Deposits and other liabilities to domestic residents	Monetary financial institutions	Central government	Other domestic residents ¹	Overnight	With agreed maturity	Repos
	1	2	3	4	5	6	7
December 2022	1 933 353.5	73 691.7	108 746.1	1 750 915.7	1 225 877.0	520 118.5	4 920.2
January 2023	1 937 354.3	74 516.2	100 992.2	1 761 845.9	1 206 574.7	549 381.5	5 889.8
February	1 976 517.5	70 759.0	107 894.7	1 797 863.8	1 214 352.4	577 148.8	6 362.6
March	1 995 720.4	74 014.8	115 646.9	1 806 058.6	1 202 651.1	588 599.5	14 808.1
April	1 992 764.2	71 300.9	109 674.7	1 811 788.6	1 188 247.0	612 389.9	11 151.6
May	2 010 084.9	68 630.1	117 802.7	1 823 652.1	1 196 742.5	611 639.3	15 270.3
June	2 030 644.9	70 028.2	136 811.0	1 823 805.7	1 196 367.3	612 003.5	15 434.9
July	2 054 005.0	68 039.4	147 235.8	1 838 729.8	1 213 115.1	613 490.5	12 124.2
August	2 063 475.7	70 304.8	138 599.1	1 854 571.8	1 236 029.1	610 506.5	8 036.2
September	2 097 818.2	74 299.1	133 438.9	1 890 080.2	1 254 981.9	629 867.0	5 231.3
October	2 097 533.0	70 778.3	129 393.1	1 897 361.7	1 254 622.8	635 370.3	7 368.6
November	2 104 991.7	73 304.9	132 715.3	1 898 971.4	1 265 061.5	627 034.2	6 875.6
December	2 113 939.9	75 603.4	115 660.6	1 922 675.9	1 316 100.1	601 188.5	5 387.3

Period	Liabilities					
	Money market fund shares	Debt securities issued	Capital and reserves	External liabilities	Remaining liabilities	Total liabilities
	8	9	10	11	12	13
December 2022	0.0	234 840.2	303 541.3	224 734.1	139 819.0	2 836 288.0
January 2023	0.0	232 490.9	313 834.6	220 210.3	147 708.3	2 851 598.4
February	0.0	237 561.9	318 202.4	221 421.1	150 227.0	2 903 929.9
March	0.0	236 228.9	324 580.0	216 769.8	149 108.0	2 922 407.1
April	0.0	236 498.2	328 946.7	216 094.2	158 655.0	2 932 958.2
May	0.0	248 776.7	334 492.6	215 308.4	149 279.3	2 957 941.9
June	0.0	247 627.6	338 523.3	215 796.7	148 984.8	2 981 577.3
July	0.0	248 228.2	346 637.6	208 891.4	144 036.7	3 001 799.0
August	0.0	252 291.1	352 254.0	206 290.1	137 498.2	3 011 809.0
September	0.0	265 175.4	356 638.8	213 357.8	139 999.0	3 072 989.2
October	0.0	265 892.2	357 026.6	211 135.7	129 930.2	3 061 517.6
November	0.0	274 318.4	358 542.1	214 105.0	130 012.1	3 081 969.3
December	0.0	277 012.5	357 801.3	224 192.5	131 096.6	3 104 042.9

¹ Non-monetary financial institutions, local government, social security funds and non-financial sector.

Table IX. Balance sheet of Narodowy Bank Polski (stocks in PLN million)**A. Assets**

Period	Domestic assets		External assets		Total assets
	1		2		
December 2022	143 382.0		752 860.1		896 242.1
January 2023	144 417.7		745 264.1		889 681.8
February	147 565.1		764 606.5		912 171.6
March	149 444.6		749 737.5		899 182.1
April	157 325.0		761 604.7		918 929.7
May	158 805.1		767 912.7		926 717.7
June	165 517.8		760 663.7		926 181.5
July	170 199.4		744 618.5		914 817.9
August	164 357.3		766 443.2		930 800.5
September	153 913.2		803 671.6		957 584.8
October	170 208.7		755 605.6		925 814.2
November	173 669.1		760 716.1		934 385.2
December	141 624.1		779 893.6		921 517.8

Table IX. Balance sheet of Narodowy Bank Polski (stocks in PLN million)**B. Liabilities**

Period	Currency in circulation	Deposits and other liabilities to domestic residents	other monetary financial institutions			Debt securities issued	Capital and reserves	External liabilities	Remaining liabilities	Total liabilities
			central government	other domestic residents ¹						
	1	2	3	4	5	6	7	8	9	10
December 2022	368 288.8	125 536.6	69 628.3	50 591.8	5 316.4	252 086.8	40 631.9	107 246.9	2 451.1	896 242.1
January 2023	362 282.5	138 741.8	88 265.1	46 086.1	4 390.7	238 012.6	47 729.1	101 025.5	1 890.3	889 681.8
February	361 728.1	149 712.0	91 006.3	54 113.4	4 592.3	242 611.2	46 148.6	109 998.5	1 973.2	912 171.6
March	363 518.6	127 004.8	86 681.0	33 322.7	7 001.1	259 457.8	43 238.4	104 231.8	1 730.7	899 182.1
April	371 015.8	116 250.3	54 222.6	58 108.6	3 919.2	290 847.2	33 468.7	104 838.9	2 508.8	918 929.7
May	369 016.8	127 747.7	73 940.7	50 033.7	3 773.2	285 445.0	34 889.2	106 206.9	3 412.2	926 717.7
June	367 825.2	135 619.2	79 870.8	51 544.1	4 204.3	284 916.2	20 102.2	115 147.6	2 571.2	926 181.5
July	367 711.1	134 549.5	92 954.7	37 068.3	4 526.6	274 937.6	17 191.0	118 103.6	2 325.1	914 817.9
August	368 387.6	144 410.1	92 488.0	44 124.8	7 797.2	272 373.6	19 147.7	124 351.8	2 129.6	930 800.5
September	376 669.8	100 790.6	59 941.3	36 251.9	4 597.4	304 681.3	34 809.5	138 202.4	2 431.2	957 584.8
October	376 440.9	131 284.2	92 177.5	34 092.9	5 013.8	276 037.6	23 181.3	115 848.1	3 022.2	925 814.2
November	373 921.7	139 025.4	93 269.8	40 932.9	4 822.7	278 838.3	15 378.9	125 224.2	1 996.7	934 385.2
December	377 192.0	131 557.0	76 804.3	48 197.2	6 555.5	302 925.6	-10 262.2	115 930.7	4 174.8	921 517.8

¹ Non-monetary financial institutions, local government, social security funds and non-financial sector.

Table X. Consolidated balance sheet of monetary financial institutions (stocks in PLN million)**A. Assets**

Period	Loans and other claims on domestic residents			Debt securities		
		general government	other domestic residents ¹		general government	other domestic residents ¹
	1	2	3	4	5	6
December 2022	1 411 246.6	97 031.5	1 314 215.1	549 180.0	467 028.4	82 151.5
January 2023	1 423 987.1	107 816.7	1 316 170.5	540 559.8	459 457.5	81 102.3
February	1 429 901.4	107 677.4	1 322 224.1	552 735.3	471 186.4	81 548.8
March	1 424 032.7	96 173.2	1 327 859.4	560 691.0	479 053.9	81 637.1
April	1 417 756.6	94 742.0	1 323 014.6	564 785.0	484 590.1	80 195.0
May	1 415 959.7	94 513.2	1 321 446.5	564 541.3	485 343.8	79 197.5
June	1 416 703.3	93 538.1	1 323 165.2	578 513.0	499 860.2	78 652.8
July	1 415 092.2	93 379.2	1 321 712.9	580 376.5	501 753.2	78 623.3
August	1 409 396.5	93 985.1	1 315 411.3	586 082.6	507 300.8	78 781.7
September	1 428 115.7	95 866.7	1 332 249.1	600 339.1	521 024.2	79 314.9
October	1 413 087.4	95 069.8	1 318 017.6	603 398.7	523 761.1	79 637.6
November	1 406 720.0	95 590.7	1 311 129.3	616 839.8	535 846.3	80 993.5
December	1 411 378.7	102 989.4	1 308 389.4	634 953.4	550 230.2	84 723.2

Period	Equity and non-MMF investment fund shares or units ¹	External assets	Fixed assets ²	Remaining assets ³	Total assets
	7	8	9	10	11
	December 2022	14 275.1	971 075.6	66 972.1	202 636.4
January 2023	14 293.4	982 848.2	67 089.4	190 301.1	3 219 079.1
February	14 322.6	1 030 476.7	67 238.5	195 732.0	3 290 406.5
March	14 532.2	1 003 924.9	67 562.4	208 913.9	3 279 657.1
April	14 618.6	1 017 461.8	68 041.0	226 113.1	3 308 776.2
May	14 613.1	1 034 042.2	68 391.4	230 179.0	3 327 726.7
June	14 646.4	1 029 648.3	68 809.5	235 812.8	3 344 133.3
July	14 644.8	1 032 621.8	69 115.4	239 979.1	3 351 829.7
August	14 698.5	1 062 329.9	69 202.5	234 634.1	3 376 344.0
September	14 566.9	1 116 415.4	69 852.5	226 426.3	3 455 716.1
October	13 693.7	1 063 723.3	70 172.9	247 309.9	3 411 385.9
November	13 582.9	1 062 945.2	70 648.6	256 520.6	3 427 257.1
December	13 751.4	1 074 103.9	71 471.4	220 226.5	3 425 885.4

¹ Non-monetary financial institutions and non-financial sector.

² Excluding financial fixed assets, included in column 7.

³ Including pre-emptive rights.

Table X. Consolidated balance sheet of monetary financial institutions (stocks in PLN million)**B. Liabilities**

Period						
	Currency in circulation	Deposits and other liabilities to central government	Deposits and other liabilities to other domestic residents ¹	overnight	with agreed maturity	repos
				1	2	3
December 2022	353 707.5	159 337.9	1 756 232.2	1 231 193.4	520 118.5	4 920.2
January 2023	348 386.9	147 078.3	1 766 236.6	1 210 965.4	549 381.5	5 889.8
February	348 235.8	162 008.2	1 802 456.1	1 218 944.7	577 148.8	6 362.6
March	349 929.8	148 969.7	1 813 059.7	1 209 652.2	588 599.5	14 808.1
April	356 629.4	167 783.3	1 815 707.7	1 192 166.2	612 389.9	11 151.6
May	355 157.3	167 836.4	1 827 425.3	1 200 515.8	611 639.3	15 270.3
June	353 811.2	188 355.1	1 828 010.0	1 200 571.6	612 003.5	15 434.9
July	353 972.2	184 304.1	1 843 256.4	1 217 641.6	613 490.5	12 124.2
August	354 380.2	182 723.9	1 862 369.0	1 243 826.3	610 506.5	8 036.2
September	362 973.3	169 690.8	1 894 677.6	1 259 579.3	629 867.0	5 231.3
October	362 278.4	163 486.1	1 902 375.4	1 259 636.5	635 370.3	7 368.6
November	360 199.2	173 648.2	1 903 794.1	1 269 884.2	627 034.2	6 875.6
December	362 604.3	163 857.8	1 929 231.5	1 322 655.6	601 188.5	5 387.3

Period	Money market fund shares	Debt securities issued	Capital and reserves	External liabilities	Remaining liabilities	Excess of inter-monetary financial institution liabilities	Total liabilities
	7	8	9	10	11	12	13
December 2022	0.0	135 549.4	336 131.4	331 981.0	142 270.1	176.3	3 215 385.8
January 2023	0.0	132 378.0	353 444.8	321 235.8	149 598.6	720.1	3 219 079.1
February	0.0	137 426.8	356 234.8	331 419.6	152 200.1	425.1	3 290 406.5
March	0.0	135 701.4	359 791.6	321 001.7	150 838.7	364.6	3 279 657.1
April	0.0	133 123.8	354 157.4	320 933.1	161 163.8	-722.4	3 308 776.2
May	0.0	141 422.8	361 316.2	321 515.3	152 691.5	361.9	3 327 726.7
June	0.0	140 933.5	350 402.8	330 944.2	151 556.0	120.6	3 344 133.3
July	0.0	141 416.6	355 496.1	326 995.1	146 361.9	27.4	3 351 829.7
August	0.0	143 367.4	363 119.9	330 641.9	139 627.8	113.9	3 376 344.0
September	0.0	151 794.7	383 234.0	351 560.1	142 430.2	-644.7	3 455 716.1
October	0.0	151 092.1	371 762.4	326 983.8	132 952.3	455.5	3 411 385.9
November	0.0	152 824.2	365 157.4	339 329.2	132 008.8	296.0	3 427 257.1
December	0.0	156 485.7	338 680.7	340 123.2	135 271.4	-369.1	3 425 885.4

¹ Non-monetary financial institutions, local government, social security funds and non-financial sector.

Table XI. Monetary aggregate M3 and its counterparts (stocks in PLN million)**A. Monetary aggregate M3**

Period											
	Currency in circulation (excluding MFIs' vault cash)	Currency in circulation (including MFIs' vault cash)	Cash in monetary financial institutions' vaults	Overnight deposits and other liabilities	households	other financial corporations	non-financial corporations	non-profit institutions serving households	local government	social security funds	M1
December 2022	353 707.5	368 288.8	14 581.3	1 231 193.4	776 517.1	33 563.7	325 017.4	28 174.0	57 903.1	10 018.2	1 584 901.0
January 2023	348 386.9	362 282.5	13 895.6	1 210 965.4	772 438.0	36 024.7	318 398.8	28 082.1	47 886.0	8 135.8	1 559 352.3
February	348 235.8	361 728.1	13 492.3	1 218 944.7	779 841.2	34 012.5	317 694.9	28 198.6	48 783.1	10 414.3	1 567 180.4
March	349 929.8	363 518.6	13 588.8	1 209 652.2	781 335.0	31 628.5	310 145.8	27 270.7	48 510.8	10 761.3	1 559 581.9
April	356 629.4	371 015.8	14 386.4	1 192 166.2	791 503.9	29 465.1	293 312.1	27 084.9	43 289.7	7 510.5	1 548 795.6
May	355 157.3	369 016.8	13 859.5	1 200 515.8	780 761.6	30 328.5	310 820.9	27 631.6	45 033.4	5 939.7	1 555 673.0
June	353 811.2	367 825.2	14 014.0	1 200 571.6	786 148.6	30 117.5	306 471.6	27 859.9	43 118.6	6 855.5	1 554 382.8
July	353 972.2	367 711.1	13 738.9	1 217 641.6	786 793.6	32 208.9	319 190.9	29 327.7	42 620.3	7 500.2	1 571 613.8
August	354 380.2	368 387.6	14 007.4	1 243 826.3	797 567.2	32 512.3	326 627.8	29 182.9	45 420.5	12 515.7	1 598 206.5
September	362 973.3	376 669.8	13 696.5	1 259 579.3	814 082.9	30 304.9	330 402.9	29 251.1	48 992.6	6 544.9	1 622 552.6
October	362 278.4	376 440.9	14 162.5	1 259 636.5	813 613.3	32 403.1	330 261.8	30 734.7	45 751.6	6 872.1	1 621 914.9
November	360 199.2	373 921.7	13 722.5	1 269 884.2	818 369.7	32 461.6	332 583.3	30 628.7	48 836.4	7 004.4	1 630 083.4
December	362 604.3	377 192.0	14 587.7	1 322 655.6	838 531.3	37 866.9	353 567.5	28 960.7	53 473.7	10 255.6	1 685 259.9

Period							
	Deposits and other liabilities with agreed maturity up to 2 years	Households	Other financial corporations	Non-financial corporations	Non-profit institutions serving households	Local government	Social security funds
December 2022	493 347.4	302 447.5	30 824.6	138 281.5	7 286.8	9 189.6	5 317.4
January 2023	522 831.7	312 998.4	30 040.6	142 747.1	8 006.7	23 128.6	5 910.3
February	551 021.9	323 082.0	33 714.4	155 607.3	8 079.3	25 237.1	5 301.7
March	562 393.7	335 329.1	34 139.8	157 172.7	8 751.1	24 668.9	2 332.2
April	586 232.7	339 999.7	39 314.4	168 514.6	8 953.0	27 125.4	2 325.6
May	585 298.7	348 102.5	37 332.8	163 882.8	9 035.9	25 094.4	1 850.3
June	585 458.9	350 943.3	36 291.6	163 749.4	9 164.0	22 945.5	2 365.2
July	586 823.6	353 773.6	34 514.0	164 852.3	9 603.6	22 740.7	1 339.3
August	583 854.5	354 064.3	37 557.0	157 774.8	9 706.8	23 419.1	1 332.4
September	603 127.0	359 905.5	39 703.3	167 780.3	9 994.1	23 329.6	2 414.1
October	608 763.0	362 102.8	39 477.0	171 366.6	10 814.3	23 841.5	1 160.9
November	600 397.1	363 320.3	38 115.1	166 068.8	10 803.8	20 231.8	1 857.3
December	574 083.6	364 122.3	40 010.5	150 704.8	10 012.0	7 280.6	1 953.4

Table XI. Monetary aggregate M3 and its counterparts (stocks in PLN million)**A. Monetary aggregate M3, cont'd**

Period	M2	Repos	Debt securities issued with maturity up to 2 years	Money market fund shares	M3
	19	20	21	22	23
December 2022	2 078 248.4	4 920.2	8 086.9	0.0	2 091 255.5
January 2023	2 082 184.0	5 889.8	8 247.3	0.0	2 096 321.0
February	2 118 202.3	6 362.6	6 791.8	0.0	2 131 356.7
March	2 121 975.7	14 808.1	3 432.1	0.0	2 140 215.9
April	2 135 028.3	11 151.6	1 344.2	0.0	2 147 524.2
May	2 140 971.7	15 270.3	1 658.4	0.0	2 157 900.4
June	2 139 841.7	15 434.9	2 057.1	0.0	2 157 333.8
July	2 158 437.4	12 124.2	2 637.7	0.0	2 173 199.3
August	2 182 061.0	8 036.2	2 894.8	0.0	2 192 992.0
September	2 225 679.6	5 231.3	2 979.0	0.0	2 233 889.8
October	2 230 678.0	7 368.6	3 007.2	0.0	2 241 053.7
November	2 230 480.5	6 875.6	2 533.1	0.0	2 239 889.3
December	2 259 343.5	5 387.3	3 538.5	0.0	2 268 269.3

Table XI. Monetary aggregate M3 and its counterparts (stocks in PLN million)**B. Counterparts to M3**

Period	External assets, net (+)	External assets	External liabilities	Credit to other residents (+)	Loans and other claims	Households	Other financial corporations	Non-financial corporations	Non-profit institutions serving households	Local government	Social security funds
	1	2	3	4	5	6	7	8	9	10	11
December 2022	639 094.6	971 075.6	331 981.0	1 470 516.9	1 346 044.2	794 280.0	113 376.3	398 062.5	8 496.3	31 829.1	0.0
January 2023	661 612.4	982 848.2	321 235.8	1 471 289.2	1 347 656.7	789 012.4	114 753.9	403 907.6	8 496.6	31 486.2	0.0
February	699 057.1	1 030 476.7	331 419.6	1 477 677.4	1 353 420.1	786 234.9	119 921.2	407 598.6	8 469.3	31 196.1	0.0
March	682 923.2	1 003 924.9	321 001.7	1 483 276.5	1 358 589.1	781 623.1	129 880.2	407 911.8	8 444.4	30 729.6	0.0
April	696 528.7	1 017 461.8	320 933.1	1 477 177.6	1 353 722.6	780 633.3	126 372.1	407 640.3	8 368.9	30 708.0	0.0
May	712 526.8	1 034 042.2	321 515.3	1 474 657.5	1 352 481.1	780 415.0	131 088.3	401 621.1	8 322.1	31 034.6	0.0
June	698 704.1	1 029 648.3	330 944.2	1 476 037.3	1 354 152.9	777 259.0	138 124.0	399 443.3	8 338.8	30 987.7	0.0
July	705 626.8	1 032 621.8	326 995.1	1 475 420.7	1 352 472.1	777 056.6	139 996.8	396 308.7	8 350.9	30 759.2	0.0
August	731 687.9	1 062 329.9	330 641.9	1 469 849.5	1 346 117.5	779 699.2	134 636.0	392 735.3	8 340.8	30 705.8	0.3
September	764 855.3	1 116 415.4	351 560.1	1 487 420.5	1 362 621.9	785 105.6	143 582.4	395 201.2	8 359.8	30 372.6	0.2
October	736 739.5	1 063 723.3	326 983.8	1 473 496.4	1 348 922.4	774 647.9	143 502.5	391 465.5	8 401.8	30 904.5	0.3
November	723 616.0	1 062 945.2	339 329.2	1 468 715.7	1 342 640.0	773 159.4	143 789.5	385 788.2	8 392.2	31 510.3	0.4
December	733 980.7	1 074 103.9	340 123.2	1 479 795.3	1 345 546.7	776 599.7	137 469.8	386 053.5	8 266.4	37 157.1	0.3

Table XI. Monetary aggregate M3 and its counterparts (stocks in PLN million)**B. Counterparts to M3, cont'd**

Period							
	Debt securities	Other financial corporations	Non-financial corporations	Local government	Equity and non-MMF investment fund shares or units	Other financial corporations	Non-financial corporations
	12	13	14	15	16	17	18
December 2022	110 197.5	65 696.0	16 455.6	28 046.0	14 275.1	12 425.6	1 848.1
January 2023	109 339.1	64 382.6	16 719.7	28 236.8	14 293.4	12 395.7	1 896.3
February	109 934.7	65 112.4	16 436.4	28 385.9	14 322.6	12 420.0	1 901.2
March	110 155.2	65 123.0	16 514.1	28 518.1	14 532.2	12 658.3	1 872.5
April	108 836.4	64 381.1	15 813.9	28 641.4	14 618.6	12 702.9	1 914.3
May	107 563.3	63 692.9	15 504.6	28 365.8	14 613.1	12 717.5	1 894.3
June	107 238.0	64 037.2	14 615.7	28 585.2	14 646.4	12 742.9	1 902.1
July	108 303.8	64 116.2	14 507.1	29 680.4	14 644.8	12 724.9	1 918.6
August	109 033.6	64 240.6	14 541.1	30 251.8	14 698.5	12 786.5	1 910.6
September	110 231.7	65 038.4	14 276.6	30 916.7	14 566.9	12 828.4	1 737.2
October	110 880.3	65 575.1	14 062.5	31 242.7	13 693.7	12 053.6	1 638.7
November	112 492.8	66 489.9	14 503.6	31 499.4	13 582.9	12 088.0	1 493.5
December	120 510.9	71 653.5	13 069.7	35 787.7	13 737.7	12 254.0	1 453.3

Period	Credit to central government, net (+)	Credit to central government		Deposits of central government	
	19	20	Loans	Debt securities	23
			21	22	
December 2022	341 747.1	504 184.8	1 624.5	438 982.4	162 437.8
January 2023	357 459.9	507 551.2	1 488.8	431 220.7	150 091.2
February	354 579.0	519 281.9	1 545.4	442 800.6	164 702.9
March	363 400.7	515 979.4	1 502.7	450 535.8	152 578.7
April	348 546.7	519 982.6	1 506.8	455 948.7	171 436.0
May	350 582.6	520 456.6	1 531.5	456 978.0	169 874.0
June	343 756.5	533 825.3	1 520.6	471 275.0	190 068.8
July	348 025.6	534 692.8	1 609.2	472 072.8	186 667.1
August	355 850.7	540 328.0	1 578.0	477 049.0	184 477.3
September	383 940.2	555 601.3	1 553.6	490 107.5	171 661.1
October	391 510.0	556 683.4	1 559.8	492 518.4	165 173.4
November	393 428.7	568 426.9	1 506.4	504 346.9	174 998.2
December	414 235.9	580 274.5	1 896.9	514 442.5	166 038.6

Table XI. Monetary aggregate M3 and its counterparts (stocks in PLN million)**B. Counterparts to M3, cont'd**

Period	Longer-term financial liabilities (-)	Deposits and other liabilities with agreed maturity over 2 years	Households	Other financial corporations	Non-financial corporations	Non-profit institutions serving households
	24	25	26	27	28	29
December 2022	487 265.2	26 771.1	24 604.9	630.3	1 375.6	137.0
January 2023	501 112.3	26 549.8	24 564.4	611.5	1 219.0	131.6
February	510 302.0	26 126.9	24 187.5	604.7	1 185.5	126.9
March	514 657.6	26 205.7	24 441.4	587.1	1 078.5	76.4
April	508 441.5	26 157.2	24 451.7	581.0	1 028.4	73.7
May	525 383.6	26 340.6	24 660.6	563.9	1 020.6	73.2
June	514 110.0	26 544.6	24 872.5	563.6	1 012.6	73.7
July	518 579.0	26 666.9	24 997.6	553.7	988.6	102.2
August	528 491.0	26 652.0	24 985.3	541.8	997.9	102.0
September	556 819.5	26 740.1	25 090.9	531.6	990.0	102.4
October	544 767.2	26 607.3	24 933.8	516.7	1 041.9	92.6
November	540 735.6	26 637.1	24 932.6	518.3	1 062.1	94.3
December	516 552.1	27 104.9	25 015.4	516.4	1 453.3	93.9

Period			Debt securities issued with maturity over 2 years	Capital and reserves	Fixed assets (excluding fixed financial assets) (+)	Other items, net (+)
	Local government	Social security funds				
	30	31	32	33	34	35
December 2022	23.4	0.0	124 362.7	336 131.4	66 972.1	60 190.1
January 2023	23.3	0.0	121 117.7	353 444.8	67 089.4	39 982.4
February	22.3	0.0	127 940.3	356 234.8	67 238.5	43 106.7
March	22.3	0.0	128 660.3	359 791.6	67 562.4	57 710.6
April	22.5	0.0	128 126.9	354 157.4	68 041.0	65 671.7
May	22.4	0.0	137 726.8	361 316.2	68 391.4	77 125.6
June	22.3	0.0	137 162.6	350 402.8	68 809.5	84 136.2
July	24.8	0.0	136 415.9	355 496.1	69 115.4	93 589.8
August	25.0	0.0	138 719.1	363 119.9	69 202.5	94 892.4
September	25.3	0.0	146 845.4	383 234.0	69 852.5	84 640.9
October	22.3	0.0	146 397.6	371 762.4	70 172.9	113 902.1
November	29.8	0.0	148 941.1	365 157.4	70 648.6	124 215.8
December	25.8	0.0	150 766.5	338 680.7	71 471.4	85 338.0

Table XII. Reserve money and counterparts (stocks in PLN million)

Period	Currency in circulation (including MFIs' vault cash)	Overnight deposits	Required reserve accounts of banks which do not hold overnight deposits with NBP	Reserve money	Net external assets	Credit to central government, net	Other items, net
	1	2	3	4	5	6	7
December 2022	368 288.8	54 030.8	589.2	422 908.8	645 613.2	24 566.5	-247 270.9
January 2023	362 282.5	81 721.2	597.7	444 601.3	644 238.6	28 909.1	-228 546.4
February	361 728.1	84 493.8	593.1	446 814.9	654 608.0	21 277.1	-229 070.1
March	363 518.6	83 176.3	601.7	447 296.6	645 505.7	41 238.9	-239 448.0
April	371 015.8	51 282.3	614.6	422 912.7	656 765.8	15 856.5	-249 709.6
May	369 016.8	71 086.4	556.3	440 659.5	661 705.8	25 631.5	-246 677.7
June	367 825.2	76 224.3	524.7	444 574.2	645 516.1	24 527.6	-225 469.5
July	367 711.1	91 138.5	509.9	459 359.5	626 514.8	37 768.4	-204 923.8
August	368 387.6	89 052.4	514.3	457 954.3	642 091.3	31 406.5	-215 543.6
September	376 669.8	55 772.3	513.8	432 955.8	665 469.2	39 144.7	-271 658.1
October	376 440.9	88 040.3	491.3	464 972.6	639 757.5	40 481.1	-215 266.0
November	373 921.7	89 684.1	498.2	464 104.0	635 491.9	34 059.6	-205 447.4
December	377 192.0	73 441.5	505.9	451 139.4	663 963.0	26 048.5	-238 872.1

Table XIII. Banking sector financial data (stocks in PLN million)

A. Banking sector assets – selected items

Period	Assets, total	Cash, cash balances at central banks and other demand deposits	Loans and advances	of which:							Derivatives	Derivatives – hedge accounting
				of which: at amortised cost	Debt instruments	of which:		Equity instruments	of which: at fair value through other comprehensive income			
						at amortised cost	at fair value through other comprehensive income					
1	2	3	4	5	6	7	8	9	10	11		
December 2022	2 715 393	134 133	1 462 167	1 399 382	807 166	414 989	381 629	5 425	3 834	53 919	2 480	
January 2023	2 730 674	169 216	1 473 410	1 410 808	793 587	415 344	368 343	5 576	3 897	48 042	2 557	
February	2 782 079	179 924	1 485 107	1 423 526	819 391	421 445	387 601	5 393	3 863	50 257	2 379	
March	2 800 648	170 905	1 475 001	1 414 429	843 704	442 716	390 638	5 353	3 836	46 802	2 483	
April	2 809 209	130 258	1 480 013	1 419 957	882 892	475 488	397 562	5 428	3 933	47 247	2 517	
May	2 834 188	159 268	1 474 535	1 414 753	884 257	478 564	394 265	5 395	3 911	47 311	3 027	
June	2 858 026	163 756	1 473 411	1 414 097	900 683	474 639	411 987	5 606	4 083	47 378	3 093	
July	2 879 721	170 337	1 486 159	1 426 643	900 899	492 454	395 269	5 741	4 175	45 871	3 447	
August	2 888 476	171 962	1 486 059	1 426 509	909 644	494 645	403 232	5 697	4 119	42 562	3 857	
September	2 948 238	138 890	1 519 543	1 459 825	963 747	516 020	436 192	5 575	4 071	42 202	4 187	
October	2 950 752	160 493	1 523 249	1 463 728	938 602	517 528	408 901	5 832	4 267	43 373	3 906	
November	2 972 777	159 569	1 510 137	1 451 412	963 215	533 979	416 906	5 905	4 335	46 896	4 117	
December	2 994 789	145 958	1 496 702	1 437 946	1 006 393	521 886	471 550	6 186	4 625	40 718	4 667	

Note: financial data as at 31 January 2024.

Table XIII. Banking sector financial data (stocks in PLN million)**B. Liabilities and equity – selected items**

Period	Liabilities and equity, total	of which:									Profit or loss for the year
		Financial liabilities	of which:			Equity	Paid up capital	Other reserves	Retained earnings	Accumulated other comprehensive income / Revaluation reserves and other valuation differences	
			Deposits	Derivatives	Derivatives – hedge accounting						
1	2	3	4	5	6	7	8	9	10	11	
December 2022	2 715 393	2 437 065	1 957 064	55 544	19 100	202 392	44 860	118 574	14 010	-28 162	10 612
January 2023	2 730 674	2 430 696	1 959 294	49 283	16 948	211 572	44 860	118 655	25 767	-23 313	3 105
February	2 782 079	2 478 943	1 998 210	50 802	17 416	215 561	44 861	118 666	28 156	-24 743	6 132
March	2 800 648	2 487 011	2 005 148	47 154	15 676	222 581	45 831	117 781	28 923	-21 552	8 768
April	2 809 209	2 483 256	2 008 001	47 443	15 063	226 935	47 829	123 680	19 977	-20 274	12 939
May	2 834 188	2 513 616	2 022 889	46 706	14 413	231 863	47 747	125 098	18 369	-19 073	16 913
June	2 858 026	2 530 789	2 045 316	46 675	12 849	236 029	52 884	127 443	15 189	-17 367	15 632
July	2 879 721	2 548 958	2 071 196	45 483	11 791	243 850	53 159	133 647	15 030	-14 741	14 501
August	2 888 476	2 557 607	2 084 771	42 358	10 834	248 332	53 147	133 610	14 990	-14 175	18 526
September	2 948 238	2 610 233	2 124 070	42 028	10 225	252 208	53 147	133 673	14 904	-12 759	21 008
October	2 950 752	2 609 979	2 122 885	41 473	9 803	255 352	53 148	133 684	14 684	-12 475	24 080
November	2 972 777	2 629 668	2 127 630	45 168	9 424	257 167	53 326	131 323	14 659	-11 931	27 557
December	2 994 789	2 650 654	2 140 702	41 291	8 618	256 938	53 361	130 031	14 344	-10 665	27 639

Note: financial data as at 31 January 2024.

Table XIII. Banking sector financial data (stocks in PLN million)**C. Income statement of banking sector – selected items**

Period	of which:			of which:		Fee and commission income	Fee and commission expenses	Other operating gains (losses), net	Total operating income, net
	Interest income	Financial assets at fair value through other comprehensive income	Financial assets at amortised cost	Interest expenses	Financial liabilities measured at amortised cost				
December 2022	118 675	18 382	95 501	43 176	36 623	24 286	5 883	-5 381	92 664
January 2023	14 480	2 330	11 712	6 308	5 562	2 063	515	95	10 280
February	27 091	4 400	21 885	11 765	10 362	3 962	969	145	19 173
March	41 093	6 640	33 319	17 769	15 743	6 126	1 505	-1 948	27 843
April	54 522	8 634	44 294	23 687	20 879	8 166	2 051	-1 927	37 379
May	68 880	11 150	55 718	29 890	26 375	10 279	2 581	-1 803	47 757
June	82 721	13 422	67 071	35 715	31 759	12 449	3 192	-5 768	54 422
July	97 411	15 716	78 854	42 252	37 387	14 586	3 756	-5 798	64 486
August	112 157	18 136	90 833	48 530	43 097	16 729	4 348	-5 787	74 921
September	126 075	20 402	102 355	54 132	48 434	18 851	4 935	-6 613	84 419
October	140 582	22 658	113 885	60 300	53 721	21 062	5 529	-6 469	94 820
November	154 573	24 872	125 128	65 783	58 642	23 125	6 102	-6 366	105 164
December	168 294	27 366	136 397	70 745	63 660	25 389	6 736	-14 659	107 827

Table XIII. Banking sector financial data (stocks in PLN million)**C. Income statement of banking sector – selected items, cont'd**

Period	of which:					
	Administrative expenses	Staff expenses	Other administrative expenses	Depreciation	Modification gains or (–) losses, net	Provisions or reversal of provisions
	10	11	12	13	14	15
December 2022	45 102	20 376	24 727	4 539	-6 932	7 863
January 2023	5 052	1 959	3 094	425	183	75
February	8 506	3 828	4 678	817	206	469
March	12 077	5 797	6 280	1 219	230	1 132
April	15 474	7 761	7 713	1 608	449	1 075
May	19 057	9 784	9 273	2 009	480	1 673
June	22 744	11 880	10 864	2 424	305	4 356
July	26 349	13 943	12 406	2 828	448	9 765
August	29 932	15 960	13 972	3 235	476	9 985
September	33 671	18 065	15 606	3 652	506	11 347
October	37 414	20 177	17 237	4 069	612	12 530
November	41 268	22 335	18 933	4 500	545	12 966
December	45 602	24 812	20 790	4 959	727	9 854

Period	of which:				
	Impairment or reversal of impairment on financial assets not measured at fair value through profit or loss	Financial assets at amortised cost	Profit or loss before tax from continuing operations	Tax expenses or income related to profit or loss from continuing operation	Profit or loss for the year
	16	17	18	19	20
December 2022	9 137	9 070	18 944	8 332	10 612
January 2023	684	686	4 266	1 161	3 105
February	1 270	1 264	8 399	2 267	6 132
March	1 630	1 626	12 159	3 391	8 768
April	2 303	2 281	17 576	4 637	12 939
May	2 863	2 838	22 881	5 967	16 913
June	3 581	3 533	22 085	6 454	15 632
July	3 910	3 858	22 580	8 079	14 501
August	4 494	4 436	28 280	9 755	18 526
September	5 176	5 085	31 650	10 643	21 008
October	5 598	5 503	36 415	12 334	24 080
November	6 149	6 021	41 465	13 909	27 557
December	7 149	6 952	41 628	13 989	27 639

Note: financial data as at 31 January 2024.

Table XIV. Investment funds statistics (end of the period)**A. Number of entities**

Period	Investment fund management companies	Investment funds	of which:			Sub-funds	of which:		
			Open-end funds	Specialised open-end funds	Closed-end funds		Open-end funds	Specialised open-end funds	Closed-end funds
	1	2	3	4	5	6	7	8	9
IV quarter 2022	57	516	37	52	427	541	256	268	17
I quarter 2023	56	522	37	53	432	546	254	274	18
II quarter	56	507	33	50	424	525	234	275	16
III quarter	57	494	33	50	411	528	234	279	15
IV quarter	58	480	31	48	401	518	227	276	15

Table XIV. Investment funds statistics (end of the period)**B. Assets and net assets value of selected groups of investment funds
(in PLN million)**

Period	Net assets value total	Open-end funds	of which:				Closed-end funds	Total assets	Open-end funds	Specialised open-end funds	Closed-end funds
			Units separated as a part of pension schemes	Specialised open-end funds	of which:						
					Units separated as a part of pension schemes	Units separated as a part of pension schemes					
1	2	3	4	5	6	7	8	9	10		
IV quarter 2022	272 592	87 522	14 622	48 412	6 564	136 658	295 406	99 133	51 828	144 445	
I quarter 2023	283 148	92 496	15 738	51 187	7 043	139 465	306 190	105 307	54 500	146 383	
II quarter	293 450	99 191	17 161	54 927	7 535	139 331	318 440	113 158	58 391	146 891	
III quarter	303 945	102 708	16 624	58 322	8 869	142 915	331 739	118 268	61 157	152 314	
IV quarter	318 174	112 817	18 662	63 754	10 017	141 604	340 637	125 317	66 474	148 846	

Table XIV. Investment funds statistics (transactions conducted during the period)**C. Sales and redemptions of investment funds shares and units broken down by funds' investment policy (in PLN million)**

Investment policy criterion		IV quarter 2022		I quarter 2023		II quarter 2023		III quarter 2023		IV quarter 2023	
		Sales	Redemptions	Sales	Redemptions	Sales	Redemptions	Sales	Redemptions	Sales	Redemptions
		1	2	3	4	5	6	7	8	9	10
Open-end funds	1	14 682	18 344	14 558	12 888	17 550	12 817	21 179	15 050	25 436	19 404
of which:											
Equity funds	2	3 263	3 545	3 015	3 299	3 195	3 770	3 345	3 799	6 882	6 870
Bond funds	3	10 066	13 146	10 344	8 340	13 063	7 954	15 982	9 458	16 846	11 132
Stable growth funds	4	483	586	547	516	562	455	958	1 082	827	586
Balanced funds	5	287	341	270	304	251	258	387	329	417	342
Other funds	6	579	697	367	404	476	370	499	371	453	467
Closed-end funds	7	3 954	7 275	1 797	1 903	1 068	987	993	3 100	1 981	2 658
of which:											
Closed-end non-public assets funds	8	699	6 639	1 286	1 351	497	273	432	1 798	1 130	1 837

Table XV. Financial accounts by institutional sectors in 2023 (in PLN million)

A. Stocks, non-consolidated

Financial instruments	Institutional sectors										
	Total economy	of which:								Households and non-profit institutions serving households	Rest of the World
		Non-financial corporations	Financial corporations	of which:					General government		
				Monetary financial institutions	Investment funds except money market funds	Other financial inter-mediar-ies, except ICPF, financial auxiliaries and captive financial institutions and money lenders	Insurance corporations and pension funds (ICPF)				
1	2	3	4	5	6	7	8	9	10		
Financial assets	1	11 881 591	2 737 262	4 899 872	3 721 289	342 931	352 837	482 815	1 128 310	3 116 147	2 968 635
Monetary gold and special drawing rights (SDR)	2	116 035	–	116 035	116 035	–	–	–	0	–	27 686
Currency and deposits	3	3 020 490	549 110	518 609	429 532	14 994	60 842	13 241	318 534	1 634 237	180 000
Debt securities	4	2 034 396	16 592	1 882 270	1 573 509	167 067	11 009	130 685	114 627	20 908	387 860
Loans	5	2 098 549	207 524	1 621 158	1 460 186	9 697	142 990	8 285	157 237	112 630	802 103
Equity and investment fund shares or units	6	1 874 942	409 192	468 668	37 881	90 752	58 911	281 124	301 781	695 302	1 253 500
Insurance, pension and standardised guarantee schemes	7	458 561	42 001	21 783	372	0	301	21 110	1 936	392 842	3 751
Financial derivatives and employee stock options	8	76 618	26 437	50 148	45 477	3 032	1 120	519	0	33	33 633
Other accounts receivable	9	2 202 000	1 486 407	221 202	58 299	57 390	77 662	27 851	234 195	260 196	280 102
Liabilities	10	12 933 011	4 790 602	4 980 481	3 697 149	340 675	446 529	496 129	2 336 619	825 310	1 823 623
Monetary gold and special drawing rights (SDR)	11	27 686	–	27 686	27 686	–	–	–	0	–	22 444
Currency and deposits	12	2 901 460	–	2 806 211	2 806 211	–	–	–	95 249	–	299 030
Debt securities	13	1 782 678	76 230	421 709	393 350	0	26 071	2 289	1 284 739	0	639 578
Loans	14	2 755 442	1 184 688	293 319	31 566	13 674	246 547	1 532	471 268	806 166	145 210
Equity and investment fund shares or units	15	2 893 180	2 101 311	791 704	310 627	294 890	117 243	68 944	0	165	235 262
Insurance, pension and standardised guarantee schemes	16	440 975	0	438 059	3 558	23 284	8 264	402 953	2 916	–	21 338
Financial derivatives and employee stock options	17	70 351	19 624	50 711	49 989	413	147	162	0	16	39 900
Other accounts payable	18	2 061 241	1 408 749	151 082	74 162	8 414	48 256	20 249	482 447	18 963	420 861
Financial net worth	19	-1 051 421	-2 053 340	-80 608	24 141	2 256	-93 692	-13 314	-1 208 309	2 290 837	1 145 012

“–” means that data does not exist or is not compiled.

Table XV. Financial accounts by institutional sectors in 2023 (in PLN million)**B. Stocks, consolidated**

Financial instruments	Institutional sectors										
	1	of which:									10
		2	3	of which:				8	9		
				4	5	6	7				
Total economy	Non-financial corporations	Financial corporations	Monetary financial institutions	Investment funds except money market funds	Other financial inter-mediarities, except ICPF, financial auxiliaries and captive financial institutions and money lenders	Insurance corporations and pension funds (ICPF)	General government	Households and non-profit institutions serving households	Rest of the World		
Financial assets	1	1 917 214	1 456 052	3 892 945	3 214 277	340 166	343 819	475 271	886 313	3 116 147	2 968 635
Monetary gold and special drawing rights (SDR)	2	116 035	–	116 035	116 035	–	–	–	0	–	27 686
Currency and deposits	3	299 030	549 110	267 938	262 959	14 994	60 842	13 241	234 256	1 634 237	180 000
Debt securities	4	639 578	8 366	1 515 242	1 273 087	167 067	11 008	130 388	19 807	20 908	387 860
Loans	5	145 210	91 048	1 466 266	1 450 282	9 697	138 704	8 247	119 750	112 630	802 103
Equity and investment fund shares or units	6	235 262	136 338	271 197	29 054	88 090	56 013	274 245	301 781	695 302	1 253 500
Insurance, pension and standardised guarantee schemes	7	21 338	42 001	21 073	372	0	301	21 073	1 936	392 842	3 751
Financial derivatives and employee stock options	8	39 900	15 345	27 322	25 738	3 032	1 120	519	0	33	33 633
Other accounts receivable	9	420 861	613 843	207 870	56 752	57 287	75 830	27 558	208 783	260 196	280 102
Liabilities	10	2 968 635	3 509 392	3 973 553	3 190 136	337 909	437 510	488 584	2 094 622	825 310	1 823 623
Monetary gold and special drawing rights (SDR)	11	27 686	–	27 686	27 686	–	–	–	0	–	22 444
Currency and deposits	12	180 000	–	2 555 539	2 639 637	–	–	–	10 971	–	299 030
Debt securities	13	387 860	68 004	54 682	92 928	0	26 070	1 991	1 189 919	0	639 578
Loans	14	802 103	1 068 212	138 428	21 662	13 674	242 261	1 495	433 781	806 166	145 210
Equity and investment fund shares or units	15	1 253 500	1 828 458	594 234	301 800	292 228	114 345	62 065	0	165	235 262
Insurance, pension and standardised guarantee schemes	16	3 751	0	437 349	3 558	23 284	8 264	402 916	2 916	–	21 338
Financial derivatives and employee stock options	17	33 633	8 533	27 885	30 249	413	147	162	0	16	39 900
Other accounts payable	18	280 102	536 185	137 750	72 616	8 311	46 424	19 956	457 035	18 963	420 861
Financial net worth	19	-1 051 421	-2 053 340	-80 608	24 141	2 256	-93 692	-13 314	-1 208 309	2 290 837	1 145 012

“–” means that data does not exist or is not compiled.

Table XV. Financial accounts by institutional sectors in 2023 (in PLN million)

C. Transactions, non-consolidated

Financial instruments	Institutional sectors										
	Total economy	of which:								Households and non-profit institutions serving households	Rest of the World
		Non-financial corporations	Financial corporations	of which:				General government			
				Monetary financial institutions	Investment funds except money market funds	Other financial inter-mediar-ies, except ICPF, financial auxiliaries and captive financial institutions and money lenders	Insurance corporations and pension funds (ICPF)				
1	2	3	4	5	6	7	8	9	10		
Financial assets	1	935 246	329 049	451 089	370 886	31 079	29 347	19 777	39 375	115 733	198 749
Monetary gold and special drawing rights (SDR)	2	34 164	–	34 164	34 164	–	–	–	0	–	-34 147
Currency and deposits	3	239 054	47 000	86 089	70 418	-586	16 153	103	-46 558	152 523	33 916
Debt securities	4	260 889	-1 564	248 356	215 533	25 340	-2 278	9 760	13 004	1 093	39 357
Loans	5	136 666	23 193	48 991	37 092	375	10 747	777	41 405	23 078	39 081
Equity and investment fund shares or units	6	-47 269	31 760	19 881	12 418	4 578	-5 425	8 310	6 906	-105 815	123 174
Insurance, pension and standardised guarantee schemes	7	40 408	4 216	233	0	0	30	203	18	35 941	-170
Financial derivatives and employee stock options	8	-7 684	-2 648	-4 652	-3 703	-877	301	-374	-377	-6	676
Other accounts receivable	9	279 017	227 093	18 028	4 963	2 249	9 818	998	24 977	8 919	-3 138
Liabilities	10	876 845	238 146	419 590	322 527	25 118	40 345	31 600	219 600	-491	257 149
Monetary gold and special drawing rights (SDR)	11	0	–	0	0	–	–	–	0	–	17
Currency and deposits	12	224 040	–	260 523	260 523	–	–	–	-36 483	–	48 930
Debt securities	13	218 794	2 157	51 056	51 883	0	-762	-65	165 581	0	81 451
Loans	14	142 387	45 628	25 908	-2 590	-881	29 521	-142	72 538	-1 687	33 360
Equity and investment fund shares or units	15	41 979	13 976	28 002	8 488	19 497	247	-229	0	0	33 926
Insurance, pension and standardised guarantee schemes	16	39 721	0	39 516	1 194	6 456	2 145	29 721	205	–	517
Financial derivatives and employee stock options	17	-15 307	-4 179	-11 130	-10 308	-752	-31	-39	0	2	8 299
Other accounts payable	18	225 230	180 563	25 714	13 336	799	9 225	2 354	17 759	1 194	50 649
Financial net worth	19	58 401	90 903	31 499	48 359	5 961	-10 998	-11 823	-180 225	116 224	-58 401

“–” means that data does not exist or is not compiled.

TABELA XV. Financial accounts by institutional sectors in 2023 (in PLN million)

D. Transactions, consolidated

Financial instruments	Institutional sectors										
	of which:									Rest of the World	
	Total economy	Non-financial corporations	Financial corporations	of which:				General government	Households and non-profit institutions serving households		
				Monetary financial institutions	Investment funds except money market funds	Other financial intermediaries, except ICPF, financial auxiliaries and captive financial institutions and money lenders	Insurance corporations and pension funds (ICPF)				
1	2	3	4	5	6	7	8	9	10		
Financial assets	1	291 296	132 387	345 052	314 012	30 848	29 906	20 304	54 634	115 733	198 749
Monetary gold and special drawing rights (SDR)	2	34 164	–	34 164	34 164	–	–	–	0	–	-34 147
Currency and deposits	3	48 930	47 000	51 404	50 187	-586	16 153	103	-8 858	152 523	33 916
Debt securities	4	81 451	615	202 344	171 776	25 340	-2 281	9 751	2 568	1 093	39 357
Loans	5	33 360	6 249	20 937	35 602	375	10 516	773	28 701	23 078	39 081
Equity and investment fund shares or units	6	33 926	12 895	14 870	10 720	4 348	-4 256	8 855	6 906	-105 815	123 174
Insurance, pension and standardised guarantee schemes	7	517	4 216	204	0	0	30	204	18	35 941	-170
Financial derivatives and employee stock options	8	8 299	1 218	4 262	6 468	-877	301	-374	-377	-6	676
Other accounts receivable	9	50 649	60 195	16 867	5 095	2 247	9 442	992	25 676	8 919	-3 138
Liabilities	10	232 895	41 484	313 553	265 653	24 886	40 904	32 127	234 859	-491	257 149
Monetary gold and special drawing rights (SDR)	11	0	–	0	0	–	–	–	0	–	17
Currency and deposits	12	33 916	–	225 838	240 292	–	–	–	1 217	–	48 930
Debt securities	13	39 357	4 336	5 045	8 126	0	-765	-75	155 145	0	81 451
Loans	14	39 081	28 684	-2 146	-4 081	-881	29 290	-146	59 834	-1 687	33 360
Equity and investment fund shares or units	15	123 174	-4 889	22 992	6 790	19 267	1 416	316	0	0	33 926
Insurance, pension and standardised guarantee schemes	16	-170	0	39 488	1 194	6 456	2 145	29 722	205	–	517
Financial derivatives and employee stock options	17	676	-313	-2 216	-138	-752	-31	-39	0	2	8 299
Other accounts payable	18	-3 138	13 665	24 553	13 469	797	8 848	2 348	18 458	1 194	50 649
Financial net worth	19	58 401	90 903	31 499	48 359	5 961	-10 998	-11 823	-180 225	116 224	-58 401

“–” means that data does not exist or is not compiled.

Methodology and explanatory notes

Table I. Main indicators

1. The data presented in Table I are sourced from the “Statistical Bulletin No. 3/2024” of the Statistics Poland (GUS). Definitions of the categories in this table can be found in their publications.
2. The data are presented in current price terms with growth rates based on constant 2021 price values, except in the case of retail sales where current prices are used as a basis for comparison. In this case, the corresponding month of the previous year’s current prices have been used as a constant price basis on the basis of the corresponding month of the previous year.
3. The enterprise sector is comprised of national economy entities with a workforce of 50 or more persons, engaged in the predominant activity classified according to the 2007 PKD (eng. *Polish Classification of Activities*) into the following sections:
 - Mining and quarrying (Section B),
 - Manufacturing (Section C),
 - Electricity, gas, steam, and air conditioning supply (Section D),
 - Water supply; sewerage, waste management and remediation activities (Section E),
 - Construction (Section F),
 - Wholesale and retail trade and repair of motor vehicles and motorcycles (Section G),
 - Transportation and storage (Section H),
 - Accommodation and catering (Section I),
 - Information and communication (Section J, excluding state and local government cultural institutions with legal personality),
 - Real estate activities (Section L),
 - Professional, scientific and technical activities (Section M),
 - Administrative and support service activities (Section N),
 - Education (Section P, excluding higher education),
 - Health care and social work activities (Section Q, excluding Independent Community Health Care Centers),

- Arts, entertainment and recreation activities (Section R, excluding state and local government cultural institutions with legal personality),
- Other services (Section S).

It should be noted that the business sector does not include entities included in sections Agriculture, forestry and fishing (Section A) and Financial and insurance activities (Section K).

4. The term „industry” encompasses national economy entities that are engaged in predominant activities, which are classified according to the 2007 PKD into the following sections:
 - Mining and quarrying (Section B),
 - Manufacturing (Section C),
 - Electricity, gas, steam, hot water and air conditioning supply (Section D),
 - Water supply; sewerage, waste management and remediation activities (Section E).
5. The data on sold production of industry (point 1), sales of construction and assembly production (point 2) and retail sales of commodities (point 6) refer to companies with more than 9 employees.
6. The data presented on the value of sold production of industry (point 1, col. 1) and sales of construction and assembly production (point 2, col. 4) are presented at so-called current prices. These exclude value added tax (VAT) and excise duties, but include the value of subsidies on goods and services.
7. The data on sales of construction and assembly production (point 2) refer to works conducted domestically and completed in accordance with the contracting system (i.e. for third-party principals), without the involvement of subcontractors, by construction companies classified, according to the 2007 PKD, within the “Construction” section.
8. The price indices of sold production of industry (point 3) were developed on the basis of a monthly survey of the prices of goods and services actually incurred by a selected group of economic entities classified within the industrial sectors. The selection of entities was made in a targeted manner. The survey included about 3,200 companies with more than 9 employees. The price indices show how price changes and shifts in product offerings and customer profiles affect prices.
9. The price indices of construction and assembly production (point 4) were obtained through a monthly construction prices survey carried out by a selected sample of economic entities classified according to the 2007 PKD classification system in the “Construction” section. The sample included approximately 400 construction companies with more than 9 employees.

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10. Prices indices of consumer goods and services (Section 5) were developed on the basis of an observation of changes in prices of representatives of consumer goods and services (approximately 1,500 units in 2020). The price indices were calculated using a weighting system developed on the basis of the expenditure breakdown (excluding natural consumption) of individual groups of households' purchase of consumer goods and services from the year preceding the year under review. This data was obtained from the Household Budget Survey. The grouping of consumer goods and services was made on the basis of the European Classification of Individual Consumption According to Purpose (ECOICOP).
 11. The data on retail sales of commodities (point 6) encompass transactions conducted at retail outlets, including commercial establishments such as shops (including pharmacies accessible to the public), distribution centres, warehouses, petrol stations, small retail outlets (stalls and mobile sales outlets, as well as pharmacy outlets), catering establishments, and transactions conducted within the wholesale network and at the premises of the producer in quantities that suggest the purchase was made for the needs of individual purchasers.
 12. The industrial new orders index (point 7) refers to companies with more than 49 employees and 10% of companies with between 10 and 49 employees. This indicator is used to assess future production and shows the development of demand for industrial goods and services in selected divisions of the "industry" section. The dynamics indicator is based on current prices.
 13. Data on persons employed in the enterprise sector (Section 10) include full and part-time employees in their main workplace. The employed are defined as those engaged in an employment relationship, including owners and co-owners of self-employment units and their assisting family members, as well as those engaged in contract work, agents, and individuals employed by agents. Additionally, the data presented in this figure excludes those engaged in agricultural production cooperatives. The data do not include individuals employed on individual farms in agriculture or in budgetary units engaged in activities related to national defense and public security.
 14. The data on average paid employment in the enterprise sector (point 11) include persons employed on the basis of full-time and those on part-time employment converted to full-time employees. The data do not include individuals employed on individual farms in agriculture or in budgetary units engaged in activities related to national defense and public security.
 15. Data on the number of registered unemployed (point 13) refer to persons registered in district employment offices are presented in accordance with the Act of 20 April 2004 on *Employment Promotion and Labour Market Institutions* (Journal of Laws of 2023, item 735, as amended). As of 12 March 2022, the *Act On Assistance to Ukrainian Citizens in Connection With Armed Conflict on the Territory of that State* entered into force (effective from 24 February 2022), which enables registration in district employment offices of Ukrainian citizens aged 18 and over as unemployed or seeking work (Journal of Laws of 2022, item 583, as amended). The number of unemployed persons does not include individuals engaged in various forms of training, including internships, professional preparation for adults, socially useful work, and those referred to employment agencies

for activation activities. An individual who has completed their studies and is currently seeking employment is considered to be an unemployed graduate. This designation applies for a period of 12 months from the date of completion of their studies, as confirmed by the relevant documentation. This may include a diploma, certificate, or other document attesting to the completion of an academic program, vocational training program of at least 24 months' duration, or the attainment of qualifications to perform a profession as a person with disability.

16. The unemployment rate (point 14) is calculated as the percentage of the unemployed in the economically active population aged 15 and over.
17. The consumer confidence indicators (point 15) are calculated on the basis of the results of the State of Households Periodic Survey, which employs the sentiment test method to obtain data. The test comprises a series of questions directed specifically at consumers. The indicators are calculated on the basis of the balances derived from the difference between the percentage of positive and negative responses. The indicators can assume values between -100 and +100. A positive value indicates a numerical advantage of optimistic consumers over pessimistic consumers, while a negative value indicates a numerical advantage of pessimistic consumers over optimistic consumers.
18. The indices of the general business climate (point 16) are calculated on the basis of the results of business leaders using the business tendency test method that has been agreed with the European Commission for the EU countries. The indicators are calculated using the difference between the percentage of positive and negative responses. The general business tendency indicator is the average of the weighted balances of the responses to the monthly survey questions on the company's current and expected economic situation. The general business tendency indicator assumes values between -100 and +100. Values above zero are regarded as positive, indicating an improvement in the business climate, whereas values below zero are considered negative, indicating a deterioration in the business climate. A value of zero indicates that the economic situation remains unchanged. The data for the survey of economic activity in manufacturing concerns companies with 10 or more employees, while in construction, trade and repair of vehicles and services it refers to the entire population.

Table II. Non-financial enterprises

1. The data presented in Table II are sourced from the Statistics Poland (GUS) and their Statistical Bulletin No. 3/2024. Definitions pertaining to the categories presented in this table can be found in publications of Statistics Poland.
2. The table shows data on the accrued basis.
3. The data on the statistics of non-financial enterprises pertain to business entities with bookkeeping and a workforce exceeding 49 employees, with the exception of entities engaged in economic activities classified according to the 2007 PKD as belonging to the sections "Agriculture, forestry and fishing" and "Financial and insurance activities". Furthermore, non-financial enterprises statistics excludes higher education institutions,

independent public healthcare institutions, cultural institutions with legal personality, trade unions, and religious and political organizations.

Table III. Financial market – basic information

The data presented in Table III has been sourced from Narodowy Bank Polski, with the exception of the data in point 5, which has been provided by the Warsaw Stock Exchange.

1. The interest rates, illustrated in Table III, are presented on an annual basis, reflecting the prevailing rate applicable on the final day of the month. In the case of the weighted average yield on Treasury bills and NBP money bills purchased, the average interest rate during the month is provided.
2. In accordance with a resolution adopted by the Monetary Policy Council, the discount rate on bills of exchange accepted by Narodowy Bank Polski from banking institutions was reinstated as of March 2020 (col. 5).
3. Minimum reserve requirements, as detailed in col. 12, stands for the volumes that have been formally declared by banking institutions and are in effect on the last day of the month.
4. Information on bill sale auctions (point 3, with the exception of the bills outstanding from tender sales at month end which can be found in col. 18) includes data from tenders held during the month. The average yields on bills purchased are calculated on a weighted basis, with the weighting reflecting the proportion of bill sales of each maturity in the total value of bills purchased. The calculation of the stock of bills in circulation at the end of the month has been made with due consideration of the redemption date, which is determined from the day following the tender resulting in the sale. This figure does not include bills in circulation that have not originated from tenders.
5. Information NBP money market bills sale auctions (point 4, with the exception of bills outstanding from tender sales at month end – col. 24) comprises data from tenders conducted during the specified period. The average yields on purchased bills are weighted according to the proportion of sales of bills of specific maturities in the total value of bills purchased.
6. The number of domestic and foreign equities on Warsaw Stock Exchange (point 5, col. 25), the turnover value (point 5, col. 26) and the turnover ratio (point 5, col. 27) are inclusive of both domestic and foreign companies listed on the WSE.
7. The turnover value (point 5, col. 26) relates to transactions in shares on the spot market carried out in the continuous trading system or in the single-price auction system.
8. The turnover ratio (point 5, col. 27) represents the ratio of the value of shares traded in session transactions to the average value of shares traded in a given month. It refers to transactions in shares on the spot market.

9. Market capitalization (point 5, col. 28) refers to domestic equities.
10. The P/E ratio (point 5, col. 29) represents the ratio of market price to net profit and is calculated as the total market value of the companies at the end of the month divided by their total profits and losses over the last four quarters for which financial data is available. This ratio refers to domestic equities.
11. The set of indices of the Warsaw Stock Exchange SA (point 5, col. 30–35) provides information on the situation among the largest (WIG20), medium-sized (mWIG40) and small (sWIG80) listed companies.
 - The WIG20 index has been calculated since 16 April 1994 on the basis of the value of the shares portfolio of the 20 largest and most liquid companies in the main market. The initial value of the index was 1,000 points. The WIG20 is a price-type index, whereby only the prices of transactions included in the index are taken into account in its calculation. Income from shares, such as dividends and pre-emptive rights, is not included. Furthermore, the WIG20 index may not include companies from the mWIG40 and sWIG80 indices, nor more than five companies from a single stock exchange sector.
 - The mWIG40 index has been calculated since 31 December 1997 and comprises 40 medium-sized companies listed on the Exchange. Prior to 16 March 2007, the index was designated as MIDWIG. The initial value of the index was 1,000 points. The mWIG40 is a price index, and only the prices of transactions included in the index are taken into account in its calculation; dividend income is not included. The mWIG40 index does not include companies from the WIG20 and sWIG80 indices or foreign companies listed simultaneously on the Warsaw Stock Exchange and other markets with a market value on the ranking date of more than EUR 1 billion.
 - The sWIG80 index which has been calculated since 31 December 1994, includes 80 small companies listed on the Warsaw Stock Exchange. Prior to 16 March 2007, the index was designated as WIRR and was an income index, encompassing 1% of listed companies by market value. The initial value of the index was 1,000 points. The sWIG80 is a price index, and only the prices of transactions included in the index are taken into account in its calculation; dividend income is not included. The sWIG80 index does not include companies from the WIG20 and mWIG40 indices, nor does it include foreign companies that are listed simultaneously on the Warsaw Stock Exchange and other markets with a market value of more than EUR 100 million on the date of the ranking. The proportion of any one company represented in the index is limited to 10%.

Table IV. Average exchange rates of USD and EUR (in PLN)

Narodowy Bank Polski is the primary source of information on exchange rates. The NBP mid-rate represents the official exchange rate employed for statistical and accounting purposes. The weighted average exchange rate is calculated as the mean of the daily average exchange rates applicable for each calendar day during the period.

Tables V–XV

Tables V to XV present data from selected areas of monetary and financial statistics. The presentation of monetary and financial data employs a sectoral breakdown of the economy in accordance with the sectoral breakdown rules set forth in 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 (hereinafter ESA 2010). For each dataset shown on the NBP website under Statistics and Reporting → Monetary and Financial Statistics, detailed descriptions of the sectors of the economy and of the categories (instruments) shown in the individual tables are provided, where applicable.

The financial sector comprises the following subsectors:

- monetary financial institutions (MFIs), which include the NBP, and other MFIs, which include: other banks, credit unions and money market funds;
- investment funds other than money market funds;
- insurance institutions;
- pension funds;
- other financial intermediaries, which include, among others, financial leasing corporations, factoring corporations, brokerage houses and financial vehicle companies engaged in securitization transactions;
- financial auxiliaries, and captive financial institutions and money lenders (includes, inter alia, foreign exchange bureaux, stock exchanges, instalment sales institutions).

The non-financial sector comprises the following sub-sectors:

- non-financial corporations, which include state-owned enterprises and companies, private enterprises and companies, and cooperatives; it also includes individual entrepreneurs who employ more than nine people;
- households, comprising private individuals, individual farmers, individual entrepreneurs;
- non-commercial institutions serving households.

General government comprising the following sub-sectors:

- central government institutions, which include, inter alia: public authorities, government administration bodies, state control and law protection bodies, courts and tribunals, state colleges and universities, state cultural institutions;
- local government institutions, which include, inter alia: provincial, county and municipal bodies, self-government bodies, public schools run by local government units, local cultural institutions, social welfare institutions);
- social security funds, which include Zakład Ubezpieczeń Społecznych (ZUS – *Social Insurance Institution*) and Kasa Rolniczego Ubezpieczenia Społecznego (KRUS – *Agricultural Social Insurance Fund*), and funds managed by them; Narodowy Fundusz Zdrowia (*National Healthcare Fund*) and its regional branches.

General comments on Tables V, VI, VII

Interest rate reporting, presented in Tables V–VII, covers deposit and lending activity between monetary financial institutions (MFIs) and resident non-financial sector which comprises

non-financial corporations, households and non-profit corporations serving households.¹ As far as banking products are concerned, reporting framework covers all types of deposits and loans, except securities, interest due, bad loans and loans for debt restructuring. Loans comprise credits and loans as well as debt purchase, guaranties and warranties, financial leasing and other.

Interest rate reporting is collected from a select group of banks and extrapolated to the banking system as a whole. Comprehensive information regarding the reporting requirements and methodology for compiling interest rate statistics is available on the NBP website under Statistics and Reporting → Monetary and Financial Statistics → Interest Rate Statistics.²

Table V. Average MFI interest rates on outstanding amounts, PLN denominated

The table presents data on outstanding amounts which refer to all interest paid and received at the end of the reporting period, these concluded prior to the reporting month as well as new businesses. This interest rate is a quotient of interest on average outstanding amounts by average volume of businesses per reporting month, commissions and other charges excluded.

Table VI. Average MFI interest rates on new and renegotiated business, PLN denominated

The table presents data on the interest rates of agreements carried out in a given reporting month. Renegotiated existing agreements are also deemed new business. Interest on new business is an effective interest also known as Narrowly Defined Effective Rate (NDER) calculated separately for each agreement. The NDER does not provide the actual interest paid, but its rate agreed with the creditor on the day the loan is drawn or deposit placed. The concept of the narrowly defined effective rate was coined as an opposite to widely understood effective interest rate or the annual percentage rate of charge (APRC). The APRC incorporates all charges paid by the borrower. These charges are most of all commissions (brokers included) but also compulsory loan insurance premiums against death or unemployment of the borrower. The APRC provides for integral picture of all-in-cost of consumer loans, which are to a great extent concealed by the bank in other charges. As regards house purchase loans, discrepancies between APRC and NDER should not be distinctive. These loans are usually long-term and therefore single commissions make an insignificant portion of total costs. In addition to NDER, the statistics on new businesses also show APRC for two interest rate categories: new consumer and residential loans. In contrast to the NDER, which only takes into account purely interest-based capital costs, the APRC includes all mandatory fees that the borrower has to pay. These are most of all commissions (brokers included), but also compulsory loan insurance premiums against death or unemployment of the borrower.

¹ The household sector includes individuals, individual entrepreneurs and farmers.

² <https://nbp.pl/en/statistic-and-financial-reporting/monetary-and-financial-statistics/mir-statistics/>.

Table VII. Average MFI interest rates on new and renegotiated business, EUR denominated

The general principles of calculation remain consistent with those outlined in Tables V and VI.

General comments on Tables VIII–XII

The data refer to the end-of-month stocks and have been derived from balance sheet information received from banks, from the balance sheet of the Narodowy Bank Polski and from credit unions. The information is presented in a layout adapted to the standards in force at the European Central Bank.

Table VIII. Aggregated balance sheet of other monetary financial institutions

The aggregated balance sheet of other monetary financial institutions presents the principal categories of assets and liabilities of banks (with the exception of the NBP), credit unions and money market funds. Further details regarding the methodology employed in the compilation of this statistics can be found on the NBP website, accessible via the following link: NBP website under Statistics and Reporting → Monetary and Financial Statistics → Aggregated Balance Sheet of Other Monetary Financial Institutions.³

Table IX. Balance sheet of Narodowy Bank Polski

The table comprises the basic categories of assets and liabilities of Narodowy Bank Polski. Further details regarding the methodology employed in the compilation of this statistics can be found on the NBP website, accessible via the following link: Statistics and Reporting → Monetary and Financial Statistics → Balance Sheet of Narodowy Bank Polski.⁴

Table X. Consolidated balance sheet of monetary financial institutions

The table comprises consolidated data (net of inter-MFIs positions) on basic assets and liabilities of monetary financial institutions sector (NBP, commercial banks, credit unions and money market funds). Accordingly, MFI's vault cash has been removed from remaining assets (col. 10).

Further details regarding the methodology employed in the compilation of this statistics can be found on the NBP website, accessible via the following link: Statistics and Reporting → Monetary and Financial Statistics → Consolidated Balance Sheet of Monetary Financial Institutions.⁵

³ <https://nbp.pl/en/statistic-and-financial-reporting/monetary-and-financial-statistics/aggregated-balance/>.

⁴ <https://nbp.pl/en/statistic-and-financial-reporting/monetary-and-financial-statistics/balance-sheet-nbp/>.

⁵ <https://nbp.pl/en/statistic-and-financial-reporting/monetary-and-financial-statistics/consolidated-balance-sheet-of-mfis/>.

Table XI. Monetary aggregate M3 and its counterparts

The table presents monetary aggregate M3 and its counterparts. Further details regarding the methodology employed in the compilation of this statistics can be found on the NBP website, accessible via the following link: [Statistics and Reporting → Monetary and Financial Statistics → Monetary Aggregate M3 and its Counterparts](#).⁶

Table XII. Reserve money and counterparts

The table presents reserve money of the central bank and its counterparts. Further details regarding the methodology employed in the compilation of this statistics can be found on the NBP website, accessible via the following link: [Statistics and Reporting → Monetary and Financial Statistics → Reserve Money and Counterparts](#).⁷

Table XIII. Banking sector financial data

Aggregated banking sector financial data are presented on the basis of FINREP solo reporting (FINPL). The information content is defined in the NBP Board of Directors Resolution 38/2023 (Annex No. 6) of 4 July 2023. Further details regarding the methodology employed in the compilation of this statistics can be found on the NBP website, accessible via the following link: [Statistics and Reporting → Monetary and Financial Statistics → Banking sector financial data](#).⁸

Table XIV. Investment funds statistics

The table presents aggregated assets and net assets of investment funds as well as information on changes in the population of investment fund market entities. Data on investment funds are broken down according to the investment policy and thereafter aggregated. Further details regarding the methodology employed in the compilation of this statistic can be found on the NBP website, accessible via the following link: [Statistics and Reporting → Monetary and Financial Statistics → Investment Fund Statistics](#).⁹

Table XV. Financial accounts

Financial accounts present financial assets and liabilities of resident entities, grouped into sectors and subsectors, and the rest of the world (non-residents) broken down by financial operations represented by financial instruments. Financial accounts, compiled according to ESA 2010 standards, comprise financial balance sheets (stock data at the end of the reporting period) and transaction data. Non-consolidated accounts record operations with all counterparts, regardless of the sector of the counterparty; consolidated accounts do not

⁶ <https://nbp.pl/en/statistic-and-financial-reporting/monetary-and-financial-statistics/m3-and-counterparts/>.

⁷ <https://nbp.pl/en/statistic-and-financial-reporting/monetary-and-financial-statistics/reserve-money/>.

⁸ <https://nbp.pl/en/statistic-and-financial-reporting/monetary-and-financial-statistics/banking-sector-financial-data/>.

⁹ <https://nbp.pl/en/statistic-and-financial-reporting/monetary-and-financial-statistics/statistics-of-investment-funds/>.

include operations between units classified in the same institutional sector (subsector). Further details regarding the methodology employed in the compilation of this statistics can be found on the NBP website, accessible via the following link: Statistics and Reporting → Monetary and Financial Statistics → Financial Accounts.¹⁰

¹⁰ <https://nbp.pl/en/statistic-and-financial-reporting/monetary-and-financial-statistics/financial-accounts/>.

List of the most important abbreviations

BFG	Bank Guarantee Fund (Bankowy Fundusz Gwarancyjny)
BIS	Bank for International Settlements
bps	basis points
CROE	cyber resilience oversight expectations for financial market infrastructures
EBA	European Banking Authority
EBRD	European Bank for Reconstruction and Development
ECB	European Central Bank
ECOFIN	Economic and Financial Affairs Council
ESCB	European System of Central Banks
ESRB	European Systemic Risk Board
EU	European Union
FSC	Financial Stability Committee
GDP	Gross Domestic Product
IMF	International Monetary Fund
KDPW SA	National Depository for Securities (Krajowy Depozyt Papierów Wartościowych SA)
KIR SA	National Clearing House (Krajowa Izba Rozliczeniowa SA)
KNF	Polish Financial Supervision Authority (Komisja Nadzoru Finansowego)
MPC	Monetary Policy Council (Rada Polityki Pieniężnej)
NBP	Narodowy Bank Polski
NBU	National Bank of Ukraine
OECD	Organisation for Economic Co-operation and Development
PFR	Polish Development Fund (Polski Fundusz Rozwoju)
SDR	Special Drawing Rights
SEPA	Single Euro Payments Area
SORBNET	Real-Time Gross Settlement System [RTGS] at the NBP Head Office
TARGET	Trans-European Automated Real-Time Gross Settlement Express Transfer System
UKNF	Office of the Polish Financial Supervision Authority (Urząd Komisji Nadzoru Finansowego)
WBG	The World Bank Group

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