



NARODOWY BANK POLSKI

Financial Statements of Narodowy Bank Polski as at 31 December 2022

Contents

| | |
|--|----|
| Balance Sheet of Narodowy Bank Polski | 5 |
| Profit and Loss Account of Narodowy Bank Polski | 6 |
| Notes | 7 |
| 1. Introduction | 7 |
| 1.1. Legal basis, scope of activities and bodies of NBP | 7 |
| 1.2. Legal basis of preparation of the financial statements | 9 |
| 1.3. Period covered by the financial statements | 9 |
| 1.4. Certified auditor and its selection | 9 |
| 1.5. Information on the adoption and approval of NBP financial statements for the year 2021 | 10 |
| 2. Description of significant accounting principles | 10 |
| 2.1. Basic accounting principles | 10 |
| 2.2. Going concern | 11 |
| 2.3. Recognition of transactions in the accounting books of NBP | 11 |
| 2.4. Valuation as at the balance sheet date | 11 |
| 2.5. Post-balance-sheet events | 13 |
| 3. Changes in accounting principles | 13 |
| 4. Values based on professional estimates | 16 |
| 5. Explanatory notes | 17 |
| Note 1 Gold and gold receivables | 17 |
| Note 2 Receivables from and liabilities to the IMF | 18 |
| Note 3 Other financial assets | 20 |
| Note 3.1 Balances with foreign institutions, securities, loans granted and other foreign assets | 22 |
| Note 3.2 Securities held for monetary policy purposes | 24 |
| Note 3.3 Other financial assets | 24 |
| Note 3.4 Sundry | 26 |
| Note 4 Tangible fixed assets and intangible assets | 27 |
| Note 5 Banknotes and coins in circulation | 30 |
| Note 6 Other financial liabilities | 30 |
| Note 6.1 Liabilities related to monetary policy operations | 32 |
| Note 6.2 Other liabilities denominated in domestic currency | 34 |
| Note 6.3 Liabilities denominated in foreign currency | 35 |
| Note 6.4 Sundry | 36 |
| Note 7 Provisions for liabilities | 36 |
| Note 8 Accruals, prepaid expenses and deferred income | 37 |
| Note 9 Equity | 38 |
| Note 9.1 Revaluation accounts | 40 |
| Note 9.2 FX risk provision | 42 |

| | | |
|------------|--|----|
| Note 9.3 | Reserve fund | 43 |
| Note 9.4 | Financial result | 43 |
| Note 10 | Off-balance-sheet items | 44 |
| Note 10.1 | Spot, forward and swap transactions recognised on off-balance-sheet accounts | 45 |
| Note 10.2 | Securities purchased or sold in a forward transaction | 46 |
| Note 10.3 | Futures | 46 |
| Note 11 | Net result on interest | 47 |
| Note 12 | Net result on financial operations | 53 |
| Note 12.1 | Net realised gains/losses | 53 |
| Note 12.2 | Unrealised losses | 56 |
| Note 13 | Net result on commissions and fees | 58 |
| Note 14 | Income on shares and participating interests | 58 |
| Note 15 | Salaries | 59 |
| Note 16 | Administrative expenses | 60 |
| Note 17 | Depreciation and amortisation expenses | 60 |
| Note 18 | Expenses on issue of banknotes and coins | 61 |
| Note 19 | Other income and other expenses | 61 |
| 6. | Other explanatory notes | 61 |
| Note 20 | Other issues | 61 |
| 7. | Financial, operational and tax risk | 62 |
| 7.1. | Financial risk | 63 |
| 7.1.1. | Credit risk | 63 |
| 7.1.1.1. | Credit risk in foreign currency reserve management | 63 |
| 7.1.1.2. | Credit risk underlying domestic operations | 66 |
| 7.1.1.2.1. | Securities | 66 |
| 7.1.1.2.2. | Claims on credit operations | 66 |
| 7.1.1.2.3. | FX swap transactions with domestic banks | 67 |
| 7.1.2. | Liquidity risk | 67 |
| 7.1.2.1. | Maturity analysis for financial liabilities in foreign currency | 68 |
| 7.1.3. | Interest rate risk | 69 |
| 7.1.4. | Foreign exchange rate risk and gold price risk | 70 |
| 7.1.5. | Equity index futures price risk | 73 |
| 7.1.6. | Market value of financial assets and liabilities and off-balance-sheet financial instruments | 73 |
| 7.2. | Operational risk | 75 |
| 7.3. | Tax risk | 75 |

Balance Sheet of Narodowy Bank Polski as at 31 December 2022

| Assets | Note | 31.12.2022 | 31.12.2021 |
|--|------|----------------------|----------------------|
| | | <i>PLN thousand</i> | |
| 1. Gold and gold receivables | 1 | 58,650,238.7 | 54,843,799.4 |
| 2. Claims on non-residents denominated in foreign currency | | 675,407,337.1 | 619,333,303.4 |
| 2.1. <i>Receivables from the IMF</i> | 2 | 31,411,666.6 | 30,010,120.7 |
| 2.2. <i>Balances with foreign institutions, securities, loans granted and other foreign assets</i> | 3.1 | 643,995,670.5 | 589,323,182.7 |
| 6. Other claims on credit institutions denominated in domestic currency | | 169.2 | 7.0 |
| 7. Securities of residents denominated in domestic currency | 3.2 | 140,673,185.5 | 149,322,164.0 |
| 10. Other assets | | 1,497,159.3 | 1,824,535.8 |
| 10.1. <i>Tangible fixed assets and intangible assets</i> | 4 | 1,016,124.3 | 1,033,750.4 |
| 10.2. <i>Other financial assets</i> | 3.3 | 303,134.2 | 299,061.9 |
| 10.3. <i>Off-balance-sheet instruments revaluation differences</i> | 10 | 34,734.7 | 354,272.7 |
| 10.4. <i>Accruals and prepaid expenses</i> | 8 | 49,683.9 | 41,496.4 |
| 10.5. <i>Sundry</i> | 3.4 | 93,482.2 | 95,954.3 |
| Total assets | | 876,228,089.8 | 825,323,809.6 |

| Liabilities | Note | 31.12.2022 | 31.12.2021 |
|--|------|----------------------|----------------------|
| | | <i>PLN thousand</i> | |
| 1. Banknotes and coins in circulation | 5 | 368,611,663.5 | 355,557,725.3 |
| 2. Liabilities to credit institutions related to monetary policy operations denominated in domestic currency | 6.1 | 55,112,907.5 | 96,525,124.4 |
| 2.1. <i>Current accounts (incl. the required minimum reserve accounts)</i> | | 34,914,457.6 | 66,061,581.2 |
| 2.2. <i>Deposit facilities</i> | | 20,198,449.9 | 30,463,543.2 |
| 3. Other liabilities to credit institutions denominated in domestic currency | 6.2 | 940,440.8 | 762,678.9 |
| 4. Liabilities due to issued securities denominated in domestic currency | 6.1 | 252,181,174.3 | 184,521,188.7 |
| 5. Liabilities to other residents denominated in domestic currency | 6.2 | 11,883,806.3 | 15,251,900.0 |
| 5.1. <i>Liabilities to general government</i> | | 10,792,940.6 | 15,185,508.3 |
| 5.2. <i>Other liabilities</i> | | 1,090,865.7 | 66,391.7 |
| 6. Liabilities to non-residents denominated in domestic currency | 6.2 | 4,124,197.2 | 3,960,800.8 |
| 7. Liabilities to residents denominated in foreign currency | 6.3 | 59,010,072.3 | 32,629,719.7 |
| 8. Liabilities to non-residents denominated in foreign currency | 6.3 | 53,625,136.0 | 36,036,430.1 |
| 9. SDR allocation | 2 | 30,871,510.9 | 29,769,702.4 |
| 11. Other liabilities | | 430,621.7 | 1,108,023.7 |
| 11.1. <i>Off-balance-sheet instruments revaluation differences</i> | 10 | 2,404.1 | 24,134.5 |
| 11.2. <i>Accruals and deferred income</i> | 8 | 97,303.7 | 97,536.8 |
| 11.3. <i>Sundry</i> | 6.4 | 330,913.9 | 986,352.4 |
| 12. Provisions | | 15,281,500.7 | 16,693,832.6 |
| 12.1. <i>FX risk provision</i> | 9.2 | 15,078,591.4 | 16,499,460.9 |
| 12.2. <i>Provisions for liabilities</i> | 7 | 202,909.3 | 194,371.7 |
| 13. Revaluation accounts | 9.1 | 50,056,738.6 | 51,038,899.5 |
| 14. Capital and reserves | 9.3 | 1,500,000.0 | 1,500,000.0 |
| 15. Financial result | 9.4 | -27,401,680.0 | -32,216.5 |
| 15.1. <i>Financial result for the financial year</i> | | -16,943,670.7 | 10,974,518.7 |
| 15.2. <i>Loss of previous years</i> | | -10,458,009.3 | -11,006,735.2 |
| Total liabilities | | 876,228,089.8 | 825,323,809.6 |

Profit and Loss Account of Narodowy Bank Polski for the year ended on 31 December 2022

| | Note | 2022 | 2021 |
|---|------|----------------------|---------------------|
| | | PLN thousand | |
| 1. Net result on interest | 11 | -5,829,784.9 | 2,252,493.1 |
| 1.1. Interest income* | | 9,371,032.8 | 3,140,350.1 |
| 1.2. Interest expenses* | | -15,200,817.7 | -887,857.0 |
| 2. Net result on financial operations | | -9,768,368.9 | 9,949,936.6 |
| 2.1. Realised gains/losses | 12.1 | 15,548,530.0 | 20,257,561.3 |
| 2.2. Unrealised losses | 12.2 | -26,737,763.7 | -3,658,590.0 |
| 2.3. Net result on impairment on financial assets | | -4.7 | -493.1 |
| 2.4. Net result on FX risk provision | 9.2 | 1,420,869.5 | -6,648,541.6 |
| 3. Net result on commissions and fees | 13 | -449.4 | 1,385.0 |
| 3.1. Commissions and fees income | | 52,945.2 | 47,466.7 |
| 3.2. Commissions and fees expenses | | -53,394.6 | -46,081.7 |
| 4. Income on shares and participating interests | 14 | 32,215.8 | 38,256.7 |
| 5. Other income | 19 | 140,909.0 | 176,280.0 |
| A. Total net income | | -15,425,478.4 | 12,418,351.4 |
| 6. Salaries | 15 | -673,408.3 | -640,499.1 |
| 7. Administrative expenses | 16 | -342,854.6 | -299,532.6 |
| 8. Depreciation and amortisation expenses | 17 | -95,484.0 | -114,186.4 |
| 9. Expenses on issue of banknotes and coins | 18 | -389,963.3 | -364,457.2 |
| 10. Other expenses | 19 | -16,482.1 | -25,157.4 |
| B. Financial result for the financial year | | -16,943,670.7 | 10,974,518.7 |

* Change in the presentation of interest income and interest expenses – see Chapter 3.

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 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 2022, item 2324, as amended),
- the Treaty on European Union and the Treaty on the Functioning of the European Union (consolidated texts: Official Journal of the EU 2016/C 202 of 7 June 2016, p. 1).

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 2022 was as follows:

Governor of NBP¹

Adam Glapiński

Monetary Policy Council²

| | | | |
|--------------------|---------------------------|-----------------------------|---------------------------|
| 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 NBP³

Chairperson *Adam Glapiński*

¹ The first term of office of Adam Glapiński as Governor of Narodowy Bank Polski ended on 21 June 2022. As of 22 June 2022 Adam Glapiński started the second term of office as Governor of Narodowy Bank Polski.

² In 2022 the following members of the Monetary Policy Council ended their terms of office as of:

- 25 January 2022 – Eugeniusz Gatnar and Jerzy Kropiwnicki,
- 9 February 2022 – Grażyna Ancyparowicz and Eryk Łon,
- 20 February 2022 – Łukasz Hardt and Kamil Zubelewicz,
- 30 March 2022 – Jerzy Żyżyński,
- 21 July 2022 – Rafał Sura (after he resigned from the post of a member of the Monetary Policy Council).

In 2022, the following members of the Monetary Policy Council were appointed for a six-year term of office, starting as of:

- 26 January 2022 – Ludwik Kotecki and Przemysław Litwiniuk,
- 21 February 2022 – Ireneusz Dąbrowski and Henryk Wnorowski,
- 23 February 2022 – Wiesław Janczyk,
- 7 September 2022 – Joanna Tyrowicz,
- 7 October 2022 – Iwona Duda and Gabriela Masłowska.

³ As on 16 July 2022 Andrzej Kaźmierczak ceased to act as member of the Management Board of NBP (after his term of office ended).

On 28 July 2022 Rafał Sura was appointed member of the Management Board of NBP.

On 1 September 2022 Paweł Mucha was appointed member of the Management Board of NBP.

As on 6 October 2022 Paweł Szlamacha ceased to act as member of the Management Board of NBP (after his first term of office ended).

On 12 October 2022 Paweł Szlamacha was appointed member of the Management Board of NBP (second term of office).

| | | | |
|---|-----------------------|-------------------------|-------------------------|
| 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>Paweł Szalamacha</i> |
| | <i>Paweł Mucha</i> | <i>Rafał Sura</i> | |

1.2. Legal basis of preparation of the financial statements

The Management Board of NBP has prepared the financial statements of NBP as at 31 December 2022 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 notes (NBP Official Journal, item 24), hereinafter referred to as “Resolution No. 13/2020 of the MPC”,
- 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), 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), referred hereinafter as “Resolution No. 64/2020 of the NBP Management Board”.

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 2022 to 31 December 2022. Comparative data in the financial statements cover the financial year from 1 January 2021 to 31 December 2021.

1.4. Certified auditor and its selection

The annual financial statements of NBP prepared as at 31 December 2022 are subject to audit by the certified auditor KPMG Audyty sp. z o.o. sp.k., with its registered office in Warsaw. The certified auditor was appointed by the Monetary Policy Council, hereinafter referred to as the “MPC”, in 2019 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 29 January 2004 – Public Procurement Law (Journal of Laws of 2018, item 1986, as amended), for a period of two years (audit of the financial statements for the years 2019 and 2020) with the option to extend the agreement for another two-year period (audit of the financial statements for the years 2021 and 2022). In 2021, the MPC decided to extend the agreement.

1.5. Information on the adoption and approval of NBP financial statements for the year 2021

The annual financial statements of NBP prepared as at 31 December 2021 were adopted by the MPC by Resolution No. 6/2022 on 6 April 2022 (NBP Official Journal, item 8) and approved by the Council of Ministers by Resolution No. 121/2022 on 3 June 2022. The certified auditor in charge of auditing the financial statements – 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 2021, NBP recorded a net financial result of PLN 10,974,518.7 thousand. Therefore, in 2022 in accordance with Article 69 para. 4 of the Act on NBP, NBP paid a contribution from profit in the amount of PLN 10,425,792.8 thousand to the State budget. In accordance with Article 62 of the Act on NBP, 5% of NBP's profit, i.e. the amount of PLN 548,725.9 thousand, was allocated 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,
- consistency and 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.

Securities 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, securities purchased by NBP and off-balance-sheet financial instruments⁴ the principle of valuation at a market value is applied.⁵ The revaluation results of the assets and liabilities to a market value as at the balance sheet date are recognised in accordance with the following rules:

- 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*.

⁴ Foreign exchange off-balance sheet items arising from foreign exchange forward and swap transactions are valued at the average NBP exchange rate.

⁵ The principle of valuation at market value was not applied for securities held-to-maturity and securities held for monetary policy purposes. Market value is the average of the bid and 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 published yield curves.

Price revaluation of financial instruments valued at a 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 securities not classified as held-to-maturity are valued at their market value.

Marketable securities held to maturity are valued at their clean price adjusted for accrued discount and premium, less impairment.⁶

Marketable securities held for monetary policy purposes are valued at their clean price adjusted for accrued discount and premium, less impairment.

Securities issued by NBP are valued at their issue price adjusted for accrued discount and premium.

Forward transactions in securities are valued by comparing the market value of the 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.

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.

After their balance-sheet value has been determined in original currency, assets, liabilities and off-balance-sheet financial instruments in foreign currencies have their value determined in domestic

⁶ Marketable 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.

currency. In the revaluation process, the average NBP exchange rates prevailing at the balance sheet date are used.

For the valuation as at 31 December 2022, the prices/exchange rates announced on 30 December 2022 were used, and for comparable data – those announced on 31 December 2021.

2.5. Post-balance-sheet events

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

Changes in the NBP accounting policy in 2022 were introduced by Resolution No. 13/2020 of the MPC.

Recognising interest, discount and premium on securities in the financial result of NBP and presentation of the net result on interest in the profit and loss account

As from 1 January 2022, interest, discount and premium on purchased securities are recognised in the net result on interest at the end of each operating day, in amounts calculated according to the internal rate of return. Until 31 December 2021, discount and premium on purchased securities were recognised in the financial result at the end of each operating day, in amounts calculated according to the internal rate of return. Interest on purchased securities was recognised in the financial result at the end of each operating day, in amounts calculated according to the straight-line method.

After the method for recognising interest, discount and premium on purchased securities in the financial result has been standardised, and also in order to enhance the transparency of the presentation of interest income and interest expenses, the following changes have been introduced in the presentation of the net result on interest:

- income and expenses (in case of a negative interest rate) on interest on financial assets are presented net as interest income (including for securities – income on interest and discount, less premium expenses, are presented as net income on interest),
- expenses and income (in case of a negative interest rate) on interest on financial liabilities are presented net as interest expenses.

Until the end of 2021:

- interest income comprised interest income on financial assets (including for securities – income on interest and discount) and interest income due to a negative interest rate on financial liabilities,

- interest expenses comprised interest expenses on financial liabilities, expenses on premium on securities and expenses due to a negative interest rate on financial assets.

The change in the presentation of income and expenses on interest is presented in tables below (see Note 11).

| Profit and loss account of NBP | Note | 2022 | 2021 comparative data | 2021 data from the approved annual financial statements |
|--------------------------------|------|---------------|--------------------------|---|
| | | PLN thousand | | |
| 1. Net result on interest | 11 | -5,829,784.9 | 2,252,493.1 | 2,252,493.1 |
| 1.1. Interest income | | 9,371,032.8 | 3,140,350.1 | 8,619,588.1 |
| 1.2. Interest expenses | | -15,200,817.7 | -887,857.0 | -6,367,095.0 |
| ... | | | | |

| Net result on interest | Income | | Expenses | | Net result | |
|--|-----------------------|---|-----------------------|---|-----------------------|---|
| | 2021 comparative data | 2021 data from the approved annual financial statements | 2021 comparative data | 2021 data from the approved annual financial statements | 2021 comparative data | 2021 data from the approved annual financial statements |
| | PLN thousand | | | | | |
| Investment instruments of foreign exchange reserves, of which | 1,139,388.4 | 5,692,036.4 | 11,175.1 | -4,541,472.9 | 1,150,563.5 | 1,150,563.5 |
| - securities | 1,383,036.8 | 5,631,240.3 | 0.0 | -4,248,203.5 | 1,383,036.8 | 1,383,036.8 |
| * interest | 5,422,281.4 | 5,422,281.4 | - | - | 5,422,281.4 | 5,422,281.4 |
| * discount | 208,958.9 | 208,958.9 | - | - | 208,958.9 | 208,958.9 |
| * premium | -4,248,203.5 | - | - | -4,248,203.5 | -4,248,203.5 | -4,248,203.5 |
| - term deposits | -232,419.7 | 21,547.1 | 0.0 | -253,966.8 | -232,419.7 | -232,419.7 |
| * positive interest rate | 21,547.2 | 21,547.2 | - | - | 21,547.2 | 21,547.2 |
| * negative interest rate | -253,966.9 | - | - | -253,966.8 | -253,966.9 | -253,966.8 |
| - reverse repo transactions | -5,827.2 | 21,756.5 | 0.0 | -27,583.7 | -5,827.2 | -5,827.2 |
| * positive interest rate | 21,756.5 | 21,756.5 | - | - | 21,756.5 | 21,756.5 |
| * negative interest rate | -27,583.7 | - | - | -27,583.7 | -27,583.7 | -27,583.7 |
| - repo transactions | 0.0 | 17,390.2 | 11,353.6 | -6,036.6 | 11,353.6 | 11,353.6 |
| * positive interest rate | - | - | -6,036.6 | -6,036.6 | -6,036.6 | -6,036.6 |
| * negative interest rate | - | 17,390.2 | 17,390.2 | - | 17,390.2 | 17,390.2 |
| - other | -5,401.5 | 102.3 | -178.5 | -5,682.3 | -5,580.0 | -5,580.0 |
| * positive interest rate | 102.3 | 102.3 | -178.5 | -178.5 | -76.2 | -76.2 |
| * negative interest rate | -5,503.8 | - | 0.0 | -5,503.8 | -5,503.8 | -5,503.8 |
| Gold | 3,364.7 | 3,364.7 | 0.0 | 0.0 | 3,364.7 | 3,364.7 |
| International Monetary Fund | 7,833.8 | 7,833.8 | -8,005.4 | -8,005.4 | -171.6 | -171.6 |
| Monetary policy instruments, of which: | 2,007,566.9 | 2,897,212.6 | -885,367.7 | -1,775,013.4 | 1,122,199.2 | 1,122,199.2 |
| - NBP bills | 0.0 | 0.0 | -768,225.5 | -768,225.5 | -768,225.5 | -768,225.5 |
| - securities | 1,986,694.4 | 2,876,340.1 | 0.0 | -889,645.7 | 1,986,694.4 | 1,986,694.4 |
| * interest | 2,803,230.1 | 2,803,230.1 | 0.0 | 0.0 | 2,803,230.1 | 2,803,230.1 |
| * discount | 73,110.0 | 73,110.0 | 0.0 | 0.0 | 73,110.0 | 73,110.0 |
| * premium | -889,645.7 | 0.0 | 0.0 | -889,645.7 | -889,645.7 | -889,645.7 |
| - required minimum reserve | 420.9 | 420.9 | -64,430.0 | -64,430.0 | -64,009.1 | -64,009.1 |
| - deposit facility | 0.0 | 0.0 | -52,187.4 | -52,187.4 | -52,187.4 | -52,187.4 |
| - other | 20,451.6 | 20,451.6 | -524.8 | -524.8 | 19,926.8 | 19,926.8 |
| Other interest income/expenses, of which | -17,803.7 | 19,140.6 | -5,659.0 | -42,603.3 | -23,462.7 | -23,462.7 |
| - on financial assets | -17,803.6 | 760.3 | - | -18,563.9 | -17,803.6 | -17,803.6 |
| * positive interest rate | 760.3 | 760.3 | 0.0 | 0.0 | 760.3 | 760.3 |
| * negative interest rate | -18,563.9 | 0.0 | 0.0 | -18,563.9 | -18,563.9 | -18,563.9 |
| - on financial liabilities | 0.0 | 18,380.3 | -5,659.0 | -24,039.3 | -5,659.0 | -5,659.0 |
| * positive interest rate | 0.0 | 0.0 | -24,039.3 | -24,039.3 | -24,039.3 | -24,039.3 |
| * negative interest rate | 0.0 | 18,380.3 | 18,380.3 | 0.0 | 18,380.3 | 18,380.3 |
| Total | 3,140,350.1 | 8,619,588.1 | -887,857.0 | -6,367,095.0 | 2,252,493.1 | 2,252,493.1 |

Values for the year 2021, brought to comparability with the data for 2022, are presented in subsequent notes (see Note 11).

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.⁷ 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:

- 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 assets impairment.

⁷ 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.

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.

| <i>PLN thousand</i> | 31.12.2022 | 31.12.2021 | Change |
|--|---------------------|---------------------|--------------------|
| Gold stored at NBP | 26,894,727.8 | 24,912,428.2 | 1,982,299.6 |
| Gold on accounts with foreign banks, of which: | 31,755,510.9 | 29,931,371.2 | 1,824,139.7 |
| - <i>current accounts in gold</i> | 0.0 | 18,144,948.1 | -18,144,948.1 |
| - <i>term deposits in gold</i> | 31,755,510.9 | 11,786,423.1 | 19,969,087.8 |
| Total | 58,650,238.7 | 54,843,799.4 | 3,806,439.3 |
| <i>of which gold revaluation differences</i> | 27,515,054.6 | 23,474,557.2 | 4,040,497.4 |

| | | 31.12.2022 | 31.12.2021 | Change |
|--|----------------------------|----------------|----------------|---------------|
| Gold stored at NBP | thousands of ounces | 3,371.2 | 3,371.2 | 0.0 |
| | (tons) | (104.9) | (104.9) | (0.0) |
| Gold on accounts with foreign banks, of which: | thousands of ounces | 3,980.6 | 4,050.5 | -69.9 |
| | (tons) | (123.8) | (125.9) | (-2.1) |
| - <i>current accounts in gold</i> | thousands of ounces | 0.0 | 2,455.5 | -2,455.5 |
| | (tons) | (0.0) | (76.3) | (-76.3) |
| - <i>term deposits in gold</i> | thousands of ounces | 3,980.6 | 1,595.0 | 2,385.6 |
| | (tons) | (123.8) | (49.6) | (74.2) |
| Total | thousands of ounces | 7,351.8 | 7,421.7 | -69.9 |
| | (tons) | (228.7) | (230.8) | (-2.1) |

Gold is held at NBP and on accounts in 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 decrease in the balance by 69.9 thousand ounces was a result of the investment policy pursued.

The domestic currency value of the item was mainly affected by the revaluation of the holding of gold (see Note 9.1 and Note 12.1).

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) 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 2022 and 2021 the maximum limit for loans amounted to SDR 2,570,800.0 thousand.⁸

Under the 2020 bilateral borrowing agreement (BBA), effective from 1 January 2021 to 31 December 2023, with an option to extend it by one year, subject to approval by NBP, 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.⁹ 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 2022 nor in 2021 did the IMF borrow funds under BBA.

- **SDR allocations**, meaning granting SDRs to member countries, were conducted in 2009 and in 2021. Under the SDR allocations, 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 | 31.12.2022 | 31.12.2021 | Change |
|--|--------------------|---------------------|---------------------|--------------------|
| Reserve tranche, of which | | 6,264,325.2 | 5,737,726.8 | 526,598.4 |
| - Member quota in the IMF | | 24,880,087.8 | 23,798,105.3 | 1,081,982.5 |
| - No. 1 Account of the IMF | | -18,615,762.6 | -18,060,378.5 | -555,384.1 |
| Current account with the IMF | | 25,033,317.9 | 24,059,229.8 | 974,088.1 |
| Term deposit with the IMF | | 41,565.5 | 40,261.8 | 1,303.7 |
| Loans extended to the IMF | | 72,458.0 | 172,902.3 | -100,444.3 |
| Total assets (Receivables from the IMF) | A.2.1 | 31,411,666.6 | 30,010,120.7 | 1,401,545.9 |
| SDR allocation (Liabilities to the IMF) | L.9 | 30,871,510.9 | 29,769,702.4 | 1,101,808.5 |
| Net item | | 540,155.7 | 240,418.3 | 299,737.4 |
| <i>of which SDR currency revaluation differences</i> | | 6,581.6 | 7,985.7 | -1,404.1 |

⁸ That is PLN 15,106,020.8 thousand according to the average NBP exchange rate as at 31 December 2022.

⁹ That is PLN 12,667,419.9 thousand according to the average NBP exchange rate as at 31 December 2022.

| <i>thousand SDR</i> | Balance sheet item | 31.12.2022 | 31.12.2021 | Change |
|--|--------------------|--------------------|--------------------|-----------------|
| Reserve tranche | | 1,066,086.7 | 1,008,086.7 | 58,000.0 |
| - Member quota in the IMF | | 4,095,400.0 | 4,095,400.0 | 0.0 |
| - No. 1 Account of the IMF | | -3,029,313.3 | -3,087,313.3 | 58,000.0 |
| Current account with the IMF | | 4,260,265.1 | 4,227,072.6 | 33,192.5 |
| Term deposit with the IMF | | 7,073.8 | 7,073.8 | 0.0 |
| Loans extended to the IMF | | 12,331.2 | 30,378.0 | -18,046.8 |
| Total assets (Receivables from the IMF) | A.2.1 | 5,345,756.8 | 5,272,611.1 | 73,145.7 |
| SDR allocation (Liabilities to the IMF) | L.9 | 5,253,831.0 | 5,230,371.0 | 23,460.0 |
| Net item | | 91,925.8 | 42,240.1 | 49,685.7 |

In 2022, the change in the item in original currency was 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 (see Note 12.1),
- 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.¹⁰

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

Note 3 Other financial assets

▪ Securities

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

Discount and premium on 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 (see Chapter 3).

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

¹⁰ As at 31 December 2022, the outstanding amount of NBP's commitment to the IMF under the NAB amounted to 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 31 December 2021, the outstanding amount of NBP's commitment was SDR 2,540,425.0 thousand (PLN 14,459,337.0 thousand according to the average NBP exchange rate as at 31 December 2021).

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

As at the balance sheet date, 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 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.

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

As at the balance sheet date, 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.

- **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, for a 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, securities, loans granted and other foreign assets

| <i>PLN thousand</i> | 31.12.2022 | 31.12.2021 | Change |
|---|----------------------|----------------------|---------------------|
| Current accounts, of which | 35,354,005.4 | 22,771,019.4 | 12,582,986.0 |
| - current account with the ECB for settlements in TARGET2 | 15,008,464.4 | 2,574,140.7 | 12,434,323.7 |
| Term deposits | 37,562,191.4 | 22,638,153.6 | 14,924,037.8 |
| Reverse repo transactions | 53,550,113.6 | 35,876,615.9 | 17,673,497.7 |
| Securities, of which | 516,089,683.1 | 506,790,467.3 | 9,299,215.8 |
| - securities held to maturity | 44,572,354.4 | 41,215,224.6 | 3,357,129.8 |
| Foreign banknotes and coins in stock | 329,942.3 | 211,890.8 | 118,051.5 |
| Other claims, of which | 1,109,734.7 | 1,035,035.7 | 74,699.0 |
| - margins related to futures | 1,088,239.0 | 1,024,049.9 | 64,189.1 |
| - interest on term deposits in gold | 3,888.1 | 405.5 | 3,482.6 |
| - other | 17,607.6 | 10,580.3 | 7,027.3 |
| Total | 643,995,670.5 | 589,323,182.7 | 54,672,487.8 |
| <i>of which</i> | | | |
| - currency revaluation differences | 22,343,479.9 | 27,820,277.4 | -5,476,797.5 |
| - price revaluation differences | -25,273,296.8 | -3,003,299.9 | -22,269,996.9 |

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

- securities (discount securities and fixed-interest-rate securities) – all securities purchased by NBP are marketable securities; in 2021 under the implemented investment policy a portfolio comprising securities issued by the US Government in the amount of USD 9.9 billion was separated (in the value approximate to the book value as at the balance sheet date) and re-classified as held-to-maturity; in 2022 the composition of the portfolio held to maturity did not change,¹¹
- term deposits,

¹¹ As at 31 December 2022, the market value of securities classified as held to maturity was PLN 38,603,591.0 thousand (PLN 40,029,535.5 thousand as at 31 December 2021).

- reverse repo transactions – under the NBP investment process, reverse repo transactions are usually executed simultaneously with repo transactions¹² (see Note 6.3).

The item includes also margins related to futures whose increase resulted from a higher investment in futures (see Note 10.3).

Basic investment instruments of foreign currency reserves by foreign currency are presented below.

| 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 |
| 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 |
| 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 |

| 31.12.2021 | | | | | | | |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|
| <i>thousand units of original currency</i> | USD | EUR | GBP | CAD | AUD | NOK | NZD |
| Term deposits | 411,700.0 | 2,506,181.4 | 19,000.0 | 0.0 | 0.0 | 12,099,299.6 | 1,353,791.6 |
| Reverse repo transactions | 2,903,444.3 | 1,167,701.4 | 2,634,208.9 | 0.0 | 1,377,438.0 | 0.0 | 74,187.3 |
| Securities | 51,985,974.5 | 22,819,662.3 | 11,380,580.4 | 16,830,953.6 | 13,593,472.8 | 50,926,300.6 | 3,979,327.0 |
| Total | 55,301,118.8 | 26,493,545.1 | 14,033,789.3 | 16,830,953.6 | 14,970,910.8 | 63,025,600.2 | 5,407,305.9 |

| Change | | | | | | | |
|--|------------------|--------------------|------------------|-------------------|--------------------|--------------------|-------------------|
| <i>thousand units of original currency</i> | USD | EUR | GBP | CAD | AUD | NOK | NZD |
| Term deposits | 2,765,184.5 | -616,754.4 | 462,443.3 | 302,832.4 | 288,020.3 | 2,143,495.1 | 69,603.2 |
| Reverse repo transactions | -1,066,362.1 | 4,462,622.4 | 194,349.7 | 0.0 | -12,837.2 | 0.0 | -74,187.3 |
| Securities | -1,772,390.8 | -435,581.0 | 65,690.6 | -656,086.0 | 784,315.3 | 940,770.2 | -104,120.3 |
| Total | -73,568.4 | 3,410,287.0 | 722,483.6 | -353,253.6 | 1,059,498.4 | 3,084,265.3 | -108,704.4 |

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, including an increase in the balance of funds on the current account with the ECB for settlements in TARGET2 following the higher balance of accounts in euro operated by NBP for domestic banks for settlements in that system (see Note 6.1 and Note 6.3).

¹² As at 31 December 2022, securities for the value of PLN 52,472,008.5 thousand were collateral to repo transactions (PLN 35,657,895.9 thousand as at 31 December 2021).

- an increased investment in simultaneous reverse repo and repo transactions in EUR amid a simultaneous decrease in investment in USD (see Note 6.3).

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 Securities held for monetary policy purposes

| <i>PLN thousand</i> | Balance sheet item | 31.12.2022 | 31.12.2021 | Change |
|---------------------|---|----------------------|----------------------|---------------------|
| | Treasury securities | 78,258,176.6 | 86,952,637.8 | -8,694,461.2 |
| | Securities guaranteed by the State Treasury | 62,415,008.9 | 62,369,526.2 | 45,482.7 |
| Total | A.7.1 | 140,673,185.5 | 149,322,164.0 | -8,648,978.5 |

This item is related to the 2020-2021 operations to purchase Treasury bonds and securities guaranteed by the Treasury in the secondary market as part of structural open market operations. The operations 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 to strengthen the monetary policy transmission mechanism (see Note 11).

The decrease in the value of the item in 2022 was mainly related to the issuer's redemption of Treasury securities, with a nominal value of PLN 7,784,070.0 thousand, at maturity (see Note 6.1).

Note 3.3 Other financial assets

| <i>PLN thousand</i> | 31.12.2022 | 31.12.2021 | 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 | 174,285.3 | 170,213.0 | 4,072.3 |
| - participating interests in the European Central Bank | 114,866.2 | 112,649.7 | 2,216.5 |
| - shares in the Bank for International Settlements | 58,760.0 | 56,917.0 | 1,843.0 |
| - participating interests in S.W.I.F.T | 659.1 | 646.3 | 12.8 |
| Total | 303,134.2 | 299,061.9 | 4,072.3 |

The increase 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 2021, and as at 31 December 2022 was as follows:

| 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 (%) |
|--|---------------------------------|--|---|--|
| | 31.12.2022 | 31.12.2022 | 31.12.2022 | 31.12.2022 |
| 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 2022 and 31 December 2021, 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 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 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.¹³ 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.

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

¹³ 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.

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 2022 and 31 December 2021, the capital paid up by NBP to 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 2022 and 31 December 2021, 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 2022 and as at 31 December 2021 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> | 31.12.2022 | 31.12.2021 | Change |
|---|-----------------|-----------------|-----------------|
| Inventories, of which | 10,170.9 | 25,601.6 | -15,430.7 |
| - <i>precious metals</i> | 8,987.7 | 24,477.1 | -15,489.4 |
| - <i>collector items not in circulation</i> | 369.7 | 366.7 | 3.0 |
| - <i>other</i> | 813.5 | 757.8 | 55.7 |
| Credit and loans extended to employees in domestic currency, of which | 21,770.2 | 22,107.6 | -337.4 |
| - <i>loans extended from the Employee Benefit Fund</i> | 13,574.8 | 11,435.2 | 2,139.6 |
| Other claims, of which | 51,474.8 | 19,977.9 | 31,496.9 |
| - <i>on public authorities</i> | 5.8 | 3.3 | 2.5 |
| - <i>on customers and suppliers</i> | 31,089.2 | 7,387.6 | 23,701.6 |
| - <i>other</i> | 20,379.8 | 12,587.0 | 7,792.8 |
| Funds of the Employee Benefit Fund | 7,670.6 | 8,476.5 | -805.9 |
| Adjustment of off-balance-sheet instruments to the average cost of foreign currency holding | 2,395.7 | 19,790.7 | -17,395.0 |
| Total | 93,482.2 | 95,954.3 | -2,472.1 |

As at 31 December 2022 *Adjustment of off-balance-sheet instruments to the average cost of foreign currency holding* related to spot and forward transactions in foreign currency recognised on off-balance-sheet accounts (as at 31 December 2021 it related to spot and forward transactions). The decrease 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 the 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 2022.

| 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 |

¹ A 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 | 31.12.2022 | 31.12.2021 | Change |
|-----------------------|--------------------|--------------------|------------------|
| Tangible fixed assets | 730,911.1 | 727,780.8 | 3,130.3 |
| Right-of-use assets | 198,658.8 | 205,422.0 | -6,763.2 |
| Intangible assets | 86,554.4 | 100,547.6 | -13,993.2 |
| Total | 1,016,124.3 | 1,033,750.4 | -17,626.1 |

| Change in tangible fixed assets, right-of-use assets and intangible 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 |
| PLN thousand | | | | | | | | | | | |
| 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 | 461,760.3 |
| 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 | 1,887.4 | 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 | -1,994.1 | -6,986.3 | -15,212.8 |
| Gross value as at the 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 | 295,551.4 | 0.0 | 297,058.4 | 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 | 1,245.4 | 1,245.4 | 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 | -376,862.3 |
| 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 | 524,300.9 | 184,189.5 | 22,340.7 | 730,911.1 | 172,703.5 | 25,955.4 | 198,658.8 | 73,081.5 | 9,539.4 | 3,933.5 | 86,554.4 |

| Change in tangible fixed assets, right-of-use assets and intangible assets in 2021 (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 |
| PLN thousand | | | | | | | | | | | |
| Gross value as at start of period | 949,942.7 | 681,864.8 | 21,406.2 | 1,653,233.7 | 175,983.5 | 17,251.6 | 193,235.2 | 465,593.5 | 19,918.5 | 1,450.0 | 486,962.1 |
| Increases | 20,991.2 | 60,105.7 | 53,651.7 | 134,748.6 | 0.0 | 32,733.1 | 32,733.1 | 5,848.4 | 1,326.9 | 8,300.3 | 15,275.6 |
| Decreases | -446.4 | -50,966.6 | -63,527.3 | -114,940.3 | 0.0 | -1,982.3 | -1,982.3 | -37,348.3 | -1,061.2 | -2,288.0 | -40,677.4 |
| Gross value as at the end 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 | 461,760.3 |
| of which fully depreciated/amortised | 1,481.9 | 253,679.6 | 0.0 | 255,161.5 | 0.0 | 0.0 | 0.0 | 102,389.6 | 4,260.8 | 0.0 | 106,650.4 |
| Depreciation/amortisation as at start of period | -423,287.3 | -496,260.7 | 0.0 | -919,548.0 | -2,542.7 | -4,738.5 | -7,281.2 | -368,970.7 | -9,333.9 | 0.0 | -374,304.6 |
| Increases | -14,238.0 | -61,554.3 | 0.0 | -75,792.3 | -2,542.7 | -10,640.6 | -13,183.3 | -22,818.0 | -2,433.1 | 0.0 | -25,251.1 |
| Decreases | 251.1 | 50,575.1 | 0.0 | 50,826.2 | 0.0 | 1,900.6 | 1,900.6 | 37,335.5 | 1,016.4 | 0.0 | 38,351.9 |
| Depreciation/amortisation as at end 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 |
| Impairment as at start of period | -272.9 | -474.3 | 0.0 | -747.2 | 0.0 | 0.0 | 0.0 | -8.9 | 0.0 | 0.0 | -8.9 |
| Increases | 0.0 | -5.0 | 0.0 | -5.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Decreases | 0.0 | 2.0 | 0.0 | 2.0 | 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 | 524,300.9 | 183,305.8 | 11,530.6 | 727,780.8 | 170,888.2 | 34,523.8 | 205,422.0 | 83,631.6 | 9,433.7 | 7,482.4 | 100,547.6 |

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 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 | 31.12.2022 | 31.12.2021 | Change |
|-----------------------------------|----------------------|----------------------|---------------------|
| Domestic banknotes in circulation | 362,247,258.9 | 349,495,557.8 | 12,751,701.1 |
| Domestic coins in circulation | 6,364,404.6 | 6,062,167.5 | 302,237.1 |
| Total | 368,611,663.5 | 355,557,725.3 | 13,053,938.2 |

The item comprises banknotes and coins in circulation issued by NBP, including collector banknotes and coins, whose value as at 31 December 2022 amounted to PLN 322,821.6 thousand as compared with PLN 313,639.6 thousand as at 31 December 2021.

The average level of banknotes and coins in circulation throughout 2022 amounted to PLN 376,350.1 million as compared with PLN 341,610.0 million in 2021.

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 are valued as at the balance-sheet date at nominal value.

▪ Issued securities

Issued securities are recognised in the NBP accounting books at issue price and valued as at the balance sheet date at the 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 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 at the balance sheet date at the 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 | 31.12.2022 | 31.12.2021 | Change |
|--------------|--|----------------------|----------------------|----------------------|
| | Current accounts (incl. required minimum reserve accounts) of which | 34,914,457.6 | 66,061,581.2 | -31,147,123.6 |
| | - current accounts of banks and KSKOK | 33,925,136.3 | 65,724,007.7 | -31,798,871.4 |
| | - required minimum reserve accounts of banks not having a current account with NBP | 589,165.0 | 337,573.5 | 251,591.5 |
| | - interest on required minimum reserve | 400,156.3 | 0.0 | 400,156.3 |
| | Deposit facilities, of which | 20,198,449.9 | 30,463,543.2 | -10,265,093.3 |
| | - accrued interest | 6,914.9 | 1,043.2 | 5,871.7 |
| | Liabilities to credit institutions related to monetary policy operations denominated in domestic currency | 55,112,907.5 | 96,525,124.4 | -41,412,216.9 |
| | NBP bills issued under main operations | 174,492,282.6 | 184,521,188.7 | -10,028,906.1 |
| | NBP bills issued under fine-tuning operations | 77,688,891.7 | 0.0 | 77,688,891.7 |
| | Liabilities due to issued securities denominated in domestic currency | 252,181,174.3 | 184,521,188.7 | 67,659,985.6 |
| | Total | 307,294,081.8 | 281,046,313.1 | 26,247,768.7 |

The note comprises liabilities related to monetary policy operations conducted by NBP.

The amount of funds held by banks and KSKOK¹⁴ 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 securities denominated in domestic currency comprise mainly liabilities to domestic banks related to the issue of NBP bills under open market main¹⁵ and fine-tuning¹⁶ operations aimed to absorb liquidity.¹⁷

The funds of the required minimum reserve and deposit facilities bear interest, whereas NBP bills are issued at a discount. As at 31 December 2022 and 31 December 2021, 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:

¹⁴ 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"].

¹⁵ In 2022, the maturity of main operations was 6, 7 and 8 days (in 2021 it was 7 days).

¹⁶ In 2022, the maturity of fine-tuning operations was 1 day, 2, 3 and 4 days (in 2021 it was 1 day, 2 and 3 days).

¹⁷ 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.

Rate of interest on liabilities due to monetary policy operations

| % | 31.12.2022 | 31.12.2021 |
|---------------------------|------------|------------|
| Required minimum reserve* | 6.75 | 1.75 |
| Deposit facility** | 6.25 | 1.25 |
| NBP bills*** | 6.75 | 1.75 |

* The interest rate of the funds of the required minimum reserve.

** NBP deposit rate.

*** NBP reference rate.

The change in the total liabilities of NBP related to the monetary policy operations (an increase by PLN 26,247,768.7 thousand as at 31 December 2022 as compared with 31 December 2021) 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),
- contribution from NBP's profit for 2021 (see Note 9.4), cash flows related to NBP's net result on monetary policy instruments (see Note 11) and other NBP's other own operations,
- an increase in the volume of cash in circulation in 2022 (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 carried out by banks.

Note 6.2 Other liabilities denominated in domestic currency

| <i>PLN thousand</i> | Balance sheet item | 31.12.2022 | 31.12.2021 | Change |
|---|--------------------|---------------------|---------------------|---------------------|
| Settlements in the domestic payment systems of Krajowa Izba Rozrachunkowa, of which | | 940,440.8 | 762,678.9 | 177,761.9 |
| - in the Elixir system | | 296,934.2 | 403,231.9 | -106,297.7 |
| - in the Express Elixir system | | 643,506.6 | 359,447.0 | 284,059.6 |
| Other liabilities to credit institutions denominated in domestic currency | L.3 | 940,440.8 | 762,678.9 | 177,761.9 |
| Liabilities to general government, of which | L.5.1 | 10,792,940.6 | 15,185,508.3 | -4,392,567.7 |
| - State budget accounts | | 6,529,897.4 | 6,454,710.0 | 75,187.4 |
| - accounts of social insurance funds | | 4,147,311.7 | 8,637,379.5 | -4,490,067.8 |
| - other | | 115,731.5 | 93,418.8 | 22,312.7 |
| Other liabilities | L.5.2 | 1,090,865.7 | 66,391.7 | 1,024,474.0 |
| Liabilities to other residents denominated in domestic currency | L.5 | 11,883,806.3 | 15,251,900.0 | -3,368,093.7 |
| Accounts of international financial institutions and central banks, of which | | 31,005.8 | 54,713.6 | -23,707.8 |
| - No. 2 Account of the IMF | | 23,378.3 | 22,890.0 | 488.3 |
| Accounts of international non-financial organisations | | 4,093,191.4 | 3,906,087.2 | 187,104.2 |
| Liabilities to non-residents denominated in domestic currency | L.6 | 4,124,197.2 | 3,960,800.8 | 163,396.4 |
| Total | | 16,948,444.3 | 19,975,379.7 | -3,026,935.4 |

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 decrease in the item was mainly related to the lower balance of accounts operated by NBP in domestic currency for social insurance funds, with a simultaneous increase in the balance of other liabilities to residents stemming from a higher balance of accounts operated for entities from outside the general government sector.

Note 6.3 Liabilities denominated in foreign currency

| <i>PLN thousand</i> | Balance sheet item | 31.12.2022 | 31.12.2021 | Change |
|---------------------|---|----------------------|---------------------|---------------------|
| | State budget accounts | 43,632,742.0 | 29,844,278.0 | 13,788,464.0 |
| | Accounts of domestic banks for settlements in TARGET2 | 15,008,405.6 | 2,574,101.1 | 12,434,304.5 |
| | Other liabilities to residents | 368,924.7 | 211,340.6 | 157,584.1 |
| | Liabilities to residents denominated in foreign currency | 59,010,072.3 | 32,629,719.7 | 26,380,352.6 |
| | Repo transactions | 53,539,855.3 | 35,873,254.8 | 17,666,600.5 |
| | Accounts of international non-financial organisations | 75,187.0 | 163,175.3 | -87,988.3 |
| | Other liabilities to non-residents | 10,093.7 | 0.0 | 10,093.7 |
| | Liabilities to non-residents denominated in foreign currency | 53,625,136.0 | 36,036,430.1 | 17,588,705.9 |
| | Total | 112,635,208.3 | 68,666,149.8 | 43,969,058.5 |
| | <i>of which currency revaluation differences</i> | <i>2,925,807.6</i> | <i>2,871,552.2</i> | <i>54,255.4</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 TARGET2,
- 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 | AUD | NZD |
|--|--------------|-------------|-------------|-------------|-----------|
| 31.12.2022 | 1,837,038.7 | 5,629,448.7 | 2,827,476.2 | 1,364,523.5 | 0.0 |
| 31.12.2021 | 2,903,406.7 | 1,167,558.5 | 2,633,780.4 | 1,377,374.6 | 74,182.2 |
| Change | -1,066,368.0 | 4,461,890.2 | 193,695.8 | -12,851.1 | -74,182.2 |

- 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 higher balances on accounts in foreign currency operated by NBP for the State budget and for domestic banks for settlements in TARGET2 (see Note 3.1) and a higher value of repo transactions.

Note 6.4 Sundry

| PLN thousand | 31.12.2022 | 31.12.2021 | Change |
|---|------------------|------------------|-------------------|
| Lease liabilities | 204,917.9 | 209,587.8 | -4,669.9 |
| Other liabilities, of which | 71,231.0 | 64,572.8 | 6,658.2 |
| - to public authorities | 20,615.3 | 18,073.8 | 2,541.5 |
| - to suppliers | 26,649.3 | 34,508.0 | -7,858.7 |
| - other | 23,966.4 | 11,991.0 | 11,975.4 |
| Employee Benefit Fund | 21,296.0 | 19,911.7 | 1,384.3 |
| Adjustment of off-balance-sheet instruments to the average cost of foreign currency holding | 33,469.0 | 692,280.1 | -658,811.1 |
| Total | 330,913.9 | 986,352.4 | -655,438.5 |

Lease liabilities comprised 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 2022, *Adjustment of off-balance-sheet instruments to the average cost of foreign currency holding* related to FX spot transactions recognised on off-balance-sheet accounts (as at 31 December 2021 it related to swap, spot and forward transactions). The decrease 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.

As at the balance-sheet date provisions for liabilities are adjusted. Provisions for liabilities unused due to a full or partial cessation of obligation justifying their creation are released as income. Provisions for liabilities may be allocated exclusively for the purpose for which they were created.

| PLN thousand | 31.12.2022 | 31.12.2021 | Change |
|---|------------------|------------------|----------------|
| Provisions for liabilities to employees | 201,352.5 | 192,667.9 | 8,684.6 |
| Other provisions | 1,556.8 | 1,703.8 | -147.0 |
| Total | 202,909.3 | 194,371.7 | 8,537.6 |

The change in provisions for liabilities in 2022 and 2021 by allocation into particular categories are presented in tables below (see also Note 15 and Note 16).

| 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 |

| PLN thousand | 31.12.2020 | Increase | Use | Decrease | 31.12.2021 |
|---|------------------|-----------------|------------------|-----------------|------------------|
| Provisions for liabilities to employees, of which | 171,187.2 | 38,183.0 | -14,138.7 | -2,563.6 | 192,667.9 |
| - due to retirement severance payments | 93,366.3 | 17,602.4 | -5,221.5 | 0.0 | 105,747.2 |
| - due to disability severance payments | 2,168.9 | 322.8 | -152.4 | 0.0 | 2,339.3 |
| - due to jubilee awards | 60,009.8 | 14,960.8 | -8,303.2 | 0.0 | 66,667.4 |
| - due to untaken leaves | 14,808.2 | 0.0 | -235.3 | -2,563.6 | 12,009.3 |
| - due to amounts paid after death | 0.0 | 3,671.9 | 0.0 | 0.0 | 3,671.9 |
| - due to statutory and additional severance payments for employees under employment contracts who are laid off for reasons unrelated to employees | 834.0 | 1,625.1 | -226.3 | 0.0 | 2,232.8 |
| Other provisions, of which | 8,382.4 | 348.0 | 0.0 | -7,026.6 | 1,703.8 |
| - for liabilities due to court proceedings | 8,325.3 | 343.4 | 0.0 | -7,026.6 | 1,642.1 |
| - for liabilities resulting from financial operations in domestic currency | 57.1 | 4.6 | 0.0 | 0.0 | 61.7 |
| Total | 179,569.6 | 38,531.0 | -14,138.7 | -9,590.2 | 194,371.7 |

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 the accounting books as accruals and deferred income and are subsequently carried to financial result along with depreciation/amortisation made on these assets.

| <i>PLN thousand</i> | Balance sheet item | 31.12.2022 | 31.12.2021 | Change |
|---|--------------------|-----------------|-----------------|----------------|
| Prepaid expenses related to services | | 49,683.9 | 41,496.4 | 8,187.5 |
| Total assets (Accruals and prepaid expenses) | A.10.4 | 49,683.9 | 41,496.4 | 8,187.5 |
| Accruals | | 96,136.8 | 96,244.0 | -107.2 |
| Deferred income | | 1,166.9 | 1,292.8 | -125.9 |
| Total assets (Accruals and deferred income) | L.11.2 | 97,303.7 | 97,536.8 | -233.1 |

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 2022 paid out in the following year and future liabilities due to supplies of goods and services in 2022).

Note 9 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 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,
- 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**

Revaluation gains on gold holding are determined by comparing the average cost of gold holding with the average market price of gold converted in 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.

Price revaluation gains on securities are determined by comparing the average cost of securities holding with the average market price of these securities, which is higher than the average cost of holding.

Price revaluation gains on forward transactions in 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 securities as at valuation date.

The value of gold holding revaluation differences, revaluation differences on holdings of individual foreign currencies and price revaluation differences on securities 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 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 used 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 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 |
| As at 31.12.2020 | 9,850,919.3 | 1,618,023.2 | 44,122,332.9 | 1,500,000.0 | 391,425.1 | -11,865,363.4 | 9,344,061.5 | 54,961,398.6 |
| Contribution from NBP's profit | | | | | | | -8,876,858.4 | -8,876,858.4 |
| Allocation of NBP profit to reserve fund | | | | | 467,203.1 | | -467,203.1 | 0.0 |
| Covering loss of previous years | | | | | -858,628.2 | 858,628.2 | | 0.0 |
| Gold holding, currency and price revaluation gain/loss | | | 5,298,543.4 | | | | | 5,298,543.4 |
| Foreign exchange rate risk provision | 6,648,541.6 | | | | | | | 6,648,541.6 |
| Financial result for the financial year | | | | | | | 10,974,518.7 | 10,974,518.7 |
| 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 holding, currency and price revaluation gain/loss | | | -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 31.12.2020 | 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 |

* Revaluation accounts concern gold revaluation gains, currency revaluation gains and price revaluation gains on securities and off-balance-sheet financial instruments (see Note 9.1).

Note 9.1 Revaluation accounts

| PLN thousand | 31.12.2022 | 31.12.2021 | Change |
|--|---------------------|---------------------|-------------------|
| Gold holding revaluation gains | 27,515,054.6 | 23,474,557.2 | 4,040,497.4 |
| Currency revaluation gains | 20,878,316.0 | 25,546,797.0 | -4,668,481.0 |
| Price revaluation gains, of which | 45,344.8 | 399,522.1 | -354,177.3 |
| - on securities | 43,545.4 | 395,860.3 | -352,314.9 |
| - on off-balance-sheet financial instruments | 1,799.4 | 3,661.8 | -1,862.4 |
| Gold revaluation account | 1,618,023.2 | 1,618,023.2 | 0.0 |
| Total | 50,056,738.6 | 51,038,899.5 | -982,160.9 |

| PLN | Average cost of holding | Average NBP exchange rate / Average price of gold | Average cost of holding | Average NBP exchange rate / Average price of gold |
|---------------|-------------------------|---|-------------------------|---|
| | 31.12.2022 | | 31.12.2021 | |
| USD | 4.0272 | 4.4018 | 3.7755 | 4.0600 |
| EUR | 4.6212 | 4.6899 | 4.5015 | 4.5994 |
| GBP | 5.2919 | 5.2957 | 5.1105 | 5.4846 |
| CAD | 3.3083 | 3.2486 | 3.2076 | 3.1920 |
| AUD | 2.9651 | 2.9890 | 2.8198 | 2.9506 |
| NOK | 0.4509 | 0.4461 | 0.4340 | 0.4608 |
| NZD | 2.8119 | 2.7884 | 2.7263 | 2.7775 |
| SDR | 5.8044 | 5.8760 | 5.5026 | 5.6917 |
| Ounce of gold | 4,235.0060 | 7,977.6022 | 4,226.6645 | 7,389.6060 |

- **Gold revaluation gains**

In 2022, an increase in gold revaluation gains was mainly related to a higher positive difference between the average price of gold and the average cost of gold holding. The increase in the price of gold was due to the increase in the average USD exchange rate with a simultaneous decrease in the price of an ounce of gold in USD (the price of an ounce of gold in USD was, respectively, USD 1,812.35 as at 31 December 2022 and USD 1,820.10 as at 31 December 2021).

- **Currency revaluation gains**

| PLN thousand | 31.12.2022 | 31.12.2021 | Change |
|--------------|---------------------|---------------------|---------------------|
| USD | 18,945,722.3 | 14,894,942.8 | 4,050,779.5 |
| EUR | 1,531,382.1 | 2,256,854.0 | -725,471.9 |
| GBP | 44,852.0 | 4,273,426.7 | -4,228,574.7 |
| AUD | 347,683.6 | 1,890,391.4 | -1,542,707.8 |
| NOK | 0.0 | 1,689,541.3 | -1,689,541.3 |
| NZD | 0.0 | 263,912.0 | -263,912.0 |
| SDR | 7,297.6 | 9,876.3 | -2,578.7 |
| CHF | 1,116.8 | 267,391.3 | -266,274.5 |
| Other | 261.6 | 461.2 | -199.6 |
| Total | 20,878,316.0 | 25,546,797.0 | -4,668,481.0 |

- **Price revaluation gains on securities**

| <i>PLN thousand</i> | 31.12.2022 | 31.12.2021 | Change |
|---------------------|-------------------|-------------------|-------------------|
| Securities in USD | 37,808.1 | 247,735.4 | -209,927.3 |
| Securities in EUR | 275.0 | 50,668.8 | -50,393.8 |
| Securities in GBP | 686.8 | 0.0 | 686.8 |
| Securities in CAD | 4,775.5 | 89,134.5 | -84,359.0 |
| Securities in AUD | 0.0 | 864.9 | -864.9 |
| Securities in NOK | 0.0 | 397.0 | -397.0 |
| Securities in NZD | 0.0 | 7,059.7 | -7,059.7 |
| Total | 43,545.4 | 395,860.3 | -352,314.9 |

- **Price revaluation gains on off-balance sheet financial instruments**

As at 31 December 2022, price revaluation gains on off-balance-sheet financial instruments related to forward sale transactions in securities denominated in AUD. As at 31 December 2021, price revaluation gains on off-balance-sheet financial instruments related to forward purchase transactions in securities denominated in USD and forward sale transactions in securities denominated in AUD (see Note 10 and Note 10.2).

- **Gold revaluation account**

Due to the fact that as at 31 December 2022 no unrealised gold revaluation losses occurred, NBP, similarly to 31 December 2021, did not release the gold revaluation account.

Note 9.2 FX risk provision

As at 31 December 2022, 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 94,551,517.4 thousand (PLN 52,036,768.0 thousand as at 31 December 2021). Pursuant to Resolution No. 6/2019 of the MPC as at 31 December 2022 the provision to cover unrealised foreign exchange losses in the amount of PLN 1,420,869.5 thousand was released (as at 31 December 2021 the amount of the provision was supplemented by the amount of PLN 6,648,541.6 thousand, that is an amount equal to half of the surplus of income of realised foreign exchange gains over realised and unrealised foreign exchange losses on foreign currencies recognised in the financial result for the financial year (see Note 12.1, Note 12.2 and Chapter 7.1.4). As at 31 December 2022, the FX risk provision amounted to PLN 15,078,591.4 thousand (PLN 16,499,460.9 thousand as at 31 December 2021).

Note 9.3 Reserve fund

In 2022, the reserve fund of NBP was supplemented by the amount of PLN 548,725.9 thousand, that is a contribution from profit to NBP's reserve fund in 2021, and then the NBP's reserve fund was allocated in full to cover NBP's balance sheet loss of previous years (see Note 9 and Note 9.4).

Note 9.4 Financial result

▪ Financial result for the financial year

The NBP financial result for 2022 was negative (loss) and amounted to PLN -16,943,670.7 thousand (the 2021 profit amounted to PLN 10,974,518.7 thousand).

In accordance with Article 62 and Article 69 of the Act on NBP, NBP's profit is allocated (within 14 days of the approval of the NBP annual financial statements by the Council of Ministers) to NBP's reserve fund (5% of the profit) and contribution from NBP's profit to the State budget (respectively, in 2022: 548,725.9 thousand and 10,425,792.8 thousand from NBP's profit for 2021).

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 10,458,009.3 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,

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.

Note 10 Off-balance-sheet items

▪ Spot, forward and swap transactions in foreign currency

Foreign currency purchased or sold by NBP 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 transaction date.

Foreign currency purchased or sold by NBP for domestic currency is recognised in the NBP accounting books at transaction value, unless separate regulations provide otherwise.

Funds purchased or sold in FX forward transaction are recognised on off-balance-sheet accounts from the trade date to settlement date at the FX spot rate set in the contract.

Funds purchased or sold (in a spot transaction) and, respectively, re-sold or re-purchased (in a forward transaction) as part of FX swap is recognised from the trade date to the settlement date on off-balance-sheet account at the agreed FX spot rate.

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 transaction type (spot, forward, swap) and separately for each foreign currency – gains as assets, while losses as liabilities.

▪ Securities purchased or sold in a forward transaction

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, securities purchased or sold in a forward transaction do not change the amount of a holding of securities.

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 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 valuation gains or losses on forward transactions in securities denominated in foreign currency recognised in off-balance-sheet accounts are presented in the NBP balance sheet – gains as assets, while losses as liabilities.

On the transaction settlement date, securities purchased in a forward transaction increase the holding of securities, while 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 losses on spot, forward or swap transactions in foreign currency recognised in off-balance-sheet transactions and of price revaluation gains and 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 | 31.12.2022 | 31.12.2021 | Change |
|--|--------------------|-----------------|------------------|-------------------|
| Currency revaluation gains on FX spot, FX forward and FX swap transactions | | 32,935.3 | 350,610.9 | -317,675.6 |
| Price revaluation gains on forward transactions in securities in foreign currency | | 1,799.4 | 3,661.8 | -1,862.4 |
| Total assets (Off-balance-sheet instruments revaluation differences) | A.10.3 | 34,734.7 | 354,272.7 | -319,538.0 |
| Currency revaluation losses on FX spot and FX forward transactions | | 2,352.2 | 23,930.4 | -21,578.2 |
| Price revaluation losses on forward transactions in securities in foreign currency | | 51.9 | 204.1 | -152.2 |
| Total liabilities (Off-balance-sheet instruments revaluation differences) | L.11.1 | 2,404.1 | 24,134.5 | -21,730.4 |

Note 10.1 Spot, forward and swap transactions recognised on off-balance-sheet accounts

| <i>PLN thousand</i> | Balance sheet item | 31.12.2022 | 31.12.2021 | Change |
|---|--------------------|------------|-------------|--------------|
| Currency to be received due to FX spot, FX forward and FX swap transactions | - | 730,113.9 | 5,903,731.3 | -5,173,617.4 |
| Currency to be paid due to FX spot, FX forward and FX swap transactions | - | 730,113.9 | 5,903,731.3 | -5,173,617.4 |
| Gains on adjustments to the average costs of holding | A.10.5 | 2,395.7 | 19,790.7 | -17,395.0 |
| Losses on adjustments to the average costs of holding | L.11.3 | 33,469.0 | 692,280.1 | -658,811.1 |
| Currency revaluation gains on FX spot, FX forward and FX swap transactions | A.10.3 | 32,935.3 | 350,610.9 | -317,675.6 |
| Currency revaluation losses on FX spot and FX forward transactions | L.11.1 | 2,352.2 | 23,930.4 | -21,578.2 |

As at 31 December 2022, the decrease in off-balance-sheet items resulted from a lower volume of FX spot transactions and no FX forward and FX swap transactions carried out by NBP. Swap transactions presented as at 31 December 2021 were carried out on the CHF/PLN currency pair (see Chapter 7.1.1.2.3).

The change in the adjustment to the average cost of holding of spot, forward and swap transactions in foreign currency is related to the volume of those transactions as at the year-end and 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, forward and swap transactions denominated in foreign currency is related to the volume of those transactions as at the year-end and the difference between the average cost of holding and the average NBP exchange rate.

Note 10.2 Securities purchased or sold in a forward transaction

| <i>PLN thousand</i> | Balance sheet item | 31.12.2022 | 31.12.2021 | Change |
|---|--------------------|-------------|-------------|--------------|
| Securities denominated in foreign currency bought in forward transactions, of which | | 1,297,788.0 | 3,333,696.7 | -2,035,908.7 |
| - securities in USD | | 1,297,788.0 | 3,333,696.7 | -2,035,908.7 |
| Securities denominated in foreign currency sold in forward transactions, of which | | 860,358.3 | 794,394.2 | 65,964.1 |
| - securities in AUD | | 860,358.3 | 794,394.2 | 65,964.1 |
| Price revaluation gains | A.10.3 | 1,799.4 | 3,661.8 | -1,862.4 |
| Price revaluation losses | L.11.1 | 51.9 | 204.1 | -152.2 |

Forward transactions in securities denominated in foreign currency are used by NBP as part of the foreign currency reserves management.

The change in the price valuation of forward transactions in securities denominated in foreign currency is related to the volume of those transactions as at the year-end and the difference between the market price of these securities and their contract price.

Note 10.3 Futures

| <i>PLN thousand</i> | 31.12.2022 | 31.12.2021 | Change |
|--|-------------|------------|-------------|
| Bond futures purchased, of which | 1,731,913.2 | 204,764.0 | 1,527,149.2 |
| - bond futures in AUD | 0.0 | 204,764.0 | -204,764.0 |
| - bond futures in CAD | 1,731,913.2 | 0.0 | 1,731,913.2 |
| Bond futures sold, of which | 998,006.8 | 682,241.1 | 315,765.7 |
| - bond futures in CAD | 330,133.4 | 0.0 | 330,133.4 |
| - bond futures in EUR | 0.0 | 682,241.1 | -682,241.1 |
| - bond futures in USD | 667,873.4 | 0.0 | 667,873.4 |
| Equity index futures purchased, of which | 3,824.9 | 3,441.1 | 383.8 |
| - equity index futures in EUR | 1,339.9 | 1,286.7 | 53.2 |
| - equity index futures in GBP | 251.3 | 260.2 | -8.9 |
| - equity index futures in USD | 2,233.7 | 1,894.2 | 339.5 |

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 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 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 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 operational 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 rate, is recognised in the net result on interest at the end of each operational 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.

| | Income* | | Expenses** | | Result | | |
|---|--------------------|---------------------------|----------------------|---------------------------|---------------------|---------------------------|---------------------|
| | 2022 | 2021 Comarable date | 2022 | 2021 Comarable date | 2022 | 2021 Comarable date | Change |
| <i>PLN thousand</i> | | | | | | | |
| Investment instruments of foreign exchange reserves, of which | 6,791,713.9 | 1,139,388.4 | -321,468.5 | 11,175.1 | 6,470,245.4 | 1,150,563.5 | 5,319,681.9 |
| - securities | 6,058,536.9 | 1,383,036.8 | 0.0 | 0.0 | 6,058,536.9 | 1,383,036.8 | 4,675,500.1 |
| - term deposits | 310,273.7 | -232,419.7 | 0.0 | 0.0 | 310,273.7 | -232,419.7 | 542,693.4 |
| - reverse repo transactions | 412,888.0 | -5,827.2 | 0.0 | 0.0 | 412,888.0 | -5,827.2 | 418,715.2 |
| - repo transactions | 0.0 | 0.0 | -321,293.1 | 11,353.6 | -321,293.1 | 11,353.6 | -332,646.7 |
| - other | 10,015.3 | -5,401.5 | -175.4 | -178.5 | 9,839.9 | -5,580.0 | 15,419.9 |
| Gold | 14,407.6 | 3,364.7 | 0.0 | 0.0 | 14,407.6 | 3,364.7 | 11,042.9 |
| International Monetary Fund | 377,792.4 | 7,833.8 | -379,302.3 | -8,005.4 | -1,509.9 | -171.6 | -1,338.3 |
| Monetary policy instruments, of which: | 2,190,234.2 | 2,007,566.9 | -14,144,621.4 | -885,367.7 | -11,954,387.2 | 1,122,199.2 | -13,076,586.4 |
| - NBP bills | 0.0 | 0.0 | -10,395,434.6 | -768,225.5 | -10,395,434.6 | -768,225.5 | -9,627,209.1 |
| - securities | 2,188,736.9 | 1,986,694.4 | 0.0 | 0.0 | 2,188,736.9 | 1,986,694.4 | 202,042.5 |
| - required minimum reserve*** | 1,485.9 | 420.9 | -3,184,812.9 | -64,430.0 | -3,183,327.0 | -64,009.1 | -3,119,317.9 |
| - deposit facility | 0.0 | 0.0 | -448,632.3 | -52,187.4 | -448,632.3 | -52,187.4 | -396,444.9 |
| - other | 11.5 | 20,451.6 | -115,741.6 | -524.8 | -115,730.1 | 19,926.8 | -135,656.9 |
| Other interest income/expense, of which | -3,115.3 | -17,803.7 | -355,425.5 | -5,659.0 | -358,540.8 | -23,462.7 | -335,078.1 |
| Total | 9,371,032.8 | 3,140,350.1 | -15,200,817.7 | -887,857.0 | -5,829,784.9 | 2,252,493.1 | -8,082,278.0 |

* 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 decrease of the net result on income in 2022 was mainly related to an increase in expenses on monetary policy, caused primarily by an increase in the NBP annual average reference rate with a simultaneous smaller increase in income on investment instruments of foreign exchange reserves, which was the result of a rise in foreign interest rates.

Net result on interest on investment instruments of foreign currency reserves (see Note 3.1 and Note 6.3)

| 2022 | | | | | | | | | |
|---------------------------|--------------------|-------------------|------------------|------------------|------------------|------------------|------------------|--------------|--------------------|
| <i>PLN thousand</i> | USD | EUR | GBP | CAD | AUD | NOK | NZD | Other | Total |
| 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 |

| 2021 | | | | | | | | | |
|---------------------------|--------------------|-------------------|-----------------|-----------------|------------------|------------------|------------------|--------------|--------------------|
| <i>PLN thousand</i> | USD | EUR | GBP | CAD | AUD | NOK | NZD | Other | Total |
| Securities | 1,352,686.4 | -591,738.5 | 81,971.3 | 25,711.6 | 194,004.9 | 188,159.8 | 132,241.3 | 0.0 | 1,383,036.8 |
| Term deposits | 339.5 | -253,879.6 | 331.7 | 114.3 | 37.5 | 9,547.1 | 11,089.8 | 0.0 | -232,419.7 |
| Reverse repo transactions | 8,373.4 | -27,572.5 | 12,552.2 | 0.0 | 230.3 | 0.0 | 589.4 | 0.0 | -5,827.2 |
| Repo transactions | 6,651.3 | 8,664.5 | -4,141.3 | 0.0 | 434.8 | 0.0 | -255.7 | 0.0 | 11,353.6 |
| Other | -553.1 | -4,732.4 | -84.4 | 0.0 | -28.5 | -16.4 | -153.2 | -12.0 | -5,580.0 |
| Total | 1,367,497.5 | -869,258.5 | 90,629.5 | 25,825.9 | 194,679.0 | 197,690.5 | 143,511.6 | -12.0 | 1,150,563.5 |

| Change | | | | | | | | | |
|---------------------------|--------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------|--------------------|
| <i>PLN thousand</i> | USD | EUR | GBP | CAD | AUD | NOK | NZD | Other | Total |
| Securities | 1,844,033.5 | 413,840.6 | 620,012.6 | 838,395.8 | 611,985.3 | 203,603.4 | 143,628.9 | 0.0 | 4,675,500.1 |
| Term deposits | 84,488.7 | 259,603.9 | 28,111.6 | 14,568.5 | 8,752.7 | 82,304.1 | 64,863.9 | 0.0 | 542,693.4 |
| Reverse repo transactions | 124,374.5 | 59,662.1 | 169,105.7 | 3,516.3 | 62,364.7 | 0.0 | -308.1 | 0.0 | 418,715.2 |
| Repo transactions | -128,857.8 | -8,952.0 | -135,031.8 | -3,276.7 | -56,542.3 | 0.0 | 13.9 | 0.0 | -332,646.7 |
| Other | 9,190.3 | 4,658.4 | 1,128.7 | 319.6 | 74.7 | 42.0 | 5.4 | 0.8 | 15,419.9 |
| Total | 1,933,229.2 | 728,813.0 | 683,326.8 | 853,523.5 | 626,635.1 | 285,949.5 | 208,204.0 | 0.8 | 5,319,681.9 |

The increase of PLN 5,319,681.9 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 securities and in term deposits,
- an average annual depreciation of the zloty against all reserve currencies (see table below),
- higher average annual investment in simultaneous repo and reverse repo transactions in EUR and AUD and, at the same time, lower average annual investment in simultaneous repo and reverse repo transactions in USD and stand-alone reverse repo transactions in EUR.

Average annual foreign exchange rates

| PLN | 2022 | 2021 | Change |
|-----|--------|--------|--------|
| USD | 4.4607 | 3.8629 | 0.5978 |
| EUR | 4.6869 | 4.5674 | 0.1195 |
| GBP | 5.4986 | 5.3117 | 0.1869 |
| CAD | 3.4255 | 3.0810 | 0.3445 |
| AUD | 3.0933 | 2.9000 | 0.1933 |
| NOK | 0.4643 | 0.4493 | 0.0150 |
| NZD | 2.8287 | 2.7310 | 0.0977 |

Interest income on gold (see Note 1 and Note 3.1)

The item includes 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 2022 was the result of a depreciation of the zloty against USD, in average annual terms, and the higher average annual level of deposit placement and of interest rate.

Net result on interest on receivables/liabilities related to the IMF (see Note 2)

| PLN thousand | Income | | Expenses | | Result | | |
|--|------------------|----------------|-------------------|-----------------|-----------------|---------------|-----------------|
| | 2022 | 2021 | 2022 | 2021 | 2022 | 2021 | Change |
| Interest on reserve tranche | 69,948.3 | 2,713.6 | 0.0 | 0.0 | 69,948.3 | 2,713.6 | 67,234.7 |
| Interest on current account with the IMF | 306,711.6 | 4,996.9 | 0.0 | 0.0 | 306,711.6 | 4,996.9 | 301,714.7 |
| Interest on loans extended to the IMF | 1,132.5 | 123.3 | 0.0 | 0.0 | 1,132.5 | 123.3 | 1,009.2 |
| Interest on SDR allocation | 0.0 | 0.0 | -379,302.3 | -8,005.4 | -379,302.3 | -8,005.4 | -371,296.9 |
| Total | 377,792.4 | 7,833.8 | -379,302.3 | -8,005.4 | -1,509.9 | -171.6 | -1,338.3 |

The net result on interest on receivables/liabilities related to the IMF is a result of higher interest expenses on interest-bearing liabilities in SDR (SDR allocation) and income on interest-bearing receivables in SDR (reserve tranche¹⁸, current account with the IMF and loans extended to the IMF, see Note 2). The increase in the negative result was primarily a result of the increase in the average annual interest on SDR in the context of the surplus of liabilities over receivables in SDR as well as a depreciation of the zloty against SDR in average annual terms (an increase of the exchange rate from 5.5009 in 2021 to 5.9606 in 2022).

¹⁸ The value of 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 13,076,586.4 thousand, in the net result on interest on instruments used in monetary policy operations was mostly driven by:

- higher, by PLN 9,627,209.1 thousand, discount expenses on NBP bills (see Note 6.1 which was mainly a result of a rise in the average annual NBP reference rate,

| <i>PLN thousand</i> | 2022 | 2021 | Change |
|--|----------------------|-------------------|---------------------|
| Discount expenses on NBP bills issued under main monetary policy operations | -10,107,613.5 | -761,414.2 | -9,346,199.3 |
| Discount expenses on NBP bills issued under fine-tuning monetary policy operations | -287,821.1 | -6,811.3 | -281,009.8 |
| Total | -10,395,434.6 | -768,225.5 | -9,627,209.1 |

Average annual level of main and fine-tuning operations and average annual reference rate*

| <i>PLN million / %</i> | 2022 | 2021 | Change |
|------------------------|-----------|-----------|-----------|
| Main operations | 191,702.0 | 205,666.6 | -13,964.6 |
| Fine-tuning operations | 5,818.0 | 393.6 | 5,424.4 |
| NBP reference rate | 5.28 | 0.35 | 4.93 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 3,119,317.9 thousand, interest expenses on the required minimum reserve, which resulted mainly from an increase in the average level of the required minimum reserve during the year (see Note 6.1)

Average level of required minimum reserve and average annual interest rate on required minimum reserve*

| <i>PLN million / %</i> | 2022 | 2021 | Change |
|---|----------|----------|-----------|
| Required minimum reserve | 56,615.9 | 10,119.6 | 46,496.3 |
| Interest rate on required minimum reserve | 5.28 | 0.34 | 4.94 p.p. |

* Amounts of the required minimum reserve are calculated based on reserve maintenance periods weighted with the number of days in the period.

- higher, by PLN 396,444.9 thousand, expenses on deposit facility, which was mainly a result of a higher average annual deposit rate with a simultaneously lower use of this instrument,

Value of deposit facilities and the average annual level of deposit rate

| PLN million / % | 2022 | 2021 | Change |
|------------------------------------|-------------|-------------|------------|
| Total value of deposit facilities* | 3,438,074.6 | 3,894,163.6 | -456,089.0 |
| Average annual deposit rate** | 4.78 | 0.15 | 4.63 p.p. |

* Value calculated for the days of use.

** All calendar days from 1 January to 31 December were taken into account in the calculation of the average annual level of the interest rate.

with a simultaneous

- higher, by PLN 202,042.5 thousand, net result on securities purchased under structural open market operations (see Note 3.2).

| PLN thousand | 2022 | 2021 | Change |
|--|-------------|-------------|-----------|
| Net result on securities held for monetary policy purposes | 2,188,736.9 | 1,986,694.4 | 202,042.5 |
| - Treasury securities | 1,038,181.6 | 908,442.0 | 129,739.6 |
| - securities guaranteed by the State Treasury | 1,150,555.3 | 1,078,252.4 | 72,302.9 |

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 TARGET2. The item also comprises interest expenses on lease liabilities (see Note 4 and Note 6.4).

| PLN thousand | Income | | Expenses | | Result | | |
|---|-----------------|------------------|-------------------|-----------------|-------------------|------------------|-------------------|
| | 2022 | 2021 | 2022 | 2021 | 2022 | 2021 | Change |
| Interest expenses on current and auxiliary accounts as well as term deposits with NBP, of which | 0.0 | 0.0 | -359,773.3 | -17,102.2 | -359,773.3 | -17,102.2 | -342,671.1 |
| - in foreign currency | 0.0 | 0.0 | -148,477.0 | -5.8 | -148,477.0 | -5.8 | -148,471.2 |
| - in domestic currency | 0.0 | 0.0 | -211,296.3 | -17,096.4 | -211,296.3 | -17,096.4 | -194,199.9 |
| Interest income/expenses related to settlements in TARGET2 | -3,837.8 | -18,563.9 | 11,421.8 | 18,380.3 | 7,584.0 | -183.6 | 7,767.6 |
| Other interest income/expenses | 722.5 | 760.2 | -7,074.0 | -6,937.1 | -6,351.5 | -6,176.9 | -174.6 |
| Total | -3,115.3 | -17,803.7 | -355,425.5 | -5,659.0 | -358,540.8 | -23,462.7 | -335,078.1 |

* Income includes income and expenses (a negative interest rate) on interest on assets related to settlements in TARGET2, whereas expenses include income on interest on liabilities related to settlements in TARGET2.

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) in 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 purchase cost of foreign currency (or gold) – as regards surplus of outflow of foreign currency (or gold) over inflow in 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 securities 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 securities at the end of the current business day.

The result of the settlement of transactions in securities is calculated:

- for securities purchased in a forward transaction – as the difference between the market price and the agreed price, adjusted for revaluation losses recognised at the balance sheet date,
- for securities sold in a forward transaction – as the difference between the agreed price, adjusted for revaluation losses recognised at the balance sheet date, and the average cost of a securities holding.

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.

Daily changes in market prices of futures are recognised in the financial result on a daily basis, including the day of closing the open position in futures.

| <i>PLN thousand</i> | 2022 | 2021 | Change |
|--|---------------------|---------------------|---------------------|
| Realised foreign exchange gains/losses on transactions in foreign currency | 25,171,742.9 | 13,556,309.0 | 11,615,433.9 |
| Realised gains/losses on transactions in gold | 281,199.1 | 6,142,695.3 | -5,861,496.2 |
| Realised price gains/losses, of which | -9,903,279.7 | 514,987.4 | -10,418,267.1 |
| - on spot transactions in securities | -6,788,169.9 | -690,621.7 | -6,097,548.2 |
| - on off-balance-sheet financial instruments, of which | -3,115,109.7 | 1,205,536.4 | -4,320,646.1 |
| * on forward transactions in securities | -1,263,838.0 | -173,431.7 | -1,090,406.3 |
| • on futures, of which: | -1,851,271.7 | 1,378,968.1 | -3,230,239.8 |
| # on bond futures | 333,831.3 | 369,122.9 | -35,291.6 |
| # on depo futures | -28,700.1 | -1,029.5 | -27,670.6 |
| # on equity index futures | -2,156,402.9 | 1,010,874.7 | -3,167,277.6 |
| - other realised price gains* | 0.0 | 72.7 | -72.7 |
| Other income/expenses on financial operations** | -1,132.3 | 43,569.6 | -44,701.9 |
| Total | 15,548,530.0 | 20,257,561.3 | -4,709,031.3 |

* Other realised price gains/losses include the result of reallocation of participating interests in SWIFT in 2021 (see Note 3.3).

** The item includes the result of the valuation of the balance of Account No. 2 for the IMF (PLN -1,132.3 thousand in 2022 as compared with PLN -2,088.0 thousand in 2021 – see Note 6.3). Moreover, in 2021 the item included income of PLN 45,657.7 thousand as the result of settlement of the IMF's transactions (see Note 2).

Net result on realised foreign exchange gains/losses on transactions in foreign currency

| <i>PLN thousand</i> | 2022 | 2021 | Change |
|---------------------|---------------------|---------------------|---------------------|
| AUD | 2,202,603.3 | 1,504,073.4 | 698,529.9 |
| CAD | 1,888,925.1 | -2,507.7 | 1,891,432.8 |
| CHF | 882,207.5 | 32,798.8 | 849,408.7 |
| EUR | 2,200,035.4 | 1,728,124.5 | 471,910.9 |
| GBP | 1,910,777.4 | 1,617,679.8 | 293,097.6 |
| NOK | 1,158,391.9 | 1,238,855.8 | -80,463.9 |
| NZD | 451,666.2 | 826,414.6 | -374,748.4 |
| USD | 14,472,637.2 | 6,600,229.9 | 7,872,407.3 |
| SDR | 3,927.9 | 10,004.4 | -6,076.5 |
| Other | 571.0 | 635.5 | -64.5 |
| Total | 25,171,742.9 | 13,556,309.0 | 11,615,433.9 |

The increase in the net result stemmed mainly from:

- an increase in the average annual positive difference between the average NBP exchange rate and the average cost of holding for USD, CAD, AUD and GBP with a simultaneous decrease of the difference for NZD and NOK,
- an increase in the sale volume of CAD, EUR, NOK and GBP with a simultaneous decrease for USD (see Note 3.1 and Note 12.2).

Net result on realised gains/losses on transactions in gold

In 2022, the decrease resulted mainly from a lower volume of purchase/sale transactions concluded by NBP in the gold market (see Note 1).

*Net result on realised price gains/losses**Net result on realised price gains/losses on the sale of securities in spot transactions*

| <i>PLN thousand</i> | 2022 | 2021 | Change |
|---------------------|---------------------|-------------------|---------------------|
| USD | -2,233,867.7 | -386,863.1 | -1,847,004.6 |
| EUR | -1,358,142.5 | -14,368.7 | -1,343,773.8 |
| GBP | -1,190,706.5 | -132,368.1 | -1,058,338.4 |
| CAD | -694,202.4 | 0.0 | -694,202.4 |
| AUD | -848,718.2 | -6,221.1 | -842,497.1 |
| NOK | -295,522.4 | -123,178.3 | -172,344.1 |
| NZD | -167,010.2 | -27,622.4 | -139,387.8 |
| Total | -6,788,169.9 | -690,621.7 | -6,097,548.2 |

Net result on realised price gains/losses on forward transactions in securities

| <i>PLN thousand</i> | 2022 | 2021 | Change |
|---------------------|---------------------|-------------------|---------------------|
| USD | -313,587.1 | -460.5 | -313,126.6 |
| EUR | -27,166.0 | -4,792.0 | -22,374.0 |
| GBP | -150,766.1 | -6.3 | -150,759.8 |
| CAD | -59,910.8 | 2,856.8 | -62,767.6 |
| AUD | -698,808.3 | -177,934.0 | -520,874.3 |
| NOK | 7,265.4 | -5,160.5 | 12,425.9 |
| NZD | -20,865.1 | 12,064.8 | -32,929.9 |
| Total | -1,263,838.0 | -173,431.7 | -1,090,406.3 |

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 | | | | | | |
| 2022 | 104,201.8 | 254,752.3 | -31,942.4 | -12,658.9 | 19,478.5 | 333,831.3 |
| 2021 | 288,252.4 | 18,035.9 | 37,344.7 | 0.0 | 25,489.9 | 369,122.9 |
| Change | -184,050.6 | 236,716.4 | -69,287.1 | -12,658.9 | -6,011.4 | -35,291.6 |
| Depo futures | | | | | | |
| 2022 | -5,356.8 | 0.0 | -23,343.3 | 0.0 | 0.0 | -28,700.1 |
| 2021 | 0.0 | 0.0 | -1,029.5 | 0.0 | 0.0 | -1,029.5 |
| Change | -5,356.8 | 0.0 | -22,313.8 | 0.0 | 0.0 | -27,670.6 |
| Equity index futures | | | | | | |
| 2022 | -1,800,061.2 | -422,011.6 | 65,721.2 | -6.6 | -44.7 | -2,156,402.9 |
| 2021 | 623,853.3 | 320,255.4 | 66,766.0 | 0.0 | 0.0 | 1,010,874.7 |
| Change | -2,423,914.5 | -742,267.0 | -1,044.8 | -6.6 | -44.7 | -3,167,277.6 |

The lower net result on realised price gains/losses in 2022 was mostly related to sale transactions in securities amid rising yields in foreign markets and losses on investment in equity index futures following the fall 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 securities are determined by comparing the average cost of securities holding with the average market price of these securities, which is lower than the average cost.

Price revaluation losses on forward transactions in 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) or a higher (in the case of forward sale) current market price of the instrument.

| <i>PLN thousand</i> | 2022 | 2021 | Change |
|--|----------------------|---------------------|----------------------|
| Currency revaluation losses | -1,420,869.5 | -259,225.8 | -1,161,643.7 |
| Price revaluation losses, of which | -25,316,894.2 | -3,399,364.2 | -21,917,530.0 |
| - on securities | -25,316,842.3 | -3,399,160.1 | -21,917,682.2 |
| - on off-balance-sheet financial instruments | -51.9 | -204.1 | 152.2 |
| Total | -26,737,763.7 | -3,658,590.0 | -23,079,173.7 |

Currency revaluation losses by foreign currency are presented below.

| <i>PLN thousand</i> | 2022 | 2021 | Change |
|---------------------|---------------------|-------------------|---------------------|
| CAD | -978,211.6 | -259,212.6 | -718,999.0 |
| HUF | -15.7 | -3.9 | -11.8 |
| JPY | -13.3 | -9.3 | -4.0 |
| NOK | -318,214.7 | 0.0 | -318,214.7 |
| NZD | -124,336.8 | 0.0 | -124,336.8 |
| SEK | -77.4 | 0.0 | -77.4 |
| Total | -1,420,869.5 | -259,225.8 | -1,161,643.7 |

Price revaluation losses by securities held by NBP denominated in foreign currencies are presented below.

| <i>PLN thousand</i> | 2022 | 2021 | Change |
|---------------------|----------------------|---------------------|----------------------|
| Securities in USD | -9,916,207.8 | -881,434.3 | -9,034,773.5 |
| Securities in EUR | -6,572,513.3 | -406,979.5 | -6,165,533.8 |
| Securities in GBP | -3,193,475.4 | -680,668.5 | -2,512,806.9 |
| Securities in CAD | -1,906,440.6 | -9,229.7 | -1,897,210.9 |
| Securities in AUD | -2,074,134.8 | -526,847.3 | -1,547,287.5 |
| Securities in NOK | -974,462.8 | -533,468.6 | -440,994.2 |
| Securities in NZD | -679,607.6 | -360,532.2 | -319,075.4 |
| Total | -25,316,842.3 | -3,399,160.1 | -21,917,682.2 |

In 2022, the increase in unrealised price revaluation losses was a result of the increase in the yields in all markets (see Note 3.1).

In 2022 and 2021, price revaluation losses on off-balance-sheet financial instruments mainly related to forward purchase transactions in 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 | 2022 | 2021 | Change |
|--|-------------------------------------|------------------|------------------|-----------------|
| Income on the execution of payment orders | | 39,036.8 | 33,740.4 | 5,296.4 |
| Other fees and commissions income | | 13,908.4 | 13,726.3 | 182.1 |
| Fees and commissions income | P&L 3.1 | 52,945.2 | 47,466.7 | 5,478.5 |
| Expenses on fees for NBP's TARGET2 participation | | -16,280.1 | -15,339.3 | -940.8 |
| Expenses on opening and operation of NBP accounts (including gold and securities accounts) | | -17,575.5 | -17,098.2 | -477.3 |
| Expenses on the execution of own payment orders | | -4,599.4 | -4,276.3 | -323.1 |
| Expenses due to substitution cash services | | -2,553.7 | -1,840.3 | -713.4 |
| Other fees and commissions expenses | | -12,385.9 | -7,527.6 | -4,858.3 |
| Fees and commissions expenses | P&L 3.2 | -53,394.6 | -46,081.7 | -7,312.9 |
| Net result on fees and commissions | | -449.4 | 1,385.0 | -1,834.4 |

The decrease in the net result on commissions and fees in 2022 was mainly the effect of:

- an increase in other commissions and fees expenses, mainly due to higher expenses on futures, primarily in relation with higher trade in equity index futures (see Note 3.1, Note 10.3 and Note 12.1),
- an increase in expenses on fees for NBP's participation in TARGET2 – following a rise in the number of the payment orders executed and a higher EUR exchange rate in 2022,

with a simultaneous

- 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 at 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).

| <i>PLN thousand</i> | 2022 | 2021 | Change |
|---|-----------------|-----------------|-----------------|
| Dividends received, of which | 32,215.8 | 38,256.7 | -6,040.9 |
| - Krajowy Depozyt Papierów Wartościowych S.A. | 9,793.0 | 6,641.6 | 3,151.4 |
| - Krajowa Izba Rozliczeniowa S.A. | 9,256.9 | 8,859.4 | 397.5 |
| - Bank for International Settlements | 13,165.9 | 22,755.7 | -9,589.8 |

Note 15 Salaries

| <i>PLN thousand</i> | 2022 | 2021 | Change |
|---|-------------------|-------------------|------------------|
| Expenses on salaries | -534,943.5 | -496,170.7 | -38,772.8 |
| Expenses on provisions for liabilities to employees | -17,291.0 | -32,886.0 | 15,595.0 |
| Expenses on social contributions, of which | -121,173.8 | -111,442.4 | -9,731.4 |
| - <i>Occupational Pension Scheme</i> | -33,232.4 | -31,108.3 | -2,124.1 |
| Total | -673,408.3 | -640,499.1 | -32,909.2 |

In 2022, the average headcount at NBP amounted to 3,344 employees and was lower by 16 employees as compared with 2021.

In 2022, higher salaries resulted mainly from the adopted HR and remuneration policy.

The decrease in expenses on provisions for liabilities to employees in 2022 was mainly driven by lower expenses on the creation of the provision for retirement severance payments and jubilee awards. In 2022 and 2021, expenses on the creation of provisions for liabilities to employees by categories were as follows (see Note 7).

| <i>PLN thousand</i> | 2022 | | 2021 | |
|--|------------------------|----------------------------------|------------------------|----------------------------------|
| | 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 | -17,291.0 | 1,193.2 | -32,886.0 | -21,105.7 |
| - due to retirement severance payments | -6,469.4 | 1,826.2 | -17,602.4 | -11,631.8 |
| - due to disability severance payments | -88.2 | 223.5 | -322.8 | -74.0 |
| - due to jubilee awards | -8,180.3 | -856.5 | -14,960.8 | -9,399.9 |
| - due to untaken leaves | -2,553.1 | - | 0.0** | - |

* 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.

** In the case of a provision for liabilities due to untaken leaves in 2021, an income from its partial release was taken to the Item *Other income*.

Note 16 Administrative expenses

| <i>PLN thousand</i> | 2022 | 2021 | Change |
|---|-------------------|-------------------|------------------|
| Materials and energy used | -34,021.6 | -28,517.8 | -5,503.8 |
| Benefits for employees and other eligible persons | -24,660.2 | -18,310.6 | -6,349.6 |
| Business travel | -2,277.3 | -471.3 | -1,806.0 |
| Services from third parties | -254,121.6 | -218,468.7 | -35,652.9 |
| Taxes and fees | -11,831.1 | -11,053.2 | -777.9 |
| Transfers to Employee Benefit Fund | -6,628.2 | -6,203.7 | -424.5 |
| Other administrative expenses | -9,314.6 | -16,507.3 | 7,192.7 |
| Total | -342,854.6 | -299,532.6 | -43,322.0 |

The increase in administrative expenses in 2022 was mainly a result of:

- 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 expenses on benefits for employees and other eligible persons – mainly due to the change in the provision for liabilities arising from additional benefits for employees (see Note 7, Note 15 and Note 19),
- an increase in expenses on materials and energy used – mainly electricity, gas and publications and educational materials purchased by NBP,

with a simultaneous

- decrease in other administrative expenses – mainly on NBP's educational activity.

Note 17 Depreciation and amortisation expenses

| <i>PLN thousand</i> | 2022 | 2021 | Change |
|---|------------------|-------------------|-----------------|
| Tangible fixed assets depreciation expenses | -59,007.6 | -75,787.1 | 16,779.5 |
| Right-of-use assets depreciation expenses | -13,629.2 | -13,149.2 | -480.0 |
| Intangible assets amortisation expenses | -22,847.2 | -25,250.1 | 2,402.9 |
| Total | -95,484.0 | -114,186.4 | 18,702.4 |

The decrease in depreciation and amortisation expenses in 2022 was mainly related to a change of the threshold of depreciation/amortisation made on a one-off basis related to tangible fixed assets and intangible assets (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 the liability arose, regardless of the date the banknotes and coins are put into circulation.

The item comprises expenses on issue of banknotes and coins, including collector banknotes and coins. In 2022, the item amounted to PLN 389,963.3 thousand and was by PLN 25,506.1 thousand higher as compared with 2021. The increase in the item resulted mainly from higher expenses on the issue of general circulation banknotes as a result, among others, of a rise in the overall number of ordered banknotes.

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 decrease in the balance of other income was mainly the result of a decrease in this income and lower income from the release of the provisions in 2022 (see Note 7).

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 of Ukraine on the economic situation in Poland, standing ready to immediately take preventive actions against possible negative trends on the financial and FX markets.

In 2022, NBP took decisions, among others, concerning:

- interventions in the FX market, particularly with the aim to reduce fluctuations of the zloty exchange rate which were not in line with the direction of the pursued monetary policy,
- opening a FX swap line with the National Bank of Ukraine (NBU),
- supporting the process of exchange of Ukrainian hryvnia for Polish zloty in Polish banks.¹⁹

Both as at 31 December 2022 and as at 31 December 2021, NBP did not have direct exposures to Russian or Belarussian entities which were subject to the economic sanctions arising from the above-mentioned

¹⁹ From 25 March 2022 to 9 September 2022 refugees from Ukraine exchanged a total of UAH 728 million for PLN 98 million. All the exchanged hryvnias were transferred by PKO Bank Polski S.A. to the regional branches of NBP, and then settled at the exchange rate set by the NBU. All the UAH currency purchased in this way was then sold to the NBU at the same exchange rate. Thus, the mutual financial settlements of parties involved in the exchange of hryvnia for Polish zloty for the needs of refugees from Ukraine have been completed. The final settlement with the National Bank of Ukraine took place on 28 September 2022.

military aggression. None of NBP's counterparties which cooperate with NBP under the process of foreign currency reserves management (including issuers of securities) had its seat in the territory of Ukraine. NBP monitored, on an ongoing basis, adverse effects of the above mentioned military aggression on risk in the process of foreign currency reserves management and in the monetary policy operations. It specifically analysed 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 any significant growth in credit risk.

Moreover, NBP monitored, on an ongoing basis, the level of operational and cybersecurity risk. The Bank had in place contingency procedures, including a business continuity plan.

A sharp rise in demand for cash was recorded in the period directly following the Russia's military aggression of Ukraine, i.e. after 24 February 2022. The value of cash in circulation was at its all-time high on 14 March 2022, when it amounted to PLN 395.7 billion (an increase of PLN 40.1 bn or 11.3%, compared to the 31 December 2021 figure). Later in 2022 the situation on the cash market calmed down. Starting from June 2022, the value of cash in circulation was declining gradually. The higher value of cash transferred to NBP was particularly due to an increase in interest rates, which led to an increased attractiveness of term deposits offered by banks to their customers (see Note 5).

Swap arrangements

In 2022 and 2021, NBP was party to a swap arrangement with the Swiss National Bank (SNB). In 2022, NBP was also party to swap arrangements with the ECB and the NBU.²⁰ No transactions were carried out under these arrangements, therefore they had no impact on the NBP balance sheet and profit and loss account in 2022 and 2021.

In 2022 and 2021, NBP carried out FX swap transactions with domestic banks (see Note 10.1 and Chapter 7.1.1.2.3). There were no such transactions as at 31 December 2022.

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:

- 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

²⁰ The swap arrangement with SNB was concluded in 2012, whereas the arrangements with ECB and NBU – in 2022.

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 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 (interest rate risk, foreign exchange rate risk, 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.²¹

| <i>PLN thousand</i> | 31.12.2022 | 31.12.2021 | Balance sheet item | Note |
|--|----------------------|----------------------|--------------------|------|
| Current account in gold | 0.0 | 18,144,948.1 | A.1 | 1 |
| Term deposits in gold | 31,755,510.9 | 11,786,423.1 | A.1 | 1 |
| Current accounts in foreign currency* | 20,345,541.1 | 20,196,878.7 | A.2.2 | 3.1 |
| Term deposits in foreign currency | 37,562,191.4 | 22,638,153.6 | A.2.2 | 3.1 |
| Reverse repo transactions | 53,550,113.6 | 35,876,615.9 | A.2.2 | 3.1 |
| Securities denominated in foreign currency | 516,089,683.1 | 506,790,467.3 | A.2.2 | 3.1 |
| Margins related to futures transactions | 1,088,239.0 | 1,024,049.9 | A.2.2 | 3.1 |
| Interest on term deposits in gold | 3,888.1 | 405.5 | A.2.2 | 3.1 |
| Total | 660,395,167.2 | 616,457,942.1 | | |

* Current accounts excluding the current accounts in the ECB used for settlements in TARGET2 (see Note 3.1).

The dominant portion of foreign currency reserves is invested in government securities of high rating countries characterised by the highest level of safety and liquidity. Non-government 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 securities held by NBP is classified as green bonds and sustainable bonds.²² The share of term deposits in foreign currency reserves is low – transactions are concluded for short periods with banks of high 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 securities issuer are, among others, used for estimating the credit quality of securities issued by governments and central banks. The credit quality

²¹ It is assumed that the exposure to the IMF (receivables from the IMF – see Note 2) does not generate credit risk.

²² 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.

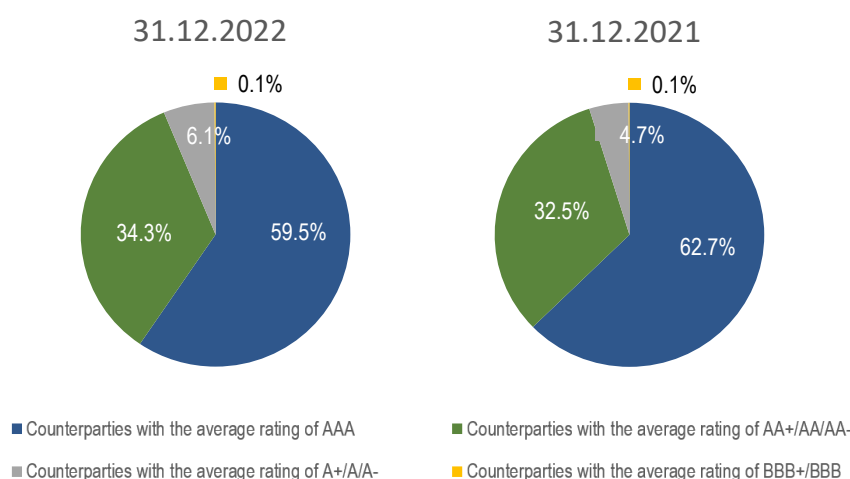
of issuers of other securities as well as counterparties with which term deposits are concluded (except for central banks) is assessed based on the scoring models that take into account, among others, ratings assigned by rating agencies and individual issuer's financial data. The financial standing of 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 2022 indicate that no cases of impairment of securities held to maturity have occurred.

Exposure to credit risk related to deposits and securities related to foreign exchange reserve management, by issuer/counterparty's sector, geographical location and credit rating, is presented below.

| <i>PLN thousand</i> | 31.12.2022 | 31.12.2021 |
|---|----------------------|----------------------|
| General government institutions | 470,891,051.9 | 469,944,728.5 |
| - Foreign central government institutions | 431,788,496.2 | 431,946,535.0 |
| - Other | 39,102,555.7 | 37,998,193.5 |
| Monetary financial institutions | 94,487,430.2 | 54,893,091.8 |
| - Foreign credit institutions | 75,930,741.1 | 47,011,150.8 |
| - Central banks | 18,556,689.1 | 7,881,941.0 |
| International financial organisations | 3,304,973.3 | 822,850.1 |
| Non-monetary financial institutions | 8,799,728.9 | 7,189,758.1 |
| Non-financial sector | 7,928,089.2 | 8,365,021.0 |
| Total | 585,411,273.5 | 541,215,449.5 |

| <i>PLN thousand</i> | 31.12.2022 | 31.12.2021 |
|---------------------|----------------------|----------------------|
| United States | 174,506,217.4 | 178,075,175.1 |
| Euro area | 170,912,123.0 | 142,415,872.5 |
| United Kingdom | 78,903,375.8 | 70,305,912.3 |
| Canada | 55,845,278.2 | 53,724,403.9 |
| Australia | 45,767,385.6 | 40,108,900.8 |
| Norway | 27,612,796.8 | 24,508,810.5 |
| Asian countries | 12,533,835.8 | 14,755,401.3 |
| New Zealand | 10,805,626.5 | 11,052,580.7 |
| Switzerland | 5,219,661.0 | 4,138,547.4 |
| Other | 3,304,973.4 | 2,129,845.0 |
| Total | 585,411,273.5 | 541,215,449.5 |



7.1.1.2. Credit risk underlying domestic operations

7.1.1.2.1. Securities

In 2022, NBP did not continue to purchase Treasury bonds and securities guaranteed by the Treasury in the secondary market, as part of its structural open market operations, and did not reinvest funds from the redemption of these instruments by their issuer at maturity. As a result of operations conducted in previous years as of 31 December 2022, NBP held Treasury securities in zloty and securities guaranteed by the State Treasury in zloty for a total accounting book value of PLN 140,673,185.5 thousand (PLN 149,332,164.0 thousand as of 31 December 2021 – see Note 3.2). Securities denominated in domestic currency held for monetary policy purposes are valued according to their clean price adjusted for the accrued discount and premium, less impairment.

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 2022 show that no indications of their impairment have occurred.

7.1.1.2.2. Claims on credit operations

To support the liquidity of the financial system, 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 | 2022 | 2021 | Change |
|------------------------|--------------|--------------|------------|
| Lombard credit | 62.2 | 9.9 | 52.3 |
| Intraday credit | 18,564,907.0 | 19,527,146.4 | -962,239.4 |
| Intraday credit in EUR | 51,011.9 | 52,551.4 | -1,539.5 |

* 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 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 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 TARGET2-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).

7.1.1.2.3. FX swap transactions with domestic banks

In 2022 and 2021, NBP executed an FX swap transaction on the CHF/PLN currency pair. The collateral for the operation was set with haircut and the margin requirement, thus mitigating risk exposure (see Note 10.1). There were no FX swap transactions as at 31 December 2022.

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 2022 and 31 December 2021.²³

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 2021), of which the outstanding amount of NBP's commitment as at 31 December 2022 was SDR 2,558,525.0 thousand (SDR 2,540,425.0 thousand as at 31 December 2021),
- bilateral borrowing agreements – up to the amount of EUR 2,701,000.0 thousand (EUR 2,701,000.0 thousand as at 31 December 2021), of which the outstanding amount of NBP's commitment as at 31 December 2022 was EUR 2,701,000.0 thousand (EUR 2,701,000.0 thousand as at 31 December 2021).

| 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 | 30,952,659.7 | 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 |

| 31.12.2021 | 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 | 32,619,174.3 | 32,619,174.3 | 0.0 | 0.0 | 0.0 | 32,619,174.4 | 32,455,999.0 | 163,175.4 | 0.0 | 0.0 |
| Term deposit accounts in foreign currency operated by NBP | 7,015.1 | 0.0 | 7,015.1 | 0.0 | 0.0 | 7,015.1 | 7,015.1 | 0.0 | 0.0 | 0.0 |
| Repo transactions | 35,879,576.0 | 0.0 | 25,577,651.4 | 1,367,527.9 | 8,934,396.7 | 35,873,254.8 | 0.0 | 35,873,254.8 | 0.0 | 0.0 |
| Other financial liabilities denominated in foreign currency | 174,485.1 | 0.0 | 174,392.0 | 93.1 | 0.0 | 174,332.7 | 166,705.5 | 0.0 | 0.0 | 7,627.2 |
| SDR allocation | 29,771,979.3 | 0.0 | 4,978.0 | 0.0 | 29,767,001.3 | 29,769,702.4 | 0.0 | 0.0 | 29,769,702.4 | 0.0 |
| TOTAL | 98,452,229.8 | 32,619,174.3 | 25,764,036.5 | 1,367,621.0 | 38,701,398.0 | 98,443,479.4 | 32,629,719.6 | 36,036,430.2 | 29,769,702.4 | 7,627.2 |

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

²³ Liabilities due to FX spot, FX forward and FX swap 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.

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 2022, the MD of the reserves remained at the level close to its level in the preceding year.

Sensitivity analysis, conducted based on MD²⁴, 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 14,138.7 million as at 31 December 2022 (as at 31 December 2021 – by PLN 14,883.7 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.

²⁴ In its sensitivity analysis NBP applied the MD ratio for individual foreign-currency securities portfolios as at 31 December 2022 and as at 31 December 2021 (in both cases, excluding the portfolio of securities held to maturity) as a linear measure of the relationship between price and yield, as well as the holding of securities portfolios as at 31 December 2022 and as at 31 December 2021 (in both cases, excluding the portfolio of securities held to maturity) based on values used in the monitoring of MD.

MD-based estimate of a change in values of securities portfolios in individual currencies in response to a 100 bps change in interest rates

| <i>PLN million</i> | 31.12.2022 | 31.12.2021 | Change |
|--------------------|-----------------|-----------------|---------------|
| USD | 4,946.2 | 5,079.0 | -132.8 |
| EUR | 2,946.5 | 3,152.4 | -205.9 |
| GBP | 1,787.1 | 1,904.0 | -116.9 |
| CAD | 1,468.4 | 1,549.0 | -80.6 |
| AUD | 1,738.3 | 1,700.7 | 37.6 |
| NOK | 876.9 | 1,031.9 | -155.0 |
| NZD | 375.3 | 466.7 | -91.4 |
| Total | 14,138.7 | 14,883.7 | -745.0 |

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.

Securities denominated in foreign currency held to maturity and 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 benchmark²⁵ alongside admissible fluctuation band (see Note 3.1 and Note 12.1).

As at 31 December 2022 and 31 December 2021, the currency composition of the strategic benchmark included:

²⁵ 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 securities held to maturity, as it is not actively managed.

| Currency composition of the strategic benchmark | | |
|---|------------|------------|
| Currency | 31.12.2022 | 31.12.2021 |
| | % 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.

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 2022 and 31 December 2021 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.

| 31.12.2022 | PLN | 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 | 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 | 78,283,570.9 | 53,553,959.1 | 47,918,333.6 | 23,497,576.7 | 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 | 189.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 189.2 |
| 7. 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 | 1,892.9 | 0.0 | 58,760.0 | 0.0 | 0.0 | 1,497,159.3 |
| TOTAL ASSETS | 141,947,933.9 | 243,936,982.1 | 176,177,519.7 | 78,284,065.0 | 53,560,021.8 | 47,922,528.7 | 23,498,765.9 | 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 | 55,112,807.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 55,112,807.5 |
| 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 securities denominated in domestic currency | 252,161,174.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 252,161,174.3 |
| 5. Liabilities to other residents denominated in domestic currency | 11,883,906.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 11,883,906.3 |
| 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 foreign currency | 0.0 | 13,385,064.0 | 45,644,484.8 | 382.0 | 21.2 | 4,078,560.8 | 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 | 8,096,142.9 | 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 | 30,871,510.9 | 0.0 | 0.0 | 30,871,510.9 |
| 11. Other liabilities | 387,827.4 | 18,021.2 | 14,799.6 | 131.0 | 6,224.1 | 2,388.2 | 1,190.2 | 0.0 | 0.0 | 0.0 | 30.0 | 430,621.7 |
| 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 | 37,898.1 | 275.0 | 686.8 | 4,775.5 | 1,799.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50,056,738.6 |
| 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 | -27,401,690.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -27,401,690.0 |
| TOTAL LIABILITIES | 732,633,231.5 | 21,517,036.2 | 72,136,299.7 | 14,974,891.6 | 11,020.8 | 4,082,788.4 | 1,192.7 | 0.0 | 30,871,510.9 | 0.0 | 148.0 | 876,228,089.8 |
| 31.12.2021 | | | | | | | | | | | | |
| ASSETS | | | | | | | | | | | | |
| 1. Gold and gold receivables | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 54,843,799.4 | 0.0 | 54,843,799.4 |
| 2. Claims on non-residents denominated in foreign currency | 0.0 | 225,161,371.4 | 142,816,029.7 | 77,116,328.7 | 53,732,486.3 | 46,402,899.2 | 23,048,156.7 | 15,019,637.0 | 30,010,120.6 | 0.0 | 24,404.8 | 619,533,303.4 |
| 6. Other claims on credit institutions denominated in domestic currency | 7.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.0 |
| 7. Securities of residents denominated in domestic currency | 149,322,164.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 149,322,164.0 |
| 10. Other assets | 1,275,838.4 | 53,603.7 | 117,556.5 | 0.0 | 2,767.3 | 42,009.6 | 14.1 | 9,433.7 | 58,917.0 | 0.0 | 266,395.5 | 1,624,538.8 |
| TOTAL ASSETS | 150,598,009.4 | 225,214,975.1 | 142,933,586.2 | 77,116,328.7 | 53,735,283.6 | 46,444,867.8 | 23,048,170.8 | 15,028,970.7 | 30,067,037.6 | 54,843,799.4 | 290,800.3 | 825,323,809.6 |
| LIABILITIES | | | | | | | | | | | | |
| 1. Banknotes and coins in circulation | 355,557,725.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 355,557,725.3 |
| 2. Liabilities to credit institutions related to monetary policy operations denominated in domestic currency | 96,525,124.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 96,525,124.4 |
| 3. Other liabilities to credit institutions denominated in domestic currency | 762,678.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 762,678.9 |
| 4. Liabilities due to issued securities denominated in domestic currency | 184,521,188.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 184,521,188.7 |
| 5. Liabilities to other residents denominated in domestic currency | 15,251,900.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 15,251,900.8 |
| 6. Liabilities to non-residents denominated in domestic currency | 3,960,900.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3,960,900.8 |
| 7. Liabilities to residents denominated in foreign currency | 0.0 | 1,250,990.7 | 31,316,095.0 | 19,542.8 | 0.0 | 4,064,081.6 | 0.0 | 0.0 | 0.0 | 0.0 | 91.2 | 32,629,719.7 |
| 8. Liabilities to non-residents denominated in foreign currency | 0.0 | 11,797,861.4 | 53,532,240.0 | 14,445,232.1 | 0.0 | 4,064,081.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 36,038,430.1 |
| 9. SDR allocation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 29,769,702.4 | 0.0 | 0.0 | 29,769,702.4 |
| 11. Other liabilities | 382,891.6 | 52,222.1 | 7,894.7 | 363.4 | 2,892.5 | 34,397.6 | 30.4 | 12,273.9 | 0.0 | 0.0 | 615,127.5 | 1,108,023.7 |
| 12. Provisions | 16,693,632.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 16,693,632.6 |
| 13. Revaluation accounts | 50,639,377.4 | 287,800.7 | 50,668.8 | 0.0 | 89,134.5 | 4,501.4 | 397.0 | 7,059.7 | 0.0 | 0.0 | 0.0 | 51,038,995.5 |
| 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 | -32,216.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -32,216.5 |
| TOTAL LIABILITIES | 725,763,343.2 | 13,391,804.9 | 36,907,842.5 | 14,465,128.3 | 91,897.0 | 4,102,990.6 | 427.4 | 225,374.6 | 29,769,702.4 | 0.0 | 615,216.7 | 825,323,809.6 |

7.1.5. Equity index futures price risk

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).

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 end of 2022 and the end of 2021, NBP invested in equity index futures in the markets in the United States, euro area and the United Kingdom.

7.1.6. 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,
- securities held to maturity,
- securities held for monetary policy purposes,
- banknotes and coins in circulation,
- securities issued by NBP,
- other financial assets and liabilities (presented in items A.10 and L.11).

Securities held to maturity and securities denominated in domestic currency held for monetary policy purposes are valued at clean price adjusted for the accrued discount and premium, less impairment.

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.

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 securities denominated in foreign currency purchased by NBP, except for 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"> ▪ securities priced based on the yield curves values for a given type of securities having the same credit risk of the issuer, ▪ forward transactions in 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 2022 and 31 December 2021, 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 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 2022 and 31 December 2021 according to market value, assigned to individual levels, are presented below.

| 31.12.2022 PLN thousand | Level 1 | Level 2 | Level 3 | Balance-sheet value | Balance sheet item |
|---|---------------|--------------|---------|---------------------|--------------------|
| ASSETS | | | | | |
| Securities purchased by NBP | 431,279,628.9 | 40,237,699.8 | 0.0 | 471,517,328.7 | A.2.2 |
| Forward transactions in securities (revaluation gains) | 0.0 | 1,799.4 | 0.0 | 1,799.4 | A.10.3 |
| LIABILITIES | | | | | |
| Forward transactions in securities (revaluation losses) | 0.0 | 51.9 | 0.0 | 51.9 | L.11.1 |

| 31.12.2021 PLN thousand | Level 1 | Level 2 | Level 3 | Balance-sheet value | Balance sheet item |
|---|---------------|--------------|---------|---------------------|--------------------|
| ASSETS | | | | | |
| Securities purchased by NBP | 439,569,252.2 | 26,005,990.5 | 0.0 | 465,575,242.7 | A.2.2 |
| Forward transactions in securities (revaluation gains) | 0.0 | 3,661.8 | 0.0 | 3,661.8 | A.10.3 |
| LIABILITIES | | | | | |
| Forward transactions in securities (revaluation losses) | 0.0 | 204.1 | 0.0 | 204.1 | L.11.1 |

In 2022 and 2021 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.

Until the end of 2022, the operational risk in NBP was divided into four sub-categories: safety risk, personnel risk, legal 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).

From 1 January 2023, the subcategories of operational risk were extended to include an additional subcategory – cybersecurity risk.

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 2022, operational risks in NBP activity, including risks identified resulting from Russia’s war efforts in Ukraine, were monitored on an ongoing basis (see Note 20). In 2022, the Commission for Operational Risk Management held 11 sessions to discuss topics related to the assessment of the current activities aimed to ensure the proper execution of NBP tasks. The level of risk at NBP in 2022 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 an obligation as a tax remitter of withholding tax on general terms,
- the Personal Income Tax (PIT) – being subject to obligations as a tax remitter, 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, 23 March 2023

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
/-/ Rafał Sura
/-/ Paweł Szałamacha

²⁶ The Public Finance Act of 27 August 2009 (Journal of Laws of 2022, item 1634, 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 2022, item 2324, as amended).

²⁹ In accordance with the Act on NBP, 95% of NBP's profit is remitted to the State budget (see Note 9.4).