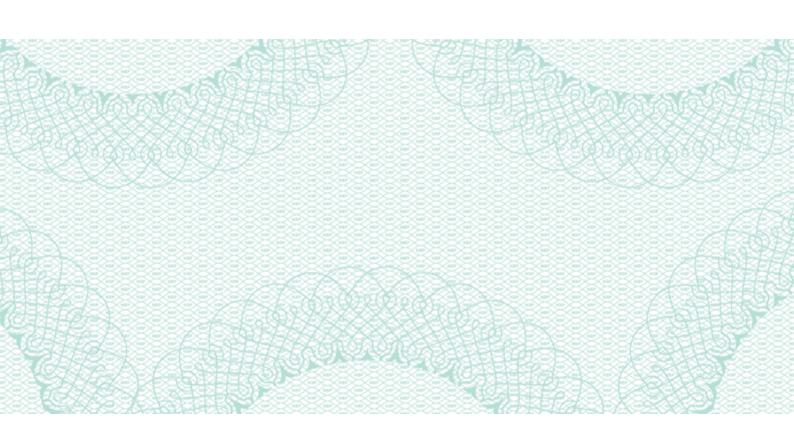
## **Annual Report 2017**



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Compiled on basis of NBP materials

Photo of the President of NBP Piotr Małecki

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Adam Glapiński President of Narodowy Bank Polski

#### Dear Readers,

Let me present to you the Annual Report of Narodowy Bank Polski, which summarises the activities of the central bank in 2017. The report highlights the most important tasks undertaken by the central bank along with the financial statements of NBP as of 31 December 2017. I hope that the information contained in the report will help you understand the activities conducted by the central bank and assess the effects of the tasks that it has accomplished. As in previous years, in 2017 Narodowy Bank Polski focused on maintaining price stability, financial system stability, and supporting sustainable economic growth.

The overriding goal of the central bank is to maintain the value of the Polish currency, as price stability is the condition for the sustainable development of Poland's economy. For several years now, Narodowy Bank Polski has implemented this task by applying the strategy of an inflation target

set at the level of 2.5% with a symmetrical tolerance band of +/- 1 percentage point. NBP allows the possibility of a temporary deviation from the inflation target if this contributes to the maintenance of sustainable economic growth.

In 2017 NBP conducted monetary policy amid improving economic conditions. GDP growth reached 4.6%, the highest since 2011. The main component of growth in this period continued to be private consumption, resulting from the continued recovery in the labour market and the payments of child benefits from the "Family 500 plus" scheme, which had a positive impact on household purchasing power and sentiment. Over the year the role of investment gradually increased, which was related to the need to increase the productive potential of the Polish economy and the growing absorption of EU structural funds under the current financial framework 2014-2020. The rapid GDP growth in 2017 was accompanied by a positive current and capital account balance (which was also higher than in 2016), with a record surplus in trade in goods and services.

In 2017 there was a marked rise in CPI inflation, which reached 2.0% against -0.6% in 2016. The rise in inflation was primarily driven by supply-side factors, which boosted growth of food and energy prices. Gradually rising demand pressure in the Polish economy and rising labour costs had a limited impact on price developments – core inflation (net of food and energy prices) did not exceed 1%. Low core inflation was an expression of strong competition in the domestic market and the flexibility of the domestic labour market. The scale of inflation growth was also limited by moderate inflation abroad.

In view of the above conditions, the Monetary Policy Council kept NBP interest rates unchanged in 2017, including the reference rate at 1.5%. The Monetary Policy Council took into consideration the fact that both current inflation and inflation forecast for the coming years

were close to the inflation target. Keeping NBP interest rates at an unchanged level supported the maintenance of the Polish economy on the path of sustainable economic growth.

Apart from monetary policy, the main tasks of NBP also include creating the conditions necessary for the development of the banking system and undertaking measures to ensure the stability of the domestic financial system. The stable and safe functioning of the financial system is vital to ensuring sustainable economic development and maintaining a stable price level. NBP implements this task by conducting research and analyses of the stability of the financial system, by cooperating with other state bodies within the Financial Stability Committee, and also by participating in the creation of domestic and European financial regulations. The functioning of the financial system in Poland was stable, including in particular the banking sector. The analyses conducted by NBP showed that the resilience of the banking system to shocks remained high, which was supported by the further growth in banks' own funds and an improvement in their capital adequacy and liquidity ratios.

Recognizing the threats connected with the rapid development of the virtual currency market, NBP began analysing the possible negative consequences of the further development of these instruments. A working group was created in which representatives of Narodowy Bank Polski and the Polish Financial Supervision Authority (KNF) participated. After analysing the measure of institutions responsible for monitoring systemic risk and the protection of financial stability, NBP and KNF prepared a joint communique warning of the risk related to investing in so-called crypto-currencies. In addition, within the framework of the information campaign conducted by both institutions, a website was launched containing information material on virtual currencies.

It should be stressed that the past year was another good period for the Polish economy, which was characterised by stable growth. The monetary policy conducted by NBP supported the maintenance of sustainable economic growth while maintaining the stability of the financial system. Let me assure you that the central bank under my leadership will continue to take all the necessary measures that will lead to the effective fulfilment of its constitutional and statutory duties.

Min Glass.

#### **MONETARY POLICY COUNCIL**

#### Chairman

Adam Glapiński

#### **Membres:**

Grażyna Ancyparowicz
Eugeniusz Gatnar
Łukasz Hardt
Jerzy Kropiwnicki
Eryk Łon
Jerzy Osiatyński
Rafał Sura
Kamil Zubelewicz
Jerzy Żyżyński

#### **NBP MANAGEMENT BOARD**

#### **Chairman, President of NBP:**

Adam Glapiński

#### **First Deputy President of NBP**

Piotr Wiesiołek

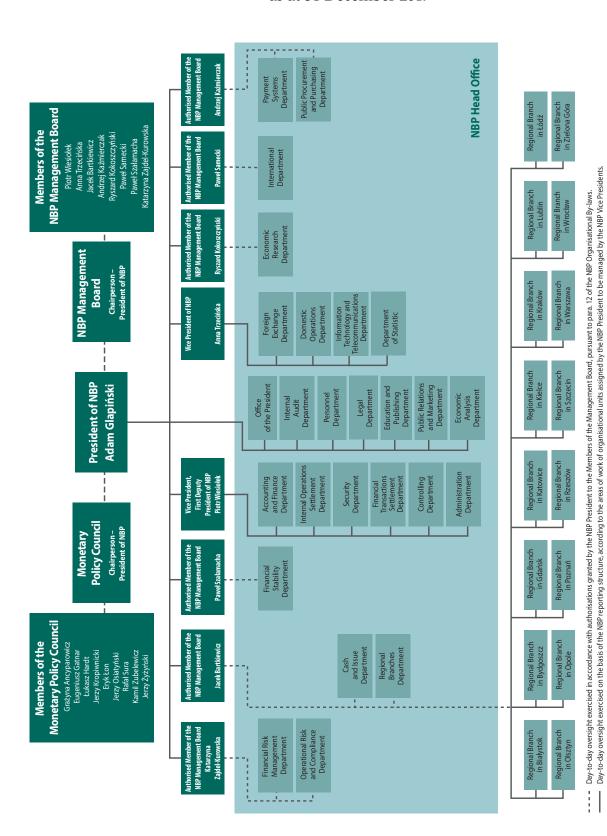
#### **Deputy President of NBP**

Anna Trzecińska

#### **Members:**

Jacek Bartkiewicz Andrzej Kaźmierczak Ryszard Kokoszczyński Paweł Samecki Paweł Szałamacha Katarzyna Zajdel-Kurowska

### Organisation chart of Narodowy Bank Polski as at 31 December 2017



## Summary



### Summary

- Pursuant to Article 227(1) of the Constitution of the Republic of Poland, "The central bank of the State shall be Narodowy Bank Polski. It shall have the exclusive right to issue money as well as to formulate and implement monetary policy. Narodowy Bank Polski shall be responsible for the value of Polish currency". The basic responsibilities of NBP are stipulated in the Act on Narodowy Bank Polski and in the Banking Act, as well as in the Treaty on the Functioning of the European Union and in the Statute of the European System of Central Banks and of the European Central Bank. In 2017, NBP conducted its activities pursuant to the *Monetary Policy Guidelines for 2017* and *Narodowy Bank Polski Plan of Activity for 2017–2019*.
- This *Report* describes the performance of the statutory responsibilities of NBP in 2017 with regard to the following areas: monetary policy, pursuit of financial system stability, issue of currency, foreign exchange reserves management, foreign exchange activities, the payment system, services to the State Treasury, analysis and research, statistics, education and information and international co-operation. The *Report* also presents the Bank's legislative activity and its internal development as well as the financial statements of NBP as at 31 December 2017, together with the opinion of an independent certified auditor on financial statements of NBP.
- According to the Constitution of the Republic of Poland and the Act on Narodowy Bank Polski, the governing bodies of NBP comprise: the President of Narodowy Bank Polski, the Monetary Policy Council and the Management Board of Narodowy Bank Polski. In 2017, the NBP organisational structure comprised the Head Office and 16 organisational units.
- In 2017 monetary policy was conducted in accordance with the Monetary Policy Guidelines for 2017. As in previous years, the main aim of monetary policy was to maintain price stability, while at the same time supporting sustainable economic growth and the stability of the financial system. In the conduct of monetary policy, NBP continued to apply the strategy of direct inflation targeting. Since 2004, the medium-term permanent inflation target has been set at the level of 2.5% with a symmetrical tolerance band for deviations of ± 1 percentage point. In 2017 the economic situation in Poland was favourable and economic growth accelerated (real GDP grew by 4.6% compared to 3.0% in 2016). The main driver of growth was consumer demand, supported by the steady rise in employment and a pick-up in wage growth, as well as the disbursement of social benefits. At the same time, there was a recovery in investment. GDP growth was also supported by the relatively high growth in economic activity in the external environment of the Polish economy, mainly in the euro area, which is Poland's main trading partner. As a result, the foreign trade balance remained in surplus and the current account balance was positive. At the same time - despite the economic recovery - lending grew at a slower pace than nominal GDP. In these conditions, consumer price growth accelerated in 2017, reaching 2.0% (compared to -0.6% in 2016). Thereby, CPI inflation approached NBP's inflation target, after several years of staying below it. This was mainly attributable to faster growth in food and energy prices. At the same time, core inflation remained weak, due to the limited internal demand pressure – despite the growth, low inflation abroad, and the appreciation of the zloty. Despite a fall in

unemployment and the acceleration in wage growth, the labour market did not create excessive inflationary pressure in 2017. Inflation forecasts suggested that price growth in the coming years would remain close to NBP's inflation target. In view of the above conditions, the Monetary Policy Council kept the NBP interest rates unchanged in 2017, including the reference rate at 1.5%. When making decisions on the level of interest rates, the Council took into account that inflation, both current and projected for the following years, was close to NBP's target. At the same time, the stabilisation of the interest rates was conducive to maintaining sustainable economic growth, including a recovery in investment and the stability of the financial system.

- In pursuing its monetary policy in 2017, Narodowy Bank Polski employed the range of instruments adopted by the Council in the Monetary Policy Guidelines for 2017. The most important instrument for the implementation of monetary policy in 2017 was the NBP reference rate. By determining the yields on open market operations, this rate influenced the interest on short-term money market instruments. In 2017, the operational target of monetary policy was to keep the POLONIA rate, which determines the weighted average interest rate on unsecured overnight deposits, running close to the NBP reference rate. In 2017 the average absolute deviation of the index from the NBP reference rate was 12 bps. In 2017, open market operations were the main instrument that NBP carried out to achieve the operational target of monetary policy. By using these, the central bank strove to ensure optimal liquidity conditions in the banking sector from the point of view of the operational target. NBP carried out main open market operations on a regular basis, once a week, in the form of the issuance of NBP bills with a 7-day maturity (by using the main open market operations, the central bank absorbed most of the funds in the banking sector in excess of the level of required reserve requirement). In turn, fine-tuning operations served the ad hoc balancing of liquidity conditions in the banking sector. At the same time, the stabilisation of short-term market interest rates was supported by the reserve requirement system, under which the entities were obliged to keep funds accumulated at the central bank during the reserve maintenance period at an average level at least equal to the required reserve level. At the same time, the obligation to maintain the required reserve limited the volume of NBP open market operations aimed at absorbing the excess liquidity. In 2017, banks also had the possibility to replenish their liquidity shortages as well as deposit surpluses of funds at the central bank, making use of the standing (lending and deposit) facilities. Alongside the reserve requirement system, these instruments played a complementary role in relation to open market operations in the pursuit of the operational target of monetary policy. Yields on deposits and loans (the NBP deposit rate and the Lombard rate) determined the range of fluctuations of the interest rate on unsecured overnight deposits placed in the interbank market.
- The level of short-term liquidity in the banking sector, measured as average annualised balance of operations carried out by NBP (the total of money market bills issued by NBP and standing facilities) in 2017 amounted to PLN 73,632 million. Compared to the average level in 2016, there was an increase in liquidity by PLN 426 million. In 2017, the average issue of NBP bills was PLN 72,786 million. Of this amount, PLN 71,090 million were bills sold under main open market operations, while fine-tuning operations accounted for PLN 1,696 million. The average level of standing facilities amounted to PLN 846 million. The increase in liquidity in 2017 was mainly due to the purchase of foreign currency by NBP being higher than the sale of foreign currency. On the other hand, the increase in the level of currency in circulation was the main source of downward pressure on the level of liquidity.

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- Pursuant to Article 3(2)(6) of the Act on Narodowy Bank Polski, the responsibilities of NBP shall include "establishing the necessary conditions for the development of the banking system". The Polish central bank performs this responsibility on an ongoing basis by acting to ensure stable conditions for the functioning of banks and the whole financial system and also to maintain a low level of inflation. In 2017, NBP continued to undertake activities aimed at the development of the payment system and safeguarding its smooth functioning. Moreover, the Bank participated in the development of legal provisions concerning the banking sector, conducted research on the national financial system and cooperated with the Polish Bank Association.
- The activities for the stability of the financial system in 2017 primarily consisted of research and analysis used to identify systemic risk and assess the stability and direction of the development of the domestic financial system. NBP also prepared proposals of measures aimed at mitigating systemic risk. The results of the research were published, among others, in: *Financial Stability Reports* (in June and December), a publication entitled *Financial System in Poland 2016*, and the report entitled *Senior loan officer opinion survey on bank lending practices and credit conditions*. NBP's role in the work of the Financial Stability Committee (FSC) on macroprudential supervision consisted in organising the work of the FSC and ensuring analytical and research services. In 2017, Narodowy Bank Polski participated in the work of the Financial Stability Committee on crisis management, cooperating with institutions that form the financial safety net, i.e. the Ministry of Finance, the Polish Financial Supervision Authority (KNF), and the Bank Guarantee Fund.
- 9 The main goal of currency issue by NBP was to ensure the safety and smoothness of cash transactions. The value of currency in circulation (including bank vault cash) increased by 5.9%, amounting to PLN 198,715.9 million as at the end of December 2017. In 2017, NBP issued collector items: 6.2 thousand pieces of gold coins and 356 thousand pieces of silver coins as well as 55 thousand pieces of collector notes. In 2017, NBP put into circulation a banknote of the face value of 500 zł. In addition, NBP continued to implement measures aimed at streamlining cash transactions in Poland.
- 10 In the management of foreign exchange reserves, NBP sought to ensure the safety and necessary liquidity of the invested funds. At the same time, while observing these criteria, it also undertook measures aimed at raising the yield on reserves. In 2017, the income on investment activity related to the management of foreign exchange reserves, excluding realised and unrealised exchange rate differences, amounted to PLN 2.4 billion.
- 11 The foreign exchange activity of NBP involved maintaining a register of bureaux de change, issuing decisions on foreign exchange matters, and carrying out statutory inspections. In 2017, a total of 1,671 inspections relating to foreign exchange matters were carried out and 29 decisions on foreign exchange matters were issued. As at 31 December 2017, the number of bureaux de change operating in Poland was 4,951.
- 12 The activities of Narodowy Bank Polski with respect to the payment system consisted mainly in the operation of the payment systems and the performance of interbank settlements, the organisation of monetary settlements, and the oversight of payment systems and the post-trade infrastructure of the financial market. In 2017, NBP

completed adaptation of the TARGET2-NBP system to cooperate with the TARGET2-Securities platform. Moreover, NBP began assigning numbers to payment service providers other than banks, conducted oversight of payment schemes and published *Narodowy Bank Polski Payment System Oversight Policy*.

- 13 The provision of bank services to the State Budget by NBP contributed to ensuring the safety and smoothness of settlements of the public finance sector. In 2017, the Polish Social Insurance Institution joined the group of entities using the B2B interface. In 2017, NBP operated 14,144 accounts for 3,017 clients. NBP organised Treasury bond and bill sales, swap and redemption auctions and cooperated with the Ministry of Finance under the framework of the Public Debt Management Committee.
- 14 The most important economic research activities conducted by NBP in 2017 concerning macroeconomic stability focused on monetary policy, price-setting processes, prices and inflation, the fiscal situation, the global economy, and the real sector of the economy. In 2017, macroeconomic forecasting tools were enhanced and forecasting models were developed. Five international scientific conferences and 27 open scientific seminars were organised. In 2017, 18 academic papers by NBP staff were published in journals of the so-called Philadelphia list.<sup>1</sup>
- 15 In 2017, NBP performed statistical tasks consisting in the collection of data to be reported, above all, from financial sector entities, and to a lesser degree from non-financial entities. NBP also carried out work on data processing methodology, its harmonisation with the changing international standards, and improvement of IT methods of gathering and presenting data. In 2017, NBP completed the development of the new monetary statistics reporting system (MONREP), introduced modifications to the reporting information system for the needs of macroprudential statistics, resulting from amendments to the European regulations. NBP also started collecting data on statistics on holdings of securities from new entities, and launched a new service entitled Statistical HUB.
- 16 As part of education and information activities carried out in 2017, NBP supported the implementation of 139 education projects addressed to a wide audience. The following information campaigns were implemented: *Safe Money, Don't let yourself be cheated*, and *Check before you sign* as well as and information campaign concerning so-called cryptocurrencies organised jointly with the KNF. In 2017, NBP's information activity on the internet was expanded. The Sławomir S. Skrzypek NBP Money Centre was visited by over 58,000 people.
- 17 In 2017, NBP participated in the activities of the Committee of the Council of Ministers and the Committee on European Affairs and other inter-departmental bodies, and also cooperated with government bodies, issuing opinions on bills relating to economic policy and the banking system. As part of cooperation with the European Central Bank (ECB), NBP issued opinions on drafts of the ECB's opinions on draft acts of the EU and of the EU member states, concerning acts related to financial supervision, financial stability, bank loans, and a reduction of cash payments.

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<sup>&</sup>lt;sup>1</sup> Philadelphia list (ISI Master Journal List) – a list of academic journals created and updated by the Institute for Scientific Information. The list includes titles of journals evaluated and included in ISI databases.

- 18 In 2017, NBP representatives participated in the activities of the following EU bodies: the ECB General Council, the ESRB General Board, the ESCB and the ESRB committees and working groups, the ECOFIN Council (at informal meetings), the committees and working groups of the Council of the European Union and the European Commission. NBP focused mainly on the activities of the European institutions responsible for monitoring of systemic risk and protection of financial stability in the EU, and on issues related to risk mitigation in the EU banking sector, including amending corresponding EU legal acts. Moreover, in 2017, NBP cooperated with international economic and financial institutions, in particular the World Bank, the International Monetary Fund (IMF), the European Bank for Reconstruction and Development (EBRD), the Bank for International Settlements (BIS), the Asian Infrastructure Investment Bank, and the Organisation for Economic Co-operation and Development (OECD). On joint request of the Minister of Economic Development and Finance and the President of NBP, Poland's access to the IMF Flexible Credit Line was terminated in 2017. NBP won the competition, jointly with the central banks of Germany and Lithuania, for the implementation of the project financed by the European Commission for the National Bank of the Republic of Belarus.
- 19 In 2017, the average employment level at NBP was 15 full-time posts lower than in 2016, and amounted to 3,281 full-time posts. The reduction in headcount was a result of the centralisation of cash transaction services to account holders and the concentration of banknote counting and sorting.
- 20 Pursuant to Article 69(1) of the Act on Narodowy Bank Polski, the *Financial Statements* of Narodowy Bank Polski as at 31 December 2017 were reviewed by a certified auditor appointed by the Monetary Policy Council. The *Financial Statements of Narodowy Bank* Polski as at 31 December 2017 and the Auditor's report on the financial statements as at 31 December 2017 constitute Appendix 8.
- 21 The financial result of NBP as at the end of 2017 was negative and amounted to PLN -2.5 billion. As in previous years, the following factors had a significant impact on the result: the positive result on the management of foreign exchange reserves, the costs of the monetary policy conducted by NBP, and operating expenses and depreciation. However, the main cause of the loss in 2017 was unrealised foreign exchange losses in the amount of PLN 13.1 billion, due to the appreciation of the zloty against foreign currencies. In order to cover these costs, NBP used the entire provision against the foreign exchange risk of the zloty in the amount of PLN 10.8 billion.

## **Governing bodies of NBP**



### Governing bodies of NBP

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

#### 1.1 President of Narodowy Bank Polski

In 2017, as part of his responsibilities, the President of Narodowy Bank Polski chaired the meetings of the Monetary Policy Council and the NBP Management Board as well as the Financial Stability Committee in its macroprudential capacity. Additionally, while representing Narodowy Bank Polski and the Republic of Poland, the President of NBP attended (or was represented in) the following meetings of international banking and financial institutions:

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

In 2017, the President of NBP issued 36 ordinances concerning, in particular, the issue of banknotes and coins, the numbering of banks and bank accounts, interbank clearings and settlements, as well as 9 announcements including, in particular, uniform texts of legal acts issued by the governing bodies of NBP, the list of convertible currencies, the balance sheet and the profit and loss account of Narodowy Bank Polski for 2016.

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

#### 1.2 Monetary Policy Council

In 2017, the Monetary Policy Council acted in accordance with the *Monetary Policy Guidelines* for 2017. In 2017, the MPC held 22 meetings (including 11 decision-making meetings) and adopted 9 resolutions (8 normative resolutions and 1 non-normative resolution). MPC resolutions were published in Monitor Polski (Official Gazette) and Dziennik Urzędowy (Official Journal of Narodowy Bank Polski).

In 2017, the Monetary Policy Council did not adopt any resolutions on the reference rate, the interest rate on refinancing loans, the interest rate on term deposits or the rediscount rate on the bills of exchange at Narodowy Bank Polski (Table 1.1).

Table 1.1 NBP interest rates at the end of 2017

Interest rate	in %
Reference rate	1.50
Lombard rate	2.50
Deposit rate	0.50
Rediscount rate	1.75

Source: NBP data.

Table 1.2 Required reserve rates and the remuneration on the required reserve balances

	in %	Applicable from
The required reserve rates on funds in Polish zloty and funds in foreign currency accumulated in bank accounts and on funds received in respect of the issue of securities	3.50	31 December 2010
The required reserve ratio on funds received from repo and sell-buy- -back transactions, as well as funds received for the duration of at least 2 years	0.00	1 March 2018
The remuneration on the required reserve balances held on current accounts or reserve requirement accounts by banks, credit unions and the National Association of Credit Unions	0.50	1 January 2018

Source: NBP data.

In 2017, the MPC adopted 2 resolutions amending the resolution on the required reserve rates for banks, credit unions and the National Association of Credit Unions<sup>1</sup> (Table 1.2).

Other resolutions adopted by the MPC in 2017 concerned:

- approval of the Report on Monetary Policy Implementation in 2016,
- evaluation of the activities of NBP Management Board regarding the implementation of the monetary policy guidelines for 2016,
- approval of the Annual Financial Statements of Narodowy Bank Polski as at 31 December 2016,
- approval of the Report on the Operations of Narodowy Bank Polski 2016,
- setting of the monetary policy guidelines for 2018,
- approval of the Financial Plan of Narodowy Bank Polski for 2018,
- choice of a certified auditor for the review of the financial statements of Narodowy Bank Polski for the financial years 2017 and 2018.

As part of its responsibilities under Article 23 of the Act on Narodowy Bank Polski, the MPC adopted the following documents:

- Balance of Payments of the Republic of Poland for 2016 Q3 and Q4 and for 2017 Q1 and Q2,
- International Investment Position of Poland in 2016,

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<sup>&</sup>lt;sup>1</sup> Resolution No. 6/2017 of the Monetary Policy Council of 08 November 2017 amending the resolution on the required reserve rates for banks, cooperative savings and credit unions and the National Association of Cooperative Savings and Credit Unions; resolution No. 7/2017 of the Monetary Policy Council of 5 December 2017 amending the resolution on the required reserve rates for banks, cooperative savings and credit unions as well as the National Association of Cooperative Savings and Credit Unions.

- Forecast of the Balance of Payments of the Republic of Poland in 2018,
- Opinion on the 2018 Draft Budget Act.

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

In 2017, the members of the MPC participated in:

- a meeting with the representatives of the Polish Financial Supervision Authority to discuss the *Report on the condition of Polish banks in 2016*,
- meetings with missions of the International Monetary Fund and OECD visiting Poland,
- meetings with market analysts,
- an international conference organised by NBP, entitled The Evolving Role of Central Europe in the European Economy. 7th Annual NBP Conference on the Future of the European Economy (CoFEE),
- conferences and seminars organised by NBP, international institutions and central banks.

#### 1.3 Management Board of Narodowy Bank Polski

Pursuant to the Act on Narodowy Bank Polski, the activity of NBP is directed by its Management Board. The Management Board adopts resolutions on matters which are not the exclusive competence of other bodies of NBP and implements the MPC-adopted resolutions. In 2017, the NBP Management Board performed its basic responsibilities in accordance with the *Monetary Policy Guidelines for 2017, Narodowy Bank Polski Plan of Activity for 2017–2019* and the *Financial Plan of Narodowy Bank Polski for 2017.* 

Moreover, the NBP Management Board examined draft resolutions and materials to be discussed at the MPC meetings, concerning in particular:

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

Moreover, the NBP Management Board discussed topics concerning: the issue of currency, the management of official reserves, the functioning of the Polish payment system – including the functioning and development of the market of the so-called crypto-currencies – and NBP's research and analytical activity.

In 2017, the NBP Management Board held 50 meetings. It adopted 93 resolutions (including: 57 normative and 36 non-normative resolutions) and 196 management resolutions.<sup>2</sup>

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

- the rules of refinancing banks with a lombard credit or an intraday credit,
- the issue of NBP bills,
- the procedure and detailed rules for calculating and maintaining the required reserves,
- the rules of maintenance by NBP of deposit accounts and sub-accounts for Treasury bills and NBP bills in the SKARBNET4 system and of conducting transactions in securities in this system,
- the terms and conditions for opening and maintaining accounts for banks by Narodowy Bank Polski,
- the rules of maintenance by Narodowy Bank Polski of bank accounts and the provision of e-banking services as well as model bank account agreements,
- the execution by Narodowy Bank Polski of foreign currency and domestic currency payment orders and cheque operations in cross-border and domestic transactions as well as purchases and sales of foreign currencies,
- the terms and conditions of sale by Narodowy Bank Polski of coins, banknotes and numismatic items for collection and other purposes,
- the issue policy for general circulation coins and banknotes,
- the method of calculating and announcing current exchange rates of foreign currencies against the Polish zloty.
- the management of official reserves,
- bank fees and commissions charged by NBP,
- the procedure and detailed rules for banks submitting to Narodowy Bank Polski the data necessary for determining the monetary policy and for the periodic assessments of the monetary situation of the state as well as the assessment of the financial situation of banks and the risks for the banking sector,
- the organizational rules of NBP,
- the rules of the NBP Management Board.

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

- the adoption by NBP of the role of organizer of the POLONIA reference rate fixing,
- supporting the initiative of preparing and implementing the FX Global Code by the Bank for International Settlements (BIS) and the European Central Bank,
- the signing by Narodowy Bank Polski and the Polish Bank Association of agreements concerning the exchange of information about attempts and mechanisms of perpetrating crimes in financial markets and the sharing of data about events ensuing from the operational risk borne by banks,
- the amendment of *The Policy for the Performance of Systemic Oversight of the Payment System by Narodowy Bank Polski*,
- the continued participation of NBP in the IMF's New Arrangements to Borrow,
- activities ensuing from NBP's participation in the implementation of a twinning project for the National Bank of Belarus.

<sup>&</sup>lt;sup>2</sup> In accordance with Article 53 and 54 of the Act on Narodowy Bank Polski, resolutions of the Management Board of Narodowy Bank Polski constituting normative acts are published in Monitor Polski or in the Official Journal of Narodowy Bank Polski.

#### 1.4 Narodowy Bank Polski Plan of Activity

In 2017, the *Narodowy Bank Polski Plan of Activity for 2017–2019*, adopted by the NBP Management Board on 27 October 2016, was implemented. The *Plan* sets out NBP's goals for the forthcoming years and tasks aimed at their implementation.

In accordance with the rules for planning activity at NBP, the NBP Management Board adopted the *Narodowy Bank Polski Plan of Activity for 2018–2020*, effective as of 1 January 2018.

## **Monetary policy**



### Monetary policy<sup>1</sup>

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

The Report on monetary policy in 2017 is accompanied by appendices presenting the development of important macroeconomic variables, as well as by Minutes of the Monetary Policy Council decision-making meetings<sup>2</sup> and Voting records of the Monetary Policy Council members on motions and resolutions in the year the Report encompasses.

An ex-post assessment of the conduct of monetary policy should take into account, above all, that the decisions of monetary authorities affect the economy with considerable lags and that they are taken under uncertainty about future macroeconomic developments. Moreover, the economy is subject to macroeconomic shocks, which, while remaining outside the control of the domestic monetary policy, may to a large extent affect economic conditions and domestic inflation developments in the short and sometimes in the medium term.

#### 2.1 Monetary policy strategy in 2017

In 2017, the Monetary Policy Council conducted monetary policy in line with the *Monetary Policy Guidelines for 2017*, adopted in September 2016. As in previous years, the primary objective of monetary policy was to maintain price stability, while supporting sustainable economic growth and financial system stability. This way, the Council pursued the basic objectives of Narodowy Bank Polski set out in the Constitution of the Republic of Poland and in the Act on Narodowy Bank Polski of 29 August 1997 (Official Journal 2017, item 1373). According to Article 227 Section 1 of the Constitution of the Republic of Poland "Narodowy Bank Polski shall be responsible for the value of Polish currency". The Act on Narodowy Bank Polski of 29 August 1997 states in Article 3 Section 1 that "the basic objective of the activity of NBP shall be to maintain price stability, while supporting the economic policy of the Government, insofar as this does not constrain the pursuit of the basic objective of NBP".

NBP pursues the price stability objective within the inflation targeting framework. As part of this strategy, since 2004 the monetary policy objective has been to keep inflation at 2.5%,

<sup>&</sup>lt;sup>1</sup> The Chapter *Monetary policy* presents the *Report on Monetary Policy Implementation for 2017* adopted by the Monetary Policy Council at its meeting on 15 May 2018. The responsibilities in this field are exercised in pursuance with Article 3 (2)(5), Article 12, Article 16, Article 17 (3)(1) and (4)(2), Article 23–24 and the provisions of Chapter 6 of the Act on NBP.

<sup>&</sup>lt;sup>2</sup> The Appendix *Minutes of the Monetary Policy Council decision-making meetings* has not been attached to the *Report* due to its length. It is available in the source document and at the NBP website.

with the symmetric band for deviations of ±1 percentage point, in the medium-term. The medium-term orientation of the target means that due to considerable changes in commodity prices or other macroeconomic and financial shocks, inflation may temporarily deviate from the target and even run outside the band for deviations. The monetary policy response to a shock depends on its cause, nature and the assessment of persistence of its consequences, including its impact on price developments and inflation expectations.

Stabilising inflation at a low level is a very important, yet insufficient, condition to keep the economy in equilibrium. Hence, the Council conducts monetary policy in a way that supports the stability of the financial system and mitigates the risk of imbalances building up in the economy. Therefore, in its decisions, the Council takes into account the prices of assets and growth in lending. Yet, the Council believes that, given free movement of capital and highly integrated financial markets, macroprudential policy should support monetary policy in containing macroeconomic imbalances. Given its ability to selectively influence credit aggregates, macroprudential policy can stabilise lending growth with a relatively low cost for economic growth compared to monetary policy.

The Council implements inflation targeting under a floating exchange rate regime. The floating exchange rate regime does not rule out interventions in the foreign exchange market whenever it is necessary to ensure the country's macroeconomic and financial stability.

#### 2.2 Monetary policy and macroeconomic developments in 2017

In 2017, economic conditions in Poland were favourable and GDP growth picked up. Real GDP increased by 4.6% compared with 3.0% in 2016. The major factor behind GDP growth was consumer demand, supported by rising employment, acceleration in wage growth and disbursement of benefits. In addition, investment activity rebounded. GDP growth was also supported by relatively strong economic conditions abroad, most notably in the euro area, Poland's main trading partner. In consequence, the external trade balance remained in surplus and the current account balance was positive. In spite of economic recovery in Poland, lending was growing at a slower pace than the nominal GDP.

Consumer price growth accelerated in 2017, reaching 2.0% (against -0.6% in 2016). Thereby, CPI inflation approached the NBP's inflation target, following several years of staying below it. This was attributable mainly to faster growth in food and energy prices, with core inflation remaining weak. Low core inflation in Poland resulted from still limited, in spite of a rise, domestic demand pressure, as well as low inflation abroad and the appreciation of the zloty. Despite a fall in unemployment and the acceleration in wage growth, the labour market did not create excessive inflationary pressure in 2017. Inflation forecasts in 2017 were suggesting that price growth in the coming years would remain close to the NBP's inflation target.

Taking into account the above conditions, the Council kept the NBP policy interest rates unchanged in 2017, including the reference rate at 1.5%. When making decisions on the level of interest rates, the Council took into account that inflation, both current and projected for the following years, was close to the NBP's target. Moreover, the stabilisation of the interest rates was conducive to maintaining balanced growth, including a recovery in investment and the stability of the financial system.

Monetary policy decision-making environment over the course of 2017 is presented in a greater detail below.

In the first half of 2017, global economic growth remained moderate, with strengthening signs of recovery in 2017 Q2, most notably in trade and industry, supporting GDP growth in the euro area. Favourable economic conditions continued also in the United States, fostered by further improvement in labour market conditions and a recovery in investment activity. Despite ongoing concerns about imbalances building up in China, GDP growth in this country remained relatively stable.

Following a sharp rise in December 2016, oil and other commodity prices were relatively stable in the first six months of 2017. In effect, global inflation, having increased in early 2017, was moderate in the remaining of the first half of the year. In the euro area and most Central and Eastern European economies, inflation was below their respective inflation targets. The core inflation rates in these economies picked up somewhat, yet were still lower than their long-term averages. In the United States, both headline and core inflation remained higher than in the euro area.

Against this background, the European Central Bank (ECB) was keeping the interest rates close to zero, including the deposit rate below zero, and maintained asset purchases, albeit on a smaller scale than in the previous year. At the same time, the Federal Reserve (Fed) raised the interest rates twice (in March and June), yet continued to reinvest debt securities purchased during quantitative easing.

Strengthening signs of global economic recovery, along with still expansionary monetary policy of the major central banks, supported improving global market sentiment. Global stock exchange indices rose, reaching all-time highs in some economies, most notably the United States. The improvement in the global market sentiment resulted also in a decline in the government bond yields of the emerging market economies and an appreciation of their currencies, including the zloty.

In Poland, following a temporary slowdown in 2016, economic growth rebounded in the first half of 2017. It was still driven primarily by increasing consumer demand, supported by rising employment and wages, very strong consumer sentiment and disbursement of benefits. At the same time, investment growth turned positive in 2017 Q1, yet was still weak and concentrated in the public sector, with a fall in corporate investment deepening further in the first half of the year. At the same time, improving global economic conditions translated into further growth in Polish exports, thus were supportive of growth in Poland in the first six months of 2017.

Improvement in economic conditions in Poland was accompanied by a further recovery in the labour market. Following a setback in the second half of 2016, employment growth re-accelerated, causing unemployment to decline further. In effect, nominal wage growth was higher than in previous years. Also unit labour costs rose slightly faster, yet still at a moderate pace.

Price growth in Poland, like in many other countries, increased at the turn of the year, as global commodity prices were remaining higher than a year before. Following that, however, price growth in Poland stabilised at a moderate level. In addition, with demand pressure still

weak in spite of the recovery, moderate price growth abroad and stronger zloty, core inflation remained low.

Available forecasts were indicating that economic recovery in Poland would continue into the following quarters, supported by a rebound in investment and an ongoing rise in consumer demand. These forecasts were also pointing to moderate price growth going forward.

Given this background, the Council judged that the NBP interest rates should remain unchanged. The Council assessed that despite the increase in price growth, the risk of inflation running persistently above the target in the medium term was limited, and no imbalances were building up in the economy. Moreover, keeping the interest rates unchanged supported the expected recovery in investment.

In the second half of 2017, global recovery was gathering strength. In the euro area, economic growth accelerated again, yet available forecasts pointed to slower GDP growth in the following quarters. Also in the United States, economic conditions remained favourable. In China, in turn, GDP growth weakened, albeit less than expected.

Improving global economic conditions were translating into higher demand for oil. At the same time, supply of this commodity remained limited due to an earlier agreement between the Organization of Petroleum Exporting Countries (OPEC) and some other exporters. All these factors led to a rise in oil prices in the second half of 2017. There was also an increase in prices of other energy commodities, i.e. gas and coal, yet global agricultural commodity prices declined. As a result, global inflation remained moderate, in many countries additionally contained by low core inflation. In the euro area, inflation remained below the ECB's definition of price stability, while in the United States it was close to the Fed's inflation goal.

Under these conditions, the ECB, like in the first half of 2017, was keeping its interest rates close to zero, including the deposit rate below zero. In addition, the ECB extended its asset purchase programme until at least September 2018 and announced a reduction in the monthly amount of asset purchases by half starting from January 2018. The Fed embarked on winding down its balance sheet in October 2017 and raised its interest rates once again in December 2017. However, global financial market sentiment remained strong. Global stock prices rose and capital inflows to emerging markets, even if weaker than in previous quarters, continued. In effect, emerging market currencies appreciated, and emerging market government bond yields declined. This concerned also the zloty and Polish government bond yields.

In Poland, favourable economic conditions continued into the second half of 2017. GDP growth accelerated markedly. Rising consumer demand remained a key growth driver, supported by increasing employment, acceleration in wage growth, as well as still very strong consumer confidence and disbursement of benefits. At the same time, growth in investment was higher than in the first half of the year, yet was still focused mainly on the public sector. Economic activity was also supported by a considerable export growth, which, however, decelerated slightly towards the end of the year.

Improving economic conditions were translating into a higher demand for labour. In the second half of the year, employment was still on a rise, which was reflected in a further decline in unemployment. Under these conditions, nominal wage growth accelerated, yet with increasing labour productivity, unit labour cost growth remained moderate.

In the second half of 2017, consumer price growth in Poland was still moderate. This resulted from limited, despite a gradual increase, domestic demand pressure. In addition, import price growth stayed low due to moderate inflation abroad and the stronger exchange rate of the zloty. In consequence, core inflation remained low. However, food price growth accelerated on the back of limited domestic supply of some agricultural products. Along with steeper growth in energy prices stemming from a rise in global commodity prices, this was supporting price growth in Poland for the most of the second half of the year.

Macroeconomic projections from the last six months of 2017 did not indicate a risk of an excessive acceleration in economic growth, especially given the expectations that the impact of child benefits on consumption growth would dissipate and activity growth abroad would slow down. Furthermore, in line with the projections, inflation in Poland was to remain close to the NBP target in the coming years.

Against this background, the Council kept the interest rates unchanged in the second half of 2017. The Council assessed that in light of available information, inflation would run close to the NBP target over the projection horizon. In addition, the stabilisation of the interest rates was conducive to maintaining balanced economic growth, including investment recovery.

Like in the previous years, in 2017 communication with the public played an important role in the conduct of monetary policy. Thus, the Council informed about its decisions and provided an assessment of economic developments behind them. The key communication instruments used in 2017 included the cyclical publications: *Information from the meeting of the Monetary Policy Council* (with accompanying press conferences held after the Council's meetings), *Minutes of the Monetary Policy Council decision-making meetings*, *3 Inflation Reports*, as well as *Report on monetary policy in 2016* and *Monetary Policy Guidelines for 2018*.

#### 2.3 Monetary policy instruments in 2017

In 2017, NBP employed the range of instruments adopted by the Council in the *Monetary Policy Guidelines for 2017.* 

#### Liquidity of the banking sector in 2017

In 2017, NBP pursued monetary policy amid liquidity surplus prevailing in the banking sector.<sup>4</sup> The level of excess liquidity averaged PLN 73,632 million,<sup>5</sup> thus being PLN 426 million (or 0.6%) higher than in 2016.

<sup>&</sup>lt;sup>3</sup> The *Minutes of the Monetary Policy Council decision-making meetings* contain a more detailed coverage of issues and arguments with an impact on the decisions made by the Council in 2017.

<sup>&</sup>lt;sup>4</sup> The liquidity surplus of the banking sector are the funds held by the banking sector in excess of the required reserve. Liquidity surplus is measured by the combined balance of the NBP open market operations and standing facility operations.

<sup>&</sup>lt;sup>5</sup> During the required reserve maintenance period.

The average level of liquidity surplus stood at PLN 83,377 million in December 2017 and was PLN 6,433 million (or 8.4%) higher than in December 2016.

The key factors affecting the banking sector liquidity were changes in the level of currency in circulation, as well as FX transactions involving purchase of foreign currency from the Ministry of Finance. The change in the first of the abovementioned factors caused banking sector liquidity to decline by PLN 10,234 million. On the other hand, the surplus of foreign currency purchases by NBP in 2017 over their sales led to a rise of PLN 9,578 million in banking sector liquidity.

Banking sector liquidity was additionally boosted by the payment of PLN 8,741 million from NBP profit to the state budget, while the increase in the required reserve ratio triggered the opposite effect – equivalent to, on average, PLN 2,450 million.

#### **NBP** interest rates

In 2017, the instrument of utmost significance for the implementation of monetary policy was the NBP reference rate. By determining the yields on open market operations, this rate influenced the interest on short-term money market instruments, in particular unsecured interbank deposits.

The range of fluctuations of interbank overnight interest rates was determined by the NBP deposit and lombard rates.

#### Open market operations

In 2017, as in the previous year, the operational target of monetary policy was to keep the POLONIA rate running close to the NBP reference rate. This was achieved mainly by open market operations, carried out on the initiative of the central bank. The central bank employed these instruments to manage the liquidity of the banking sector. The implementation of the operational goal of monetary policy was supported by the required reserve system and the standing facilities provided by the central bank.

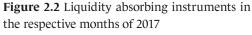
By using the main open market operations, the central bank strived to ensure balanced liquidity conditions in the sector throughout the entire required reserve maintenance period. At the same time, the yields on the individual operations, equal to the NBP reference rate at the date of the operation, had a direct impact on the cost of money determined in the interbank market (including the POLONIA rate).

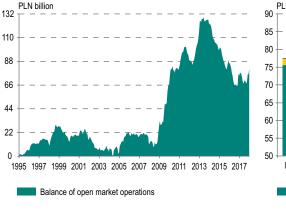
In 2017, the main open market operations were carried out on a regular weekly basis, in the form of issuance of NBP bills with a 7-day maturity. By using the main open market operations, the central bank absorbed most of the surplus liquidity in the banking sector. In 2017, the average volume of the NBP bills categorised as the main open market operations amounted to PLN 71,090 million, i.e. PLN 85 million less than in 2016.

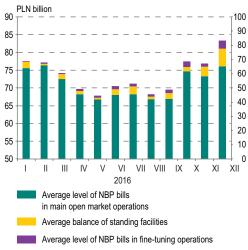
Apart from the main open market operations, in 2017 NBP also conducted fine-tuning open market operations, which played a complementary role in achieving the operational target

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**Figure 2.1** Average monthly balance of open market operations 1995–2017



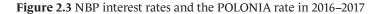


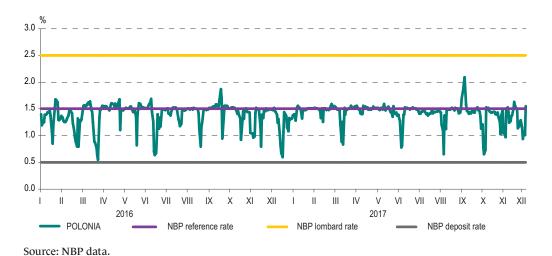


Source: NBP data. Source: NBP data.

of monetary policy. Fine-tuning operations were aimed to enable the banks to balance their liquidity positions throughout the reserve maintenance periods. Yields on these operations were equal to the NBP reference rate, and they affected the price of money in the interbank market in a similar manner to the main operations.

In 2017, NBP carried out 12 fine-tuning operations on the last day of the required reserve maintenance periods. In addition, NBP conducted 8 fine-tuning operations within the required reserve maintenance period. Under this category of operations, the NBP bills were issued with maturities of 1, 2, 3 and 4 days. The average issue of the NBP fine-tuning operations amounted to PLN 1,696 million in 2017 and exceeded the 2016 level by PLN 433 million.





The liquidity management by NBP enabled banks to balance their liquidity positions within the required reserve maintenance period, as reflected in the successful implementation of the monetary policy operational target by the central bank in 2017. The POLONIA rate was running close to the NBP reference rate in 2017, as its average absolute deviation from the NBP reference rate was 12 bps in 2017, compared with 16 bps in 2016.<sup>6</sup>

#### Reserve requirement

The required reserves system supported the implementation of the operational target of monetary policy, thus contributing to the stability of short-term market interest rates. The averaged character of the required reserve system allowed the entities to decide on the amount of funds accumulated at the central bank during the reserve maintenance period, provided that the average holdings at NBP were at least equal to the required reserve level. At the same time, the obligation to maintain the required reserve limited the scale of the NBP open market operations necessary to absorb the excess liquidity prevailing in the banking sector in 2017.

In 2017, the following entities were subject to the reserve requirement: banks, branches of credit institutions, branches of foreign banks operating in Poland, credit unions and the National Credit Union.

In 2017, the basic reserve requirement ratio amounted to 3.5% on all liabilities, except for funds received from the sale of securities in repo and sell-buy-back transactions, on which the reserve requirement ratio stood at 0.0%.

The amount of required reserves as at 31 December 2017 stood at PLN 42,581 million, including the required reserve of commercial and cooperative banks of PLN 42,282 million and the required reserves of credit unions and the National Credit Union of PLN 299 million. This represents an increase in the total required reserves of PLN 2,548 million, i.e. 6.36%, on the level recorded on 31 December 2016. The main factor responsible for the rise in the total amount of the required reserve holdings in 2017 were the increasing deposits of the banking sector, on which the required reserve was calculated.

In all the required reserve maintenance periods in 2017, entities' average holdings at NBP remained above the required level. The surplus ranged from the lowest point (of PLN 101 million) observed in March to a peak (of PLN 254 million) in October. The average funds in excess of the required reserves holdings in 2017 amounted to PLN 183 million and accounted for 0.43% of the average level of the required reserves.

Two instances of commercial banks failing to maintain the required reserve level were recorded in 2017.

The remuneration on reserve balances in 2017 was equivalent to 0.9 of the NBP reference rate. This means that on average it was equal to 1.35% during the year.

<sup>&</sup>lt;sup>6</sup> The quoted index has been computed as the average absolute daily deviation of the POLONIA rate from the NBP reference rate (the average module of the differential) based on a 365-day year.

PI N million 43.0 450 400 42. 42.1 42.0 42.0 350 300 41.5 41.0 237.8 250 224.3 40.7 211.4 199.0 193.5 40.5 200 164.3 162.3 40.0 150 115.3 111.1 100.6 39.5 100 39.0 50 VIII XII Deviations from required reserves (rhs) Reserve requirement (lhs)

Figure 2.4 Changes in required reserves level and deviations from the reserve requirement in 2017

Source: NBP data.

In 2017, the Council decided to introduce two changes in the required reserve system.

Pursuant to the decision of 8 November 2017, starting from the reserve maintenance period beginning on 30 April 2018, the required reserve ratio for banks and the credit union sector in relation to term deposits with a maturity of 2 years or more amounts to 0.0%. The abovementioned decision was motivated mainly by the need to align the treatment of funds received from domestic and foreign entities subject to the required reserve system.

On 5 December 2017, the Council decided to decrease, as of 1 January 2018, the remuneration on the required reserve holdings to 0.5%.

Both changes in the reserve requirement system are designed to help reduce the mismatch between the term structures of assets and liabilities of Polish institutions obliged to maintain the required reserve by supporting long-term savings.

In 2017, the NBP Management Board decided to prolong the exemption, granted to a cooperative bank, from the obligation to maintain the required reserve during the implementation of its rehabilitation programme.

#### Standing facilities

Standing facilities (overnight deposit and lombard credit) acted as an instrument for stabilising the level of liquidity in the banking sector and the scale of the fluctuations of interest rates in the interbank market. These operations were conducted at the initiative

of banks. Banks used them to supplement their liquidity shortages, or to place surplus funds with NBP, in both cases for a term of one day.

The interest rate on lombard credit, setting the maximum price of borrowing money at NBP, determined the upper bound of overnight rate fluctuations in the interbank market. The overnight deposit rate, in turn, provided the floor for these fluctuations.

In 2017, like in previous years, banks used the lombard credit only occasionally. The total drawing on this credit in 2017 (set for the days of using this instrument) was PLN 13 million, compared to PLN 1,350 million in 2016. The average daily drawing on the lombard credit stood at PLN 35 thousand (compared with PLN 3,667 thousand in 2016).

In 2017, banks placed overnight deposits totalling PLN 309 billion at NBP (calculated for the period of their holding), i.e. 8.8% more than the previous year's figure calculated in the same manner (PLN 284 billion). The total amount of overnight deposits fluctuated between PLN 29 million and PLN 10,936 million. In 2017, the average daily overnight deposit amounted to PLN 846 million, as against PLN 772 million in 2016. Banks deposited the highest amounts with NBP on the last days of the required reserve maintenance periods.

#### Foreign exchange swaps

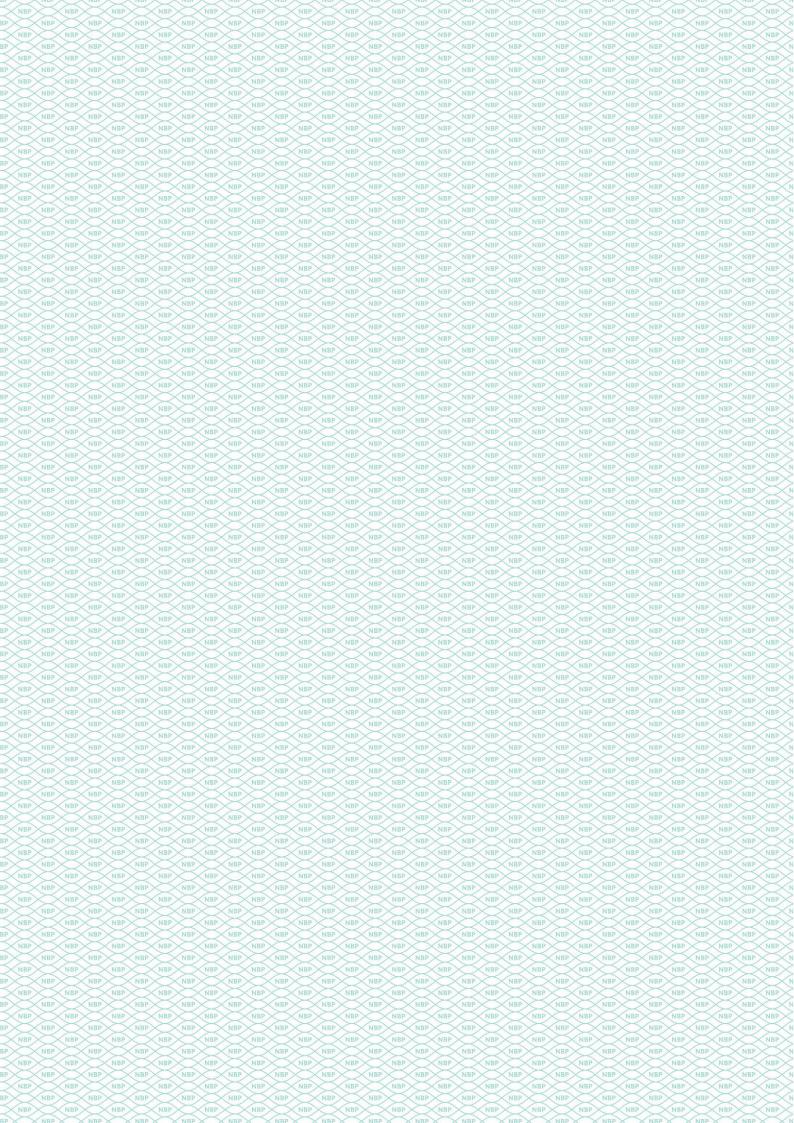
By using a foreign exchange swap, NBP could purchase (or sell) the Polish zloty against foreign currency in the spot market, with a simultaneous sale (repurchase) in a fixed-date forward transaction.

In 2017, the central bank did not conclude any such operations.

#### Foreign exchange interventions

Under the existing monetary policy strategy, NBP may purchase or sell foreign currency in the foreign currency market against the Polish zloty.

In 2017, the central bank did not conclude any such operations.



# Financial system



## Financial system<sup>1</sup>

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

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

#### 3.1 Macroprudential supervision

In 2017, Narodowy Bank Polski provided services relating to the organisation and substance of the Financial Stability Committee as a competent authority for macroprudential supervision (FSC-M). The Committee held 5 meetings in 2017.

As part of FSC-M work in 2017, Narodowy Bank Polski:

- Provided analyses, studies and opinions on the identification and assessment of risk in the financial system and its (domestic and external) economic environment, including regular reports: Financial Stability Report and Macroeconomic Stability of the Polish Economy.
- Participated in the preparation of proposals of action aimed at mitigating systemic risk, and prepared analytical studies that provided the basis for delivering, on a quarterly basis,
   FSC-M recommendations on the level of the countercyclical buffer.<sup>2</sup>
- Communicated the FSC-M's work to the public and supervised entities. To this end, it operated an Internet news service on macroprudential supervision by posting current information on the activity of the FSC-M.

In 2017, an NBP representative chaired the Permanent Working Group established by the Committee to prepare analyses and opinions on systemic risk and threats to financial stability, develop the content-related basis for decisions taken by the FSC-M and present proposals on how to reduce systemic risk (including macroprudential instruments). In addition to regular systemic risk assessments, in 2017 the group discussed the impact of fixed interest rates applied in credit agreements on the stability of the banking sector,

<sup>&</sup>lt;sup>1</sup> Tasks in this area are fulfilled pursuant to Article 3(2) (6) and (6a) of the Act of 29 August 1997 on Narodowy Bank Polski (Journal of Laws 2017, item 1373).

<sup>&</sup>lt;sup>2</sup> Level of the countercyclical capital buffer in Poland – materials available on the NBP website.

the benefits and costs arising from the new MREL,<sup>3</sup> developments in the real estate market and the operation of the covered bonds market in EU Member States.

The Working Group on the Risk of FX Housing Loans, headed by an NBP representative, implemented its mandate in 2017.<sup>4</sup> The Group prepared a *Recommendation on the restructuring* of the FX housing loans portfolio, which was adopted by the Financial Stability Committee on 13 January 2017. Implementing the recommendation will help to introduce regulatory incentives for banks and their clients to restructure FX housing loan portfolios on a voluntary agreement basis.

Also in 2017, the NBP President acting as Chairperson of the FSC-M, submitted to the Sejm (the Polish Parliament) the annual Information on the activities of the Financial Stability Committee in the area of tasks relating to macroprudential supervision in 2016.

#### 3.2 Cooperation with financial safety net institutions

Narodowy Bank Polski participated in FSC work in its crisis management capacity (FSC-C). Two meetings were held in 2017 during which its participants discussed, among others, the issue of developing resolution plans, the situation in the cooperative banking sector and the state of preparations and progress of implementation of bank recovery proceedings.

In 2017, NBP and the Bank Guarantee Fund signed a new *Agreement on the subject matter, modalities and deadlines of the transfer of information between the Bank Guarantee Fund and Narodowy Bank Polski.*<sup>5</sup> The agreement broadened the scope of information and analyses that the two institutions transfer to each other (including information and analyses on BFG's new duties relating to bank resolution).

The cooperation of NBP with financial safety net institutions also included the following:

- membership of an NBP Management Board member delegated by the President of NBP in the Polish Financial Supervision Authority,<sup>6</sup>
- interaction with the Office of the Polish Financial Supervision Authority under the statutory authorisation regarding the rules for submitting information,<sup>7</sup>
- membership of two representatives delegated by the President of NBP in the BFG Council.<sup>8</sup>

MREL stands for the minimum requirement for own funds and eligible liabilities of financial institutions; the requirement was introduced for the resolution authorities to be able to apply the bail-in tool to implement the process of resolution.

<sup>&</sup>lt;sup>4</sup> The Group was appointed under an FSC resolution in 2016 and its mandate expired on 2 June 2017.

<sup>&</sup>lt;sup>5</sup> Pursuant to Article 328 of the Act of 10 June 2016 on the Bank Guarantee Fund, Deposit Guarantee Scheme and Resolution.

<sup>&</sup>lt;sup>6</sup> Pursuant to Article 5(2)(3) of the Act of 21 July 2006 on Financial Market Supervision (Journal of Laws 2016, item 174, as amended).

<sup>&</sup>lt;sup>7</sup> Pursuant to Article 17(2) of the Act of 21 July 2006 on Financial Market Supervision (Journal of Laws 2017, item 196, as amended).

Pursuant to Article 7(4)(2) of the Act of 10 June 2016 on the Bank Guarantee Fund, Deposit Guarantee Scheme and Resolution (Journal of Laws 2017, item 1937).

#### 3.3 Financial system analytical and research activities

Narodowy Bank Polski regularly conducts analysis and research of Poland's financial system, its sectors and linkages with the real economy, and presents its results in, among others, cyclical studies. The scope of analytical and research work was systematically expanded after NBP became engaged in the FSC-M's work, notably in areas related to systemic risk and macroprudential supervision.

The following documents, available on the NBP website, were published in 2017:

- Financial Stability Report. The analysis in this document deals with the financial system and its economic environment in terms of identification of the main risks to Poland's financial stability, paying particular attention to the banking sector. The analyses have shown that Poland's financial system functioned in a stable manner in 2017 and that the intensity of risks to its stability did not change substantially. The situation of the banking sector remained good, which is evidenced by stress tests the majority of banks would be able to absorb the effects of potential shocks, although the capital ratios in the shock scenario would fall substantially. The decrease in banks' profitability observed during the tests may reduce their capacity to increase capital in the future. The steadily decreasing albeit still substantial portfolio of FX loans remained a vulnerability. The main risks to financial stability continued to stem from uncertainty over developments in Poland's economic environment. In its reports, NBP included recommendations for action aimed at improving the resilience of the domestic financial system and mitigating systemic risk.
- Financial System in Poland 2016. The report presents the structure of Poland's financial system as well as an analysis of trends and barriers to the development of financial markets and institutions operating in Poland. The analysis deals with changes in infrastructure and legal regulations related to the financial system as well as initiatives aimed at integrating and enhancing the safety of the financial market in the EU. The assessments of domestic and international financial institutions' indicate that the size and structure of the Polish financial system will enable its further balanced development, supporting stable economic growth.
- Senior loan officer opinion survey on bank lending practices and credit conditions. This study is based on quarterly questionnaire surveys addressed to the chairpersons of the credit committees of commercial banks. It presents changes in the lending policy of banks and in demand for selected loan types as well as the factors influencing these changes.
- Household Wealth and Debt in Poland. Pilot survey report 2016. The analysis in this study
  deals with the financial and asset situation of households in Poland in 2016, with emphasis
  on the structure of their assets and liabilities and risk associated with incurred liabilities.
- The level of the countercyclical capital buffer in Poland. The study, produced quarterly for the FSC-M, includes data on the credit cycle indicator and calibration of the countercyclical capital buffer in Poland.

#### 3.4 International cooperation for financial stability

In 2017, Narodowy Bank Polski participated in the work of European institutions responsible for the monitoring of systemic risk and the protection of financial stability in the EU. The activities mainly involved the performance by the President of NBP of the duties of a member in the General Board of the European Systemic Risk Board (ESRB) and the participation of NBP representatives in the work of ESRB bodies. NBP's involvement in the activities resulted from the fact that developments in Poland's economic environment remained the main risk to financial stability.

In 2017, the ESRB discussed, in particular, the ties between financial institutions and the situation in the residential and commercial real estate markets in the context of the EU's financial stability, stress tests for the banking sector and central counterparties (CCPs), ways to address the problem of impaired loans in the EU and to prevent a new build-up of such loans, experience related to the conduct of macroprudential policy in EU Member States, the rules governing the use of macroprudential instruments and the idea of a single market for financial instruments backed by bonds of EU countries (sovereign bonds-backed securities, SBBS).

Moreover, in 2017 NBP representatives participated in the following:

- the work of resolution colleges set up for cross-border European banking groups, with a focus on banks identified by the Polish supervision authority as other systemically important institutions (OSIIs<sup>9</sup>); NBP representatives participate in the work of the colleges at the invitation of the Polish Financial Supervision Authority and cooperate on the issue with representatives of the Bank Guarantee Fund (the Polish resolution authority);
- meetings of the Board of Supervisors of the European Banking Authority (EBA);
- the work of the European Bank Coordination ("Vienna") Initiative;
- in the work of the International Banking Research Network, where central banks examine the cross-border effects of changes in monetary policy and macroprudential regulations in various countries.

#### 3.5 NBP operational activities aimed at maintaining financial stability

In 2017, NBP continued to exempt a bank from the obligation to maintain the required reserve during the implementation of the recovery proceedings and processed a similar request of another bank.

<sup>&</sup>lt;sup>9</sup> OSII – other systemically important institution is an entity which is not a global systemically important institution but which can – due to its size, value, linkages and business model – create a risk to the financial system stability of a given country.

#### Highlights of 2017:

- organisational and substantive support of the Financial Stability Committee as a competent authority for macroprudential supervision (FSC-M),
- developing analyses and research on the stability and development of the financial system and on reducing systemic risk,
- participation in the work of European institutions related with the operationalization of macroprudential policy.

## The issue of currency



### The issue of currency<sup>1</sup>

Narodowy Bank Polski holds the exclusive right to issue currency of the Republic of Poland. By introducing into circulation banknotes and coins in full nominal structure, NBP guarantees smooth cash settlements and the adequate quality of currency circulation.

#### 4.1 Currency in circulation

The value of currency in circulation (including bank vault cash), as at 31 December 2017, amounted to PLN 198,715.9 million. This represents an increase in the value of currency by PLN 11,141.1 million, i.e. 5.9% more compared to 31 December 2016.

In 2017, manufacturers of legal tender delivered to NBP 377,791.2 thousand pieces of notes and 1 billion 59,414.5 million pieces of coins. In relation to the deliveries in 2016 (331,615.2 thousand pieces and 847,464.4 thousand pieces, respectively), this represented an increase of 46,176 thousand (13.9%) in the number of notes and 211,950.1 thousand (25.0%) in the number of coins.

As at 31 December 2017, notes accounted for 97.6% of all zloty-denominated currency in circulation by value, while coins represented 2.4% (97.6% and 2.4% – in 2016, respectively). In terms of volume, zloty-denominated notes accounted for 10.2% of all currency in circulation, whilst coins represented 89.8% (10.4% and 89.6% – in 2016, respectively).

In terms of face value of notes in circulation, as at the end of 2017, the following denominations had the biggest share:  $100 \text{ z}^{1} - 62.8\%$  (65.2% – in 2016) and  $200 \text{ z}^{1} - 28.3\%$  (27.6% – in 2016), whereas among coins the following prevailed:  $5 \text{ z}^{1} - 35.1\%$  (36.4% – in 2016) and  $2 \text{ z}^{1} - 29.8\%$  (29.5% – in 2016).

In terms of volume, the following notes had the biggest share in circulation as at the end of 2017: 100 z in 61.6% (62.6% – in 2016) and 200 z in 2016. As regards coins, the following denominations prevailed: 1 gr - 37.5% (37.5% – in 2016) and 2 gr - 17.5% (17.6% – in 2016).

#### 4.2 Issue of collector coins and notes

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

In 2017, under 23 topics of commemorative coins, 6.2 thousand pieces of gold coins, 356 thousand pieces of silver coins as well as 55 thousand collector notes were issued

<sup>&</sup>lt;sup>1</sup> Tasks in this field are performed pursuant to, among others, Article 4 and Articles 31–37 of the Act of 29 August 1997 on Narodowy Bank Polski.

(in 2015, 11.2 thousand gold coins, 312 thousand silver coins and 35 thousand collector notes, respectively).

In 2017, a total of 27 types of collector coins and one collector note were issued. Among collector items issued in 2017, the following series inaugurated in that year are worth mentioning:

- The Enduring Soldiers Accursed by the Communists a coin inaugurating the series dedicated to the accursed soldiers, followed by coins with images of Danuta Siedzikówna "Inka", Witold Pilecki "Witold", Feliks Selmanowicz "Zagończyk" and Henryk Glapiński "Klinga";
- The Great Polish Economists a coin commemorating Nicolaus Copernicus;
- The Polish Thermopylae a coin dedicated to the battle of Zadwórze.

In 2017, NBP also issued a collector note commemorating the 300th anniversary of the coronation of the image of Our Lady of Częstochowa.

Narodowy Bank Polski continued to issue 5 zł coins with a commemorative image, in circulation standard, of the *Discover Poland* series. Under two topics (*The Holy Trinity Chapel at Lublin Castle* and *Central Industrial District*) a total of 2.4 million pieces of coins were issued.

Narodowy Bank Polski continued to issue gold bullion investment coins, *White-tailed Eagle* coins with the face values of 500 zł, 100 zł and 50 zł.

In 2017, collector coins issued by Narodowy Bank Polski gained recognition at international numismatic competitions. A silver 5 zł collector coin issued in 2016, commemorating the 250th anniversary of the foundation of the Warsaw Mint won the third prize in the Coin of the Year category at the Coin Constellation 2017. The collector note of the face value of 20 zł issued in 2016 on the occasion of the 1050th anniversary of the baptism of Poland won the first prize for the best collector banknote at the Currency Conference in Kuala Lumpur.

#### 4.3 Introduction into circulation of a banknote with a face value of 500 zł

In February 2017, a 500 zł banknote was put into circulation. As at the end of 2017, 7.2 million pieces of this note were in circulation, i.e. 0.4% of all banknotes in circulation. In terms of value, they represented 1.9% of the total value of banknotes.

## 4.4 Withdrawal of banknotes and coins from circulation due to wear and tear or damage

In 2017, 231.2 million pieces of notes and coins were withdrawn, including 225.4 million pieces of banknotes and 5.8 million pieces of coins (210.9 million pieces in 2016, including 200.2 million pieces of banknotes and 10.7 million pieces of coins) due to wear and tear, damage or loss of counterfeit protection features.

#### 4.5 Counterfeit of Polish currency

In 2017, the number of disclosed counterfeit Polish currency notes and coins decreased by 23.55% as compared to 2016. The number of all counterfeit banknotes and coins per million of currency pieces<sup>2</sup> in circulation amounted to 1.91 pieces, having decreased by 0.77 pieces as compared to 2016.

Data on the number of counterfeit notes and coins disclosed in 2014–2017 are shown in Table 4.1.

Table 4.1 The number of counterfeit Polish notes and coins in circulation in the years 2014–2017

Counterfeits	2014	2015	2016	2017
Banknotes	11,549	7,803	6,919	5,156
Coins	4,250	2,296	1,490	1,273
Total	15,799	10,099	8,409	6,429

Source: NBP data.

#### 4.6 Supply of notes and coins to banks

In 2017, commercial banks and entities with statutory authority to withdraw and lodge Polish currency notes and coins from/in NBP, purchased at NBP Polish notes and coins worth PLN 184.6 billion (PLN 197.8 billion in 2016), of which:

- PLN 93.2 billion in a deposit system (PLN 94.1 billion in 2016),
- PLN 91.4 billion in the main system (PLN 103.7 billion in 2016).<sup>3</sup>

#### 4.7 Activities aimed at streamlining cash transactions

In 2017, NBP continued to work on the implementation – starting from 1 July 2018 – of changes in the operation of domestic cash transactions, consisting mainly in preparing cash transaction market participants to the planned changes.

#### They concern:

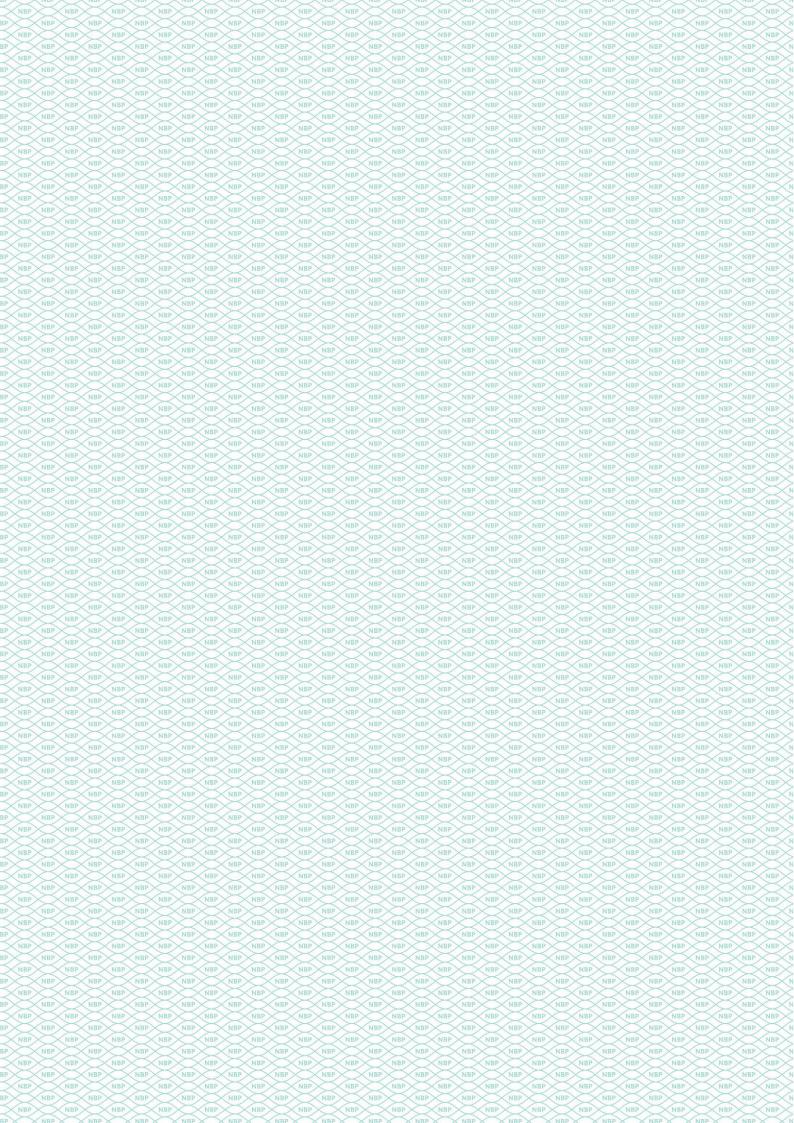
- implementation of multi-orientation sorting of banknotes and lodgements of banknotes to NBP without the obligation to sort them to fit and unfit for circulation;
- introduction of new reporting forms on equipment, counting and sorting of banknotes and coins as well as their recirculating outside NBP,
- launching tests of machines designed to check the authenticity of banknotes or sort their fitness for circulation.

In the case of coins, 1 zł, 2 zł and 5 zł denominations were taken into account.

<sup>&</sup>lt;sup>3</sup> In the main system, Polish currency is collected from vaults located in NBP regional branches after funds are transferred to NBP for this purpose; in the deposit system Polish currency is owned by NBP but kept in vaults of commercial banks. It is collected after the funds are transferred to NBP for this purpose. In both cases, Polish currency is collected based on concluded agreements.

#### Highlights of 2017:

- introduction into circulation of a 500 zł banknote,
- continuation of work on implementing changes in the functioning of domestic cash transactions.



# Foreign exchange reserves management



## Foreign exchange reserves management<sup>1</sup>

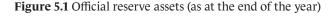
Pursuant to Article 52(1) of the Act on Narodowy Bank Polski, the central bank holds and manages foreign exchange reserves as well as takes measures to ensure the safety of Poland's foreign exchange operations in terms of payment liquidity. In the context of a floating exchange rate, the role of foreign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

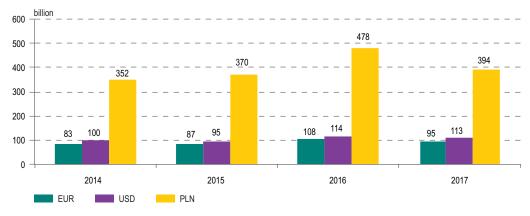
#### 5.1 Level of the official reserve assets

In 2017, the NBP official reserve assets<sup>2</sup> decreased:

- in euro terms by EUR 13.5 billion (-12.5%) to EUR 94.5 billion,
- in dollar terms by USD 1.1 billion (-1.0%) to USD 113.3 billion,
- in zloty terms by PLN 83.7 billion (-17.5%) to PLN 394.4 billion.

This was mainly the result of the lower exposure to reverse repo transactions concluded at the same time as the repo ones, under investment of foreign exchange reserves.





Source: NBP data.

<sup>&</sup>lt;sup>1</sup> Tasks in this area are performed pursuant to Article 3(2)(2) and Article 52 of the Act of 29 August 1997 on NBP.

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

#### 5.2 Foreign currency reserves management strategy<sup>3</sup>

The priority in the foreign exchange reserves management is to ensure the safety of the invested funds and their adequate liquidity. While observing these criteria, Narodowy Bank Polski also undertakes measures aimed at raising the yield on the reserves.

Taking into account analyses of the global macroeconomic perspectives, forecasts of developments in the global financial markets and results of the optimisation and simulation analysis, the NBP Management Board maintained the currency composition of the strategic benchmark applicable in 2016: 44% USD, 27% EUR, 12% GBP, 8% AUD, 6% NOK and 3% NZD. The modified duration<sup>4</sup> of the reserves amounted to 2.1 (1.9 in 2016).

The major part of foreign exchange reserves is invested in government securities of the countries with a high rating, i.e. securities characterised by the highest degree of security and liquidity. The non-government securities held in the investment portfolios are issued, first of all, by international institutions and government agencies. In 2017, NBP began to invest in non-government securities denominated in NZD, striving to raise the yield on the reserves and increase liquidity of funds in this currency.

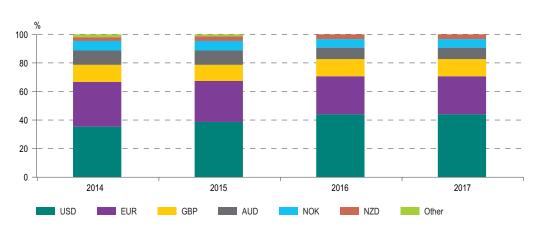


Figure 5.2 Currency composition of reserves in 2014–2017

Source: NBP data.

A small part of the reserves is held in short-term deposits at banks with high creditworthiness and in corporate bonds in USD. Bond futures contracts are used in modified duration management.

In 2017, work on the implementation of an upgraded version of the IT system supporting foreign exchange reserves management at NBP was carried out.

<sup>&</sup>lt;sup>3</sup> Excluding funds held on the foreign currency accounts operated by NBP for the Ministry of Finance.

<sup>&</sup>lt;sup>4</sup> Modified duration is a measure of interest rate risk, representing the sensitivity of investment portfolios to fluctuations in yields on financial instruments.

100 89.0 85.6 83.0 79.2 80 60 40 20 13.2 8.3 7.6 8.7 Government securities Non-government securities Deposits 2014 2015 2016 2017 Source: NBP data.

Figure 5.3 Share of investment instruments in the NBP foreign currency reserves excluding gold (as at the end of a given year)

#### 5.3 Financial risk management in the foreign exchange reserves management process

The management of investment risk is one of the key elements in the management of foreign exchange reserves. It is based on a system of investment limits and restrictions. In 2017, a review of the credit limit system was performed and the concept of global limits defining the maximum acceptable risk-weighted level of exposure against a given entity was developed.

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

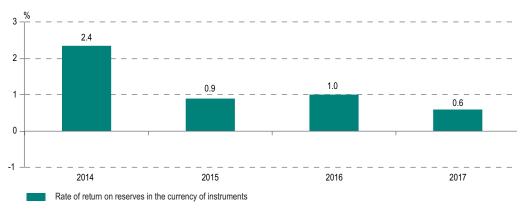
Risk	Mitigation methods		
Credit risk	Limited share of deposit transactions and non-government securities Counterparty selection criteria and ongoing monitoring of a counterparty's creditworthiness Counterparty limits on deposit transactions and foreign exchange transactions Limited maturity of deposit transactions Minimum accepted rating of securities Limits for issuers of securities Collateral in reverse repo transactions		
Foreign exchange risk	Currency composition of the Strategic Asset Allocation along with fluctuation ranges determining the scope of active investment policy		
Interest rate risk	Level of modified duration of the Strategic Asset Allocation along with fluctuation ranges determining the scope of active investment policy		
Liquidity risk	Investments in the most liquid financial markets Limited share of deposit transactions Securities selection criteria		

Source: NBP data.

#### 5.4 Rate of return on foreign currency reserves<sup>5</sup>

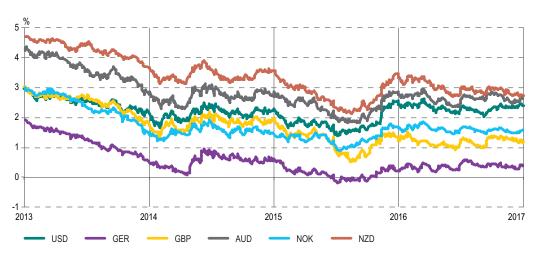
The rate of return on the invested foreign currency reserves depends, most of all, on market conditions: changes in currency exchange rates, level of yields and changes in investment instrument prices.

**Figure 5.4** Return on the NBP foreign currency reserves excluding the impact of exchange rate fluctuations



Source: NBP data.

Figure 5.5 Yields on 10-year government securities in major markets

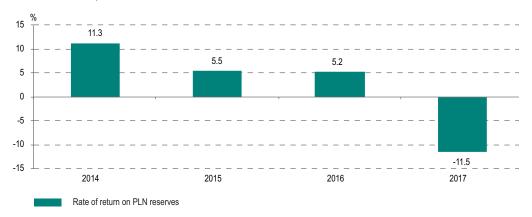


Source: Bloomberg.

<sup>&</sup>lt;sup>5</sup> Foreign currency reserves correspond to foreign exchange reserves excluding gold.

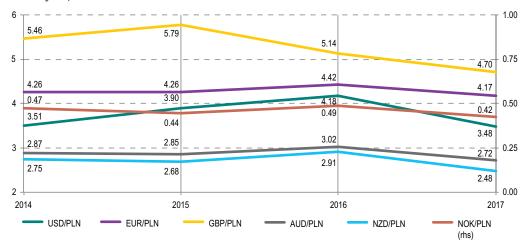
In 2017, the rate of return on the foreign currency reserves, denominated in the currency of instruments,<sup>6</sup> was 0.6% amidst relatively low yields on government securities,<sup>7</sup> which resulted from a low inflation rate and an expansive monetary policy of the majority of central banks.<sup>8</sup>

**Figure 5.6** Rate of return on the NBP foreign currency reserves (including the impact of exchange rate fluctuations)



Source: NBP data.

**Figure 5.7** Exchange rates of major reserve currencies in relation to PLN (levels as at the end of the year)



Source: NBP data.

<sup>6</sup> The rate of return on foreign currency reserves in the currency of individual investment portfolios is calculated on a basis of daily fluctuations in the market value of instruments.

<sup>8</sup> The majority of central banks in developed economies maintained interest rates at all-time low level. In 2017, interest rates were increased by the Fed (which additionally started the process of balance sheet total reduction) and by the Bank of England.

<sup>&</sup>lt;sup>7</sup> As at 31 December 2017, the yields on 10-year US government bonds amounted to 2.41%, German government securities – 0.43%, UK government bonds – 1.19%, Australian government bonds – 2.63%, Norwegian government bonds – 1.59%, and New Zealand government bonds – 2.72%. In 2017, the yields on 10-year government bonds decreased in the majority of markets (the strongest decline of 61 basis points was recorded at the New Zealand market), except for the German market (a growth by 22 basis points).

In 2017, the rate of return on the reserves calculated in PLN<sup>9</sup> amounted to -11.5%. The negative rate of return on the reserves as expressed in PLN resulted from the appreciation of PLN against reserve currencies, the scale of which was the highest in recent years.<sup>10</sup>

#### 5.5 Investment income

In 2017, the income on investment related to foreign currency reserves management, excluding the realised and unrealised exchange rate effects, amounted to PLN 2.4 billion (as compared to PLN 3.3 billion in 2016).

In 2017, realised foreign exchange gains amounted to PLN 0.0 billion, whereas unrealised foreign exchange losses amounted to PLN 13.1 billion.<sup>11</sup>

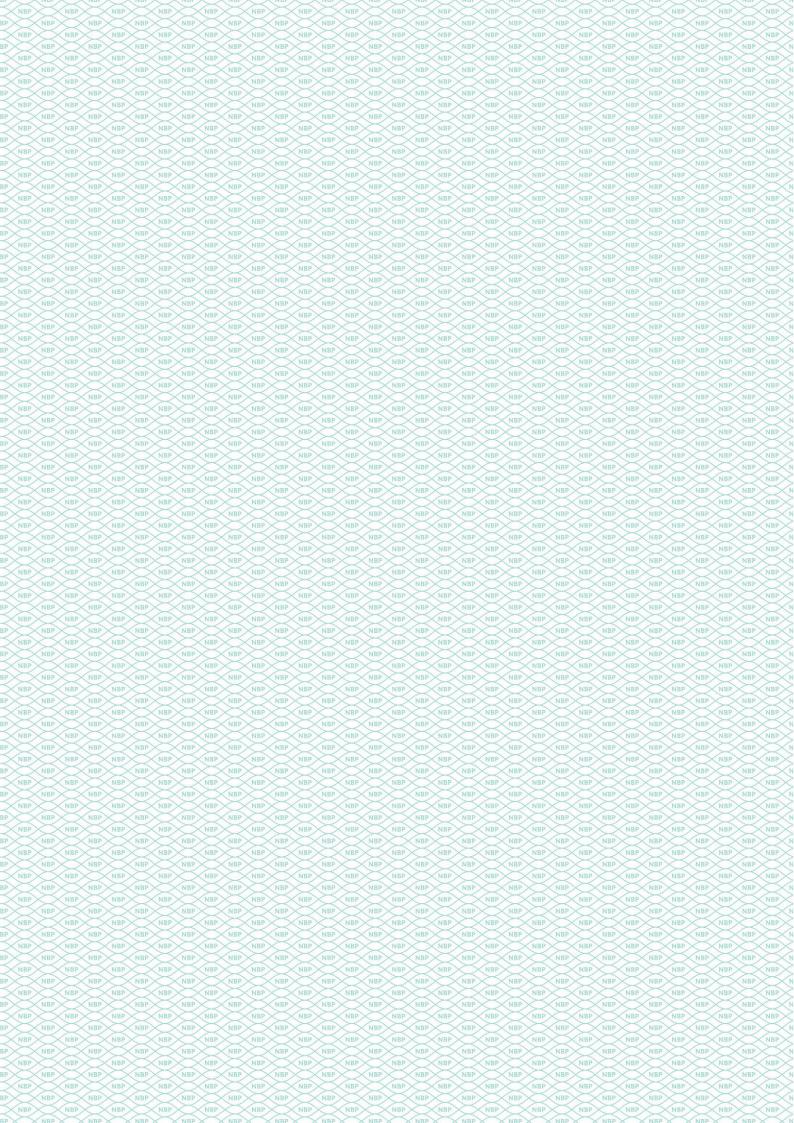
#### Highlights of 2017:

- launch of investment in the non-government New Zealand securities market, contributing to raising the rate of return on reserves in 2017,
- a comprehensive review of the foreign exchange reserves management rules, including the development of the concept of global limits defining the maximum acceptable risk-weighted level of exposure against a given entity,
- development of the IT system supporting foreign exchange reserves management implementation of the new version of the system.

<sup>&</sup>lt;sup>9</sup> The rate of return on foreign currency reserves in PLN also includes the impact of fluctuations in the exchange rates of reserve currencies in relation to PLN.

<sup>&</sup>lt;sup>10</sup> A decline in the exchange rates: USD/PLN – by 16.7%, EUR/PLN – by 5.7%, GBP/PLN – by 8.6%, AUD/PLN – by 9.9%, NOK/PLN – by 12.9% and NZD/PLN by 14.7% (NBP middle exchange rates).

According to the NBP accounting principles, unrealised foreign exchange gains do not affect the NBP profit and loss account but are recognised as liabilities on the NBP balance sheet. In contrast, unrealised foreign exchange losses diminish the NBP financial result (similarly as realised foreign exchange losses).



## Foreign exchange activity



### Foreign exchange activity<sup>1</sup>

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

#### 6.1 Register of bureaux de change

In 2017, 856 entries were made to the register of bureaux de change (as compared to 836 in 2016), of which 157 entries concerned new entities (as compared to 194 in 2016) and the remainder regarded the deletion of entities or data updates in the register.

As at 31 December 2017, 4951 bureaux de change were operating in Poland (as at 31 December 2016 there were 4990).

#### 6.2 Foreign exchange-related decisions

In 2017, a total of 29 decisions on foreign exchange were issued, including 18 permits and 11 other decisions (in 2016 – 14 decisions on foreign exchange were issued).

The permits were granted for the waiver of restrictions on foreign exchange transactions conducted with non-residents from countries that are not members of the EU, the OECD and the EEA. Decisions were related to the increase in the amount of transfer abroad, prolonging the validity of permits and discontinuation of proceedings due to their being groundless.

#### 6.3 Foreign exchange control

Foreign exchange control by the President of NBP in 2017 included inspections of residents who were subject to the mandatory transfer to NBP of data necessary for the compilation of the balance of payments and the international investment position, and inspections of operators of bureaux de change.

<sup>&</sup>lt;sup>1</sup> Tasks in this field are performed pursuant to Article 3(2)(3) and Article 52(2) of the Act on Narodowy Bank Polski of 29 August 1997, Article 21(3)(1) of the Act of 16 November 2000 on Counteracting Money Laundering and Terrorism Financing (Journal of Laws of 2017, item 1049) and the provisions of the Act of 27 July 2002 – the Foreign Exchange Law (Journal of Laws of 2017, item 679).

In 2017, a total of 1671 inspections were carried out (in comparison to 1645 in 2016), including:

- 1014 inspections concerning the performance of the reporting responsibilities for the needs of the balance of payments (in 2016 951),
- 656 inspections regarding bureaux de change activity (in 2016 692).
- 1 inspection of an individual foreign exchange permit (in 2016 2).

Irregularities were detected in the course of 661 inspections, i.e. 40% of all inspections conducted (in 2016 – 40% too), including:

- 430 inspections concerning the performance of the reporting obligation for the needs of the balance of payments (in 2016 404),
- 230 inspections regarding bureaux de change activity (in 2016 258).
- 1 inspection of the implementation of an individual foreign exchange permit (in 2016 0).

If such irregularities occurred, post-inspection recommendations were submitted to the managers of the inspected units. In 681 cases, NBP notified the competent financial authorities of the infringement of legal standards. Having conducted the appropriate proceedings, tax offices informed NBP of penalties imposed on 101 entities, 297 cases of submission of the so-called active repentance<sup>2</sup> and 6 cases of voluntary submission to liability. The results of all inspections as regards the fulfilment of responsibilities by the operators of bureaux de change laid down by the Act on Counteracting of Money Laundering and Terrorism Financing were forwarded to the General Inspector of Financial Information.

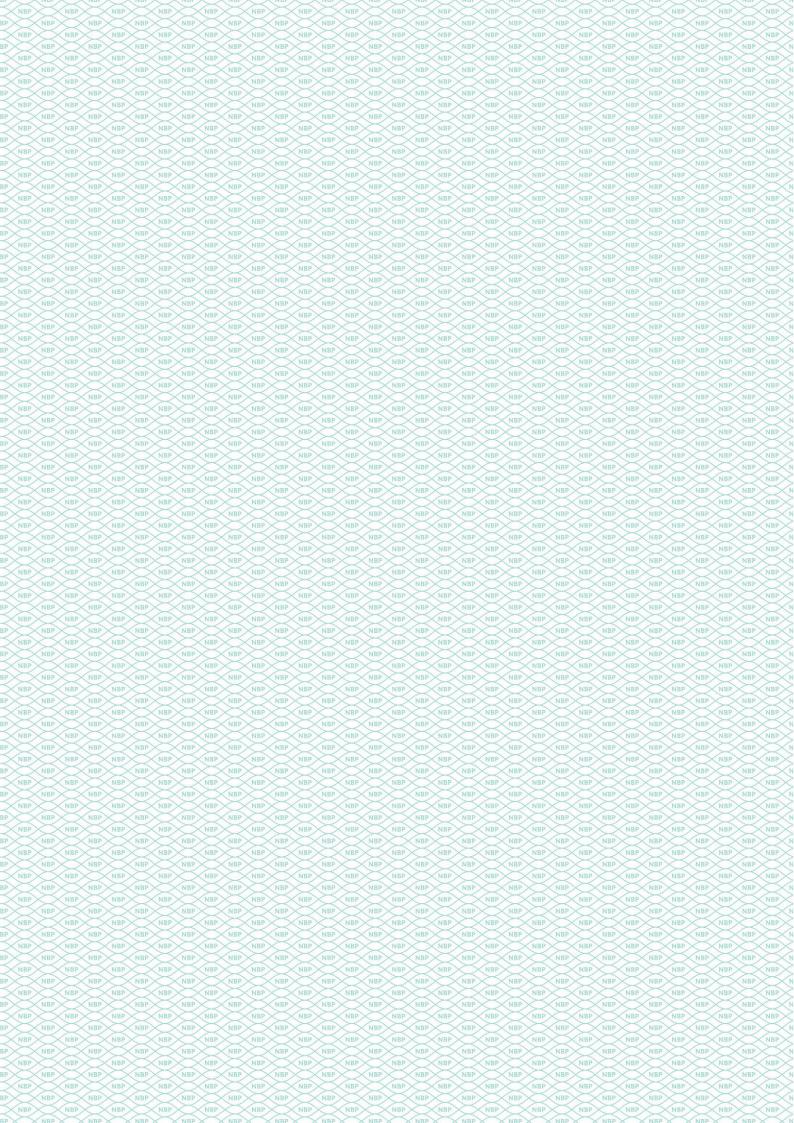
Inspections carried out by NBP ensure:

- the compliance of foreign exchange trading in bureaux de change with the requirements of procedures defining the rules of the pursuit of regulated activity,
- the proper fulfilment of responsibilities in the area of counteracting money laundering and terrorism financing,
- the compliance of data provided by reporting entities to the balance of payments statistics with the source documents.

#### Highlights of 2017:

• 1671 inspections performed, 29 foreign exchange decisions issued.

Pursuant to Article 16(1) of the Act of 10 September 1999 – Penal Fiscal Code (Journal of Laws of 2017, item 2226, as amended), the offender who, after committing the offence, notified the prosecution authority thereof, disclosing the significant circumstances of such an act, in particular, persons cooperating in its commitment, shall not be subject to punishment for fiscal crime or fiscal offence.



# Payment system oriented activities



### Payment system oriented activities<sup>1</sup>

The activities of Narodowy Bank Polski with respect to the payment system include:

- operational tasks, including the operation of the payment systems and performance of interbank settlements,
- activities relating to the payment system policy and development, including organising payments and drafting relevant legal regulations,
- oversight of the payment systems and post-trade infrastructure of the financial market.

The Bank's objective is to ensure efficient operation of the payment system, enabling fast and safe flow of money between both individuals and economic entities.

#### 7.1. Performance of operational tasks

#### 7.1.1 Operation of accounts in the SORBNET2 system

The SORBNET2 system is the RTGS payment system in which current accounts of banks are operated and interbank settlements of payments in zloty are performed. In the RTGS system, payment orders are executed in accordance with the gross settlement principle (processing of single orders, without their mutual offsetting) and the rule of real time settlement (processing of orders on an on-going basis during the day, instead of on predetermined hours).

As at 31 December 2017, accounts operated in the SORBNET2 system included current accounts in zloty for 45 banks (unchanged as compared to 2016) as well as accounts for Krajowa Izba Rozliczeniowa (National Clearing House, KIR SA), Krajowy Depozyt Papierów Wartościowych (National Depository for Securities, KDPW SA) and the clearing house KDPW\_CCP SA.

In 2017, about 4,191 million payment orders were executed in SORBNET2 system (in 2016 – 3,924 million), totalling PLN 73.1 trillion (PLN 71.0 trillion in 2016). This represents an increase in the number of executed payment orders by 267 thousand (6.8%) and an increase in their total value by PLN 2.1 trillion (3.0%) as compared to 2016. In 2017, the average value of a single payment order dropped by about 3.5% compared to the previous year, to reach PLN 17.4 million (PLN 18.1 million in 2016).

#### 7.1.2 Operation of accounts in euro in the TARGET2-NBP system

The TARGET2-NBP system is a Polish component of the TARGET2 system – a pan-European RTGS system providing settlements for payments in euro.

Tasks in this field are performed pursuant to Article 3(2)(1) and Article 3(2)(6) of the Act of 29 August 1997 on Narodowy Bank Polski and the Act of 24 August 2001 on the Finality of Settlement in Payment Systems, Securities Settlement Systems and Principles of Oversight of These Systems (Journal of Laws of 2018, item 145).

As at 31 December 2017, the TARGET2-NBP system operated accounts in euro for 22 participants: NBP, KIR SA, KDPW SA and KDPW\_CCP SA and 18 commercial banks.<sup>2</sup>

In 2017, almost 1.5 million transactions were carried out in the TARGET2-NBP system for the total amount of EUR 1,027 trillion. As compared to 2016, the number of completed transactions increased by 107.9 thousand (7.9%) and the total value of transactions rose by EUR 187.6 billion (22.4%). The average value of transactions amounted to EUR 693.4 thousand and increased by 13.4% as compared to 2016.

#### 7.2 Policy measures and development of the payment system

#### 7.2.1 Regulatory activities

In 2017, the President of NBP issued the following legal ordinances concerning the payment system:

- ordinance No. 30/2017 of 26 October 2017 on interbank clearing and settlements,<sup>3</sup>
- ordinance No. 7/2017 of 20 February 2017 on the method used for assigning numbers to banks and bank accounts.<sup>4</sup>

Furthermore, as part of its regulatory activities concerning the payment system, NBP participated in legislative work on drafts of legal acts. In 2017, its regulatory activities focused on:

- implementation of so-called PSD2 directive<sup>5</sup> and implementation of new types of payment services related to it, modification of the principles concerning liability for an unauthorised transaction and the introduction of so-called "small payment institution",<sup>6</sup>
- draft of regulations aiming to increase possibilities of making payments in non-cash form,
- principles for assigning numbers to payment service providers (PSPs) operating payment accounts and participating in payment systems, and for assigning unique account identifiers to payment accounts operated by these service providers; based on the new regulations NBP started to assign identifiers and sort codes to entities other than banks.<sup>7</sup>

<sup>&</sup>lt;sup>2</sup> On 31 March 2017, the account of RBS Bank (Polska) SA was closed.

<sup>&</sup>lt;sup>3</sup> Official Journal of Narodowy Bank Polski, item 21.

<sup>&</sup>lt;sup>4</sup> Official Journal of Narodowy Bank Polski, item 3.

<sup>&</sup>lt;sup>5</sup> Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No. 1093/2010, and repealing Directive 2007/64/EC.

<sup>6</sup> The status of a small payment institution can be assigned to an entity operating payment accounts, issuing instruments (e.g. cards or mobile payments) and handle small-scale payment transactions – up to EUR 1.5 million per month.

<sup>&</sup>lt;sup>7</sup> Ordinance of the Minister of Development and Finance of 5 July 2017 (Journal of Laws of 2017, item 1360).

## 7.2.2 Development of domestic large value payment systems and adjusting them to the payment systems operated in the EU countries

In 2017, the following activities were undertaken with the purpose of development of domestic large value payment systems:

- the new version of the SORBNET2 payment system was launched,
- completion of work on adjusting the NBP infrastructure, i.e. the TARGET2-NBP component, so that it is able to cooperate with the TARGET2-Securities platform.<sup>8</sup>
   On 18 September 2017, NBP's auto-collateralisation services on this platform became operational and the Bank opened first dedicated account in favour of a participant of the TARGET2-NBP system.

#### 7.2.3 Standardisation activities

On 22 May 2017, NBP made the EWIB 2.0 system<sup>9</sup> available to external users. It serves the purpose of generating and assigning bank numbers, organisational units numbers, non-bank PSP identifiers and sort codes, as well as for keeping and publishing the registers of such data by NBP. The system also allows to transfer data and documentation by institutions covered by this numbering.

#### 7.2.4 Actions related to the development of SEPA

In 2017, NBP continued to provide intermediary services to banks interested in the participation in the pan-European STEP2 clearing house, enabling them to clear credit transfers in euro in the SEPA Credit Transfer (SCT) system<sup>10</sup> via the Euro Elixir system operated by KIR SA.

In addition, NBP prepared itself for providing intermediary services to the banks-participants of the Euro Elixir system in the process of clearing direct debits in euro in the SEPA Direct Debit (SDD) schemes.

#### 7.2.5 Payment System Council activity

The Payment System Council, the opinion-giving and advisory body to the NBP Management Board, analyses and evaluates the Polish payment system on an on-going basis and promotes the development of this system.

In 2017, the Council primarily discussed:

- issues related to IT risks in the banking sector,
- the advancement of work on increasing the number of non-cash payment transactions,

<sup>&</sup>lt;sup>8</sup> TARGET2-Securities (T2S) is a pan-European platform for securities settlement, which was launched on 22 June 2015.

<sup>&</sup>lt;sup>9</sup> With regard to Ordinance No. 7/2017 of the President of NBP of 20 February 2017 on assigning numbers to banks and bank accounts and to the Ordinance of the Minister of Development and Finance of 5 July 2017 on identifiers and sort codes assigned to some payment service providers and unique identifiers assigned to payment accounts operated by these providers (Journal of Laws of 2017, item 1360).

<sup>&</sup>lt;sup>10</sup> At the end of 2017, 19 banks used these intermediary services.

- the project of installing payment terminals at public administration units,
- the advancement of work on applying standard security measures for interfaces of individual banks, in the context of giving access to bank account to Third Party Providers,
- services based on access to the bank accounts in the Polish market,
- new payment scheme supervision-related powers of the President of NBP and changes in Narodowy Bank Polski Payment System Oversight Policy,
- the plans of KIR SA concerning clearing of instant payments in euro.

## 7.3 Oversight of payment systems and post-trade infrastructure of the financial market

Oversight of payment system and post-trade infrastructure of the financial market seeks to minimise the risk related to the possible disruptions in the operations of the payment systems, in the securities clearing and settlement systems and in provision of acquiring services by domestic payment institutions. It also serves maintaining financial stability.

On 8 February 2017, the amended Act on Payment Services entered into force.<sup>11</sup> In accordance with this Act, the President of NBP was conferred supervisory powers over the payment schemes operating in the territory of Poland (including payment card schemes), and extended, than before, powers of oversight of the payment systems and post-trade infrastructure of the financial market.

In addition to that, in 2017:

- The NBP Management Board passed amendments to *Narodowy Bank Polski Payment System Oversight Policy* (in order to adjust it to the current legal environment and current international standards on cybersecurity with respect to the systemic oversight) and accepted *Polish Payment System Oversight Report for 2016* (the first compilation concerning the payment market infrastructure subject to oversight by NBP and the NBP oversight activities).
- NBP participated in the European Central Bank's survey on cyber resilience of entities
  that form the payment system infrastructure. As part of the study, NBP carried out
  assessment of cyber maturity of two entities operating systematically important payment
  systems.

#### 7.3.1 Oversight of payment systems

In 2017, NBP analysed, on an on-going basis, the statistical data and other information on the overseen payment systems. It also assessed incidents disruptive to the systems' operations and undertook actions aimed at ensuring their secure and efficient functioning.

<sup>&</sup>lt;sup>11</sup> Act of 30 November 2016 Amending the Act on Payment Services and Some Other Acts (Journal of Laws of 2016, item 1997).

#### Furthermore, in 2017:

- The President of NBP issued 6 decisions on the authorisation of modifications to the payment system rules of operation.
- The NBP Management Board adopted the report on supervisory assessment of the SORBNET2 system operated by NBP, as to its compliance with *Principles for financial market infrastructures*. Work related to the conduct of a similar assessment of card payment system called Krajowy System Rozliczeń (Domestic Settlement System), operated by the First Data Polska SA company.

#### 7.3.2 Oversight of payment schemes

#### In 2017, NBP:

- analysed the compliance of the operation of 6 payment schemes which are payment card schemes, with the European regulations on interchange fees;<sup>13</sup>
- assessed the rules of operation of 2 four-party payment schemes subject to supervision by another supervisory body of an EU member country or a competent EU authority;
- issued consent for a one payment scheme to operate in the territory of Poland;
- analysed statistical data and other information on the supervised payment schemes.

#### 7.3.3 Oversight of the payment service of acquiring

As part of the oversight of the payment service of acquiring (an intermediary service in authorising non-cash payments), the President of NBP, at the request of KNF, issued in the form of decisions 3 opinions on the rendering of the acquiring service.

#### 7.3.4 Oversight of the post-trade infrastructure of the financial market

In 2017, the President of NBP issued, in the form of decisions, 7 opinions on changes to the rules of operation of securities settlement and clearing systems. The SKARBNET4 securities clearing system, operated by NBP, started to be assessed as regards its compliance with the requirements specified in CSDR.<sup>14</sup>

<sup>&</sup>lt;sup>12</sup> Published jointly by Committee on Payments and Market Infrastructures (CPMI) and International Organisation of Securities Commissions (IOSCO).

<sup>&</sup>lt;sup>13</sup> That means with the provisions of Regulation (EU) No. 2015/751 of the European Parliament and the Council of 29 April 2015 on interchange fees for card-based payment transactions (OJ L 123, 19.5.2015).

<sup>&</sup>lt;sup>14</sup> Regulation (EU) No. 909/2014 of the European Parliament and the Council of 23 July 2014 on improving securities settlement in the European Union and on central securities depositories.

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

In 2017, NBP held shares or participating interests in the following domestic entities:<sup>15</sup>

- KDPW SA, with its registered office in Warsaw, which is the central institution responsible for operating the deposit and settlement system in the scope of financial instrument trading in Poland;
- KIR SA, with its registered office in Warsaw, which is the key institution on the domestic market of payments clearing;
- BSB (Bazy i Systemy Bankowe sp. z o.o. [Bank Databases and Systems, Ltd]) company, with its registered office in Bydgoszcz, the producer and integrator of IT solutions addressed mainly to financial sector institutions, in particular, banks and insurance institutions as well as public administration.

**Table 7.1** Specification of stocks and shares held by NBP in companies acting under the Polish commercial law as at 31 December 2017

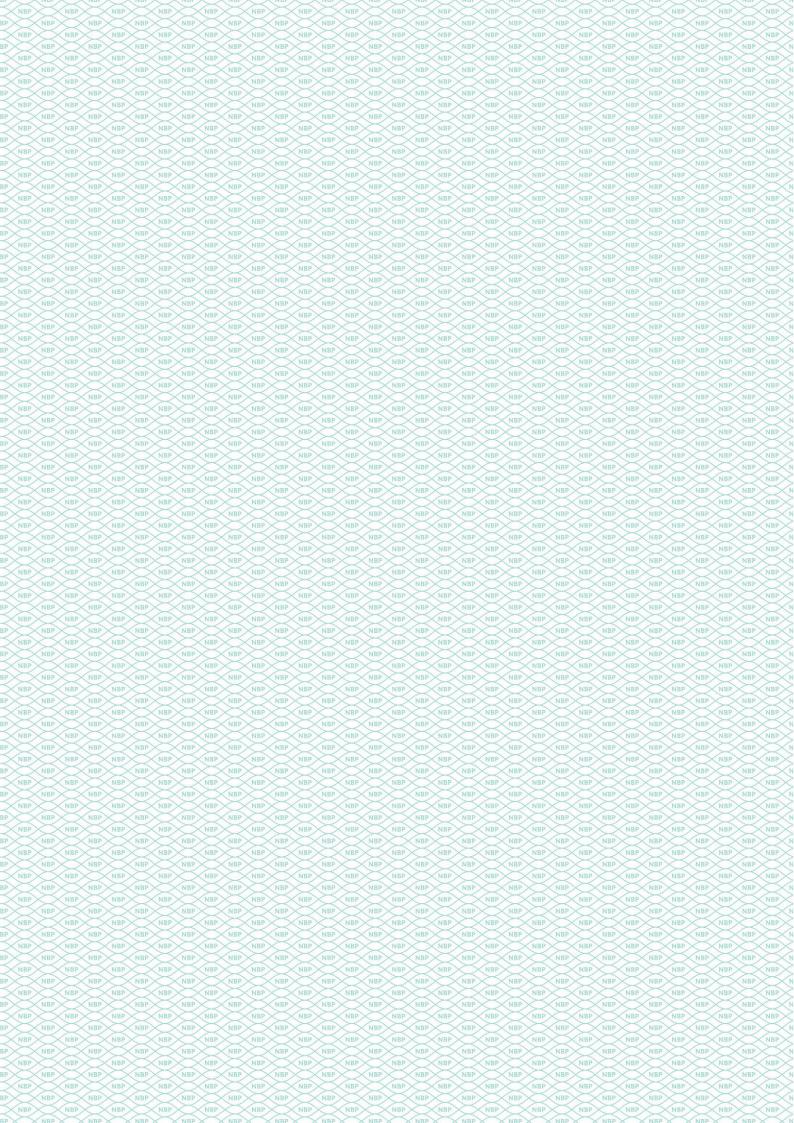
Name of entity	Share capital (PLN)	Number of stocks/shares held by NBP	NBP interest in share capital
KDPW SA	21,000,000	7,000	33.33%
KIR SA	5,445,000	3,750	34.44%
BSB sp. z o.o.	10,000,000	1,000	100.00%

Source: NBP data.

#### Highlights of 2017:

- sort codes started to be assigned to payment service providers other than banks operating payment accounts,
- completion of work on adapting the NBP infrastructure so that it interoperates with the TARGET2-Securities platform,
- launch of oversight activities focused on payment schemes and adoption of a new Narodowy Bank Polski Payment System Oversight Policy.

<sup>&</sup>lt;sup>15</sup> In accordance with Article 5(2) of the Act of 29 August 1997 on Narodowy Bank Polski, NBP may hold shares or participating interests in other legal persons that provide services to financial institutions or the State Treasury, or are relevant for NBP in terms of acting to sustain stability of Poland's financial system.



## **Services to the State Treasury**



## Services to the State Treasury<sup>1</sup>

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

#### 8.1 Bank accounts operated by NBP

In 2017, NBP operated bank accounts referred to in Article 196 of the Public Finances Act of 27 August 2009, including in particular the central current account of the State Budget, current accounts of budgetary entities, including offices providing services to tax authorities, as well as budgetary entities' accounts for permanent appropriations. NBP also maintained term deposit accounts in PLN and foreign currencies for entities authorised to hold accounts with NBP.

Moreover, pursuant to Article 51(1)(4) of the Act on Narodowy Bank Polski (hereinafter: the Act on NBP), NBP operated accounts of other legal persons.

#### 8.1.1 Operating bank accounts

Narodowy Bank Polski performed operations on State Budget bank accounts – in non-cash form, mainly in the enbepe system (Electronic Banking system), as well as in cash form. Bank accounts of some customers (e.g. the State Budget Department of the Ministry of Finance, common courts) were serviced via B2B cross-system interface which enables a technologically advanced method of communication with NBP and ensures high security of transferred data.

Since September 2017, following the replacement of the software for the operation of social contribution accounts, the Polish Social Insurance Institution (Zakład Ubezpieczeń Społecznych, ZUS) has joined the group of entities using B2B interface. In line with changes in the law,<sup>2</sup> from 1 January 2018 payers of social insurance contributions are allowed to pay amounts due to ZUS contributions via a single transfer in a standardised form for an individual contribution account.

In 2017, NBP continued to modernise the process of providing banking services to the State Budget and prepare for offering new services to account holders. Specifically, in March 2017, Narodowy Bank Polski joined the Express Elixir instant payment system to make clearings in that system.

<sup>&</sup>lt;sup>1</sup> Tasks in this area are performed pursuant to Article 3(2)(4) and Articles 49, 51 and 52 of the Act of 29 August 1997 on Narodowy Bank Polski, the Public Finances Act of 27 August 2009 (Journal of Laws of 2016, item 1870, as amended) and the Act of 29 August 1997 – the Banking Law (Journal of Laws of 2016, item 1988, as amended).

<sup>&</sup>lt;sup>2</sup> The Act of 11 May 2017 on Amending the Act on the Social Security System and the Act on Amending the Act – the Labour Code and Some Other Acts (Journal of Laws of 2017, item 1027).

#### 8.1.2 Categories of accounts operated by NBP

Narodowy Bank Polski operates accounts in PLN and in foreign currencies, including accounts for handling funds coming from the EU budget.

As at 31 December 2017, NBP provided services for 3,017 customers (in 2016 - 3,075), for whom NBP's regional branches operated 14,146 accounts (in 2016 - 14,364), of which 6,755 accounts were operated as part of a third-party substitution cash service (in 2016 - 6,754).

#### 8.2 Handling international liabilities and claims of the State Budget

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

- 72 loans granted by international financial institutions to the government of the Republic of Poland,
- 71 foreign loans granted to domestic entities, guaranteed by the government of the Republic of Poland,
- 1 agreement on making funds available to a domestic entity under the loan granted,
- Poland's contributions to international financial institutions.

While acting as a depositary for the World Bank Group, NBP administered 16 promissory notes issued by the government of the Republic of Poland in connection with Poland's membership in institutions of that financial group.

#### 8.3 Organisation of trade in Treasury securities

#### 8.3.1 Treasury securities auctions

Narodowy Bank Polski acts as the issuing agent for Treasury securities. Therefore, it is committed to organise sale and redemption auctions of Treasury bills as well as sale, redemption and swap auctions of Treasury bonds. In 2017, the following auctions were organised:

- 4 Treasury bills sale auctions. The total supply amounted to PLN 7.5 billion, the total amount bid was PLN 12.9 billion, bills worth PLN 5.9 billion were allotted;
- 11 Treasury bond sale auctions, including 3 non-competitive complementary auctions.
   The total supply amounted to PLN 66.8 billion, the total amount bid was PLN 131.8 billion, bonds worth PLN 66.6 billion were allotted. The majority of bonds offered by the Ministry of Finance were fixed-rate bonds; their amount allotted constituted 58.5% of the total amount allotted;
- 8 Treasury bond swap auctions, where the Ministry of Finance redeemed bonds worth PLN 45.2 billion, and allotted bonds worth PLN 47.1 billion; the value of purchase of bonds for cash amounted to PLN 36.6 million. Fixed-rate bonds represent the biggest share of bonds allotted at auctions (42.2%).

In 2017, 1 redemption auction of US dollar-denominated Treasury bonds was organised: the supply amounted to USD 700 million, bid – to USD 464.3 million and redemption – to USD 461.51 million.

#### 8.3.2 Treasury Securities Dealer System (DSPW)

In 2017, as in previous years, NBP performed tasks associated with the Treasury Securities Dealer System (DSPW).<sup>3</sup> Under the agreement concluded with the Ministry of Finance, NBP:

- submitted to the Ministry of Finance monthly and quarterly assessments of the activities of the DSPW banks at the Treasury securities primary market,
- acted as the organiser of Treasury securities fixing,<sup>4</sup>
- participated in periodic meetings of the Council of Treasury Securities Market
   Participants, the opinion-making and advisory group at the Minister of Finance.

## 8.4 Cooperation with the Ministry of Finance within the Public Debt Management Committee

In 2017, NBP cooperated with the Ministry of Finance within the Public Debt Management Committee. The objective of the cooperation is to exchange information used to harmonize the public debt management policy (of the Ministry of Finance) with the NBP's monetary and foreign exchange policies.

#### Highlights of 2017:

- extension of the list of entities using the B2B cross-system interface as part of the operation of bank accounts,
- NBP joined clearings in the Express Elixir instant payments system,
- organisation of the total of 24 sale, redemption and swap auctions of Treasury securities.

The main aim of the system is to distinguish primary dealers. This is a group of banks which in return for a privilege of exclusive submission of bids at the Treasury securities (SPW) auctions and exclusiveness or privilege in concluding individual transactions with the Minister of Finance are obliged to participate, on a regular basis, in SPW sale auctions, SPW fixings, SPW quoting (in particular, the benchmark Treasury securities on the electronic market), undertake actions aimed at expanding the SPW investor base, fulfil the obligations arising from their participation in depository systems in a reliable manner, and promote the SPW market. Those actions are aimed at the implementation of the public finance sector debt management strategy, in particular, the enhancement of the liquidity, efficiency and transparency of the SPW market.

<sup>&</sup>lt;sup>4</sup> Acting as an organiser of SPW fixing, NBP defines its rules, in agreement with the Minister of Finance (the issuer) and BondSpot SA (the proxy), as well as provides the general supervision of fixing (para. 2 item 3 of the fixing regulations).

# Analytical and research activities



### Analytical and research activities<sup>1</sup>

Actions of central banks aimed at ensuring macroeconomic and financial stability require detailed knowledge of the developments in the economy and its environment. While performing these tasks NBP relies on a broad range of data and analytical and prognostic tools. The Bank also conducts scientific research enabling the assessment of changes in the economy and verification of analytical tools applied. The results of analyses and research are used in the decision-making process by the Management Board of NBP and the Monetary Policy Council.

Below are presented the most important works and analytical and research activities conducted in 2017 concerning macroeconomic stability<sup>2</sup> – broken down into major topics.

### 9.1 Analyses and research concerning monetary policy

- Another study of the monetary policy transmission mechanism was conducted and a report *Monetary policy transmission in Poland. What do we know in 2017* was drawn up. The report takes into account new issues, including: assessment of the evolution of the monetary policy transmission mechanism over time, study of the credit channel with the use of questionnaire survey data and study of the risk taking channel.
- NBP staff conducted a study estimating the impact of demographic developments on the decrease of real equilibrium interest rates in Poland and in the euro area and their consequences for the conducted monetary policy. A particular emphasis was put on the issue of deflation trap and the importance of monitoring the equilibrium rate in real time.
- NBP staff analysed the impact of monetary policy on banks' management of liabilities and the impact of this process on household expenditure and aggregate demand.
- NBP staff continued to study the development of the term premium in Poland and worldwide. An analysis of the potential impact of reduction of the Fed's balance sheet on monetary conditions and the economic situation of Poland was carried out.

Monetary policy of central banks worldwide and its determinants were monitored and analysed, including the use of non-conventional tools and the principles of communication with the public.

<sup>&</sup>lt;sup>1</sup> Taks in this area are performed, among others, under article 59 of the Act on Narodowy Bank Polski of 29 August 1997.

<sup>&</sup>lt;sup>2</sup> Analytical and research activities concerning financial system's stablility and development were presented in Chapters 3 and 7 of the *Report*.

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

- A system was implemented to create and combine short-term inflation forecasts (Automatic System of Analysis for Poland, ASAP), used for its current forecasting.
- Analyses and measurements of core inflation indicators and inflation developments in the national economy were continued, short-term forecasts of the consumer price index and its components were prepared.
- Inflation expectations of various groups of entities were examined, including the degree of their anchoring and macroeconomic importance as well as the frequency of price changes in the Polish economy.
- NBP staff analyzed the impact of price changes on global commodity markets (including on the markets for agricultural and food products and energy commodities) and the impact of globalization on price changes in Poland.

### 9.3 Macroeconomic forecasting and development of prognostic models

- The main forecasting model of NBP, the NECMOD model has been expanded to include the balance of payments and international investment position module; simulation and prognostic tests of the household financial asset module in this model were carried out. Using NECMOD model, NBP staff prepared forecasts of the savings rate broken down into the main institutional sectors.
- The statistical properties of fan charts published in *Inflation Reports*, including the quality of measurement of uncertainty in the economy were analyzed.
- NBP staff conducted works the reconstruction of the NBP forecasting model, SoePL to better take into account medium-term trends in European economies and in Poland, in particular, microeconomic sources of investment restrictions (savings), the role of EU funds and changes in the domestic labour market. NBP staff also conducted studies on the possibility of forecasting FX rates using time series models and DSGE class models.
- Four NBP Macroeconomic Surveys were conducted, collecting macroeconomic forecasts (including probabilistic forecasts of GDP and inflation) of professional forecasters from outside NBP.

### 9.4 Analyses and studies of the fiscal situation

• Analyses and forecasts of the state budget and public finance sector entities as well as the use of funds from the European Union budget and their impact on the main macroeconomic aggregates were carried out. NBP staff analysed, among others, the causes and consequences of the gap in the absorption of EU funds, which in 2016 was observed in Poland and in other countries.

- The differences in wages and salaries in the public and private sector in Poland were examined and the impact of the wage freeze in the public sector on the size of the cross--sectoral wage gap was assessed.
- Multiplier effects of fiscal policy (government spending) were studied, including their impact on household consumption and the impact of credit limits (LTV ratio) on the size of fiscal multipliers.

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

- The current and forecasted international business conditions in the world's major economies and in Central and Eastern European countries were examined.
- NBP staff analyzed how the materialization of risk in the global economy will affect economic growth in Poland.
- Macro-financial variables used in FX reserves management for the world's selected economies were forecasted and the outlook for the economic situation of countries in which NBP invests in foreign exchange reserves was assessed.
- The role of institutional factors in determining workforce productivity growth in Central and Eastern European countries was studied.
- NBP staff carried out analyses of the Polish economy in the international context, including the state of internal and external equilibrium, links in global value chains and changes in the structure of trade with foreign countries.
- The influence of EU funds on Poland's economic development was estimated using the NECMOD model.
- A study of the impact of quantitative easing in the United States, the euro area and the United Kingdom on international capital flows and economic activity of small open economies was conducted.

### 9.6 Analyses and studies of the real sector of the economy

### 9.6.1 Analyses and studies of the economic situation of households

 NBP staff conducted cyclical analyses of the financial situation of the household sector in terms of sources of income, consumption expenditure and savings as well as changes in consumer climate.

- NBP staff continued studies on excessive indebtedness of households, including the impact
  of their optimistic expectations of future income on debt formation and the influence
  of central bank's policy on debt reduction.
- The second round of the Households' Wealth and Debt Study was completed under the ECB's research project: Household Finance and Consumption Network aimed at understanding the financial situation of households in Europe.

### 9.6.2 Analyzes and studies of the economic situation of the labour market

- The situation on the labour market was analyzed on a cyclical basis, focusing on factors leading to changes in employment and unemployment, wages, relationship between labour productivity and wage growth as well as the phenomenon of migration, including the intense inflow of immigrants to Poland observed in the recent years.
- NBP staff developed methods to measure labour resources and studied the impact of demographic factors and the structure of education on economic growth as well as the impact of changes in legal regulations on labour supply and wages (among others, +500 programme, lowering of the statutory retirement age).
- Once again, the Labour Market Survey was carried out, focusing on changes in wage expectations of the unemployed, staff recruitment costs, reasons why Polish companies hire foreigners, and the impact of migration on vacancy statistics in employment offices.
- Analysis of economic activity of migrants was conducted, based on the surveys of Polish immigrants in the United Kingdom, Ireland, Germany and the Netherlands and immigration of employees from Ukraine to Poland.
- The research project of the EBC entitled: Wage Dynamics Network was implemented.
- The study of how the structure of the labour market influences the transmission of structural disorders and the monetary transmission mechanism continued.

### 9.6.3 Analysis and research of the economic and financial situation of enterprises

- A series of quarterly NBP Quick Monitoring Surveys focusing on production, employment, investment, financial and pricing decisions of companies and their relations with the banking system were conducted.
- NBP's Annual Survey was conducted, analysing factors affecting the condition of the enterprise sector.
- For the first time, the study of microenterprises in Poland was conducted, focusing on issues important from the perspective of monetary policy: competition in the SME sector, pricing processes, wage issues, as well as the outlook for growth and its financing.

 An analysis of the impact of uncertainty on investment decisions of enterprises and the impact of investments on the efficiency of operations and finances of enterprises was conducted.

### 9.6.4 Analysis and research of the real estate market

- Periodical analyses of the situation and prices in the residential and commercial real
  estate market were conducted. Studies of these sectors were extended to address new
  issues (including: regional variations in housing saturation in Poland, price determinants
  in local markets of 17 cities in Poland, macroeconomic modelling of mortgage loans).
- NBP published quarterly *Information on home prices and the situation in the residential* and commercial real estate market and the Report on the situation in the residential and commercial real estate market in 2016.

### 9.7 Research papers of NBP staff

Dissemination of results of research conducted by NBP staff enables scientific verification of its quality and methodological correctness – thanks to the assessment by domestic and foreign experts as well as the peer review process.

In 2017, 65 research papers of NBP staff were published in renowned national and international periodicals, including 12 papers in Polish and 53 papers in English. 18 research papers were published in journals from the ISI Master Journal list (Appendix 6).

### 9.8 Scientific conferences and seminars organized by NBP

In 2017, NBP organized international scientific conferences, attended by representatives of central banks and representatives of the scientific community with significant scientific achievements:

- 18–19 May 2017: *The Role of Central Bank in Economic Development*. The conference was organized for the second time in Kiev in cooperation with the National Bank of Ukraine. It was devoted to the role of the central bank in supporting economic growth.
- 3–7 July 2017: 6th NBP Summer Workshop. It was an annual meeting of Polish economists
  conducting research in the most important foreign and domestic institutions, focusing on
  macroeconomics and finance.
- 20 October 2017: *The Evolving Role of Central Europe in the European Economy*. The seventh session of the Conference on the Future of the European Economy was devoted to the challenges facing the Central and Eastern European countries, which have operated as market economies for over 26 years.

- 20–21 November 2017: NBP Workshop on Forecasting. The workshops addressed the methods used in forecasting the main macroeconomic variables in central banks and other forecasting institutions.
- 21–23 November 2017: Recent trends in the real estate market and its analysis. During the sessions, the results of price analyses and the current situation in the residential and commercial real estate markets were discussed. The conference was organized in cooperation with the Warsaw School of Economics. After the conference, a two-day NBP workshops was held.

Moreover, 27 open scientific seminars were organized. They addressed various issues related to monetary policy, functioning of the economy, the financial system and other aspects of economic policy. The list of seminars is presented in Appendix 6.

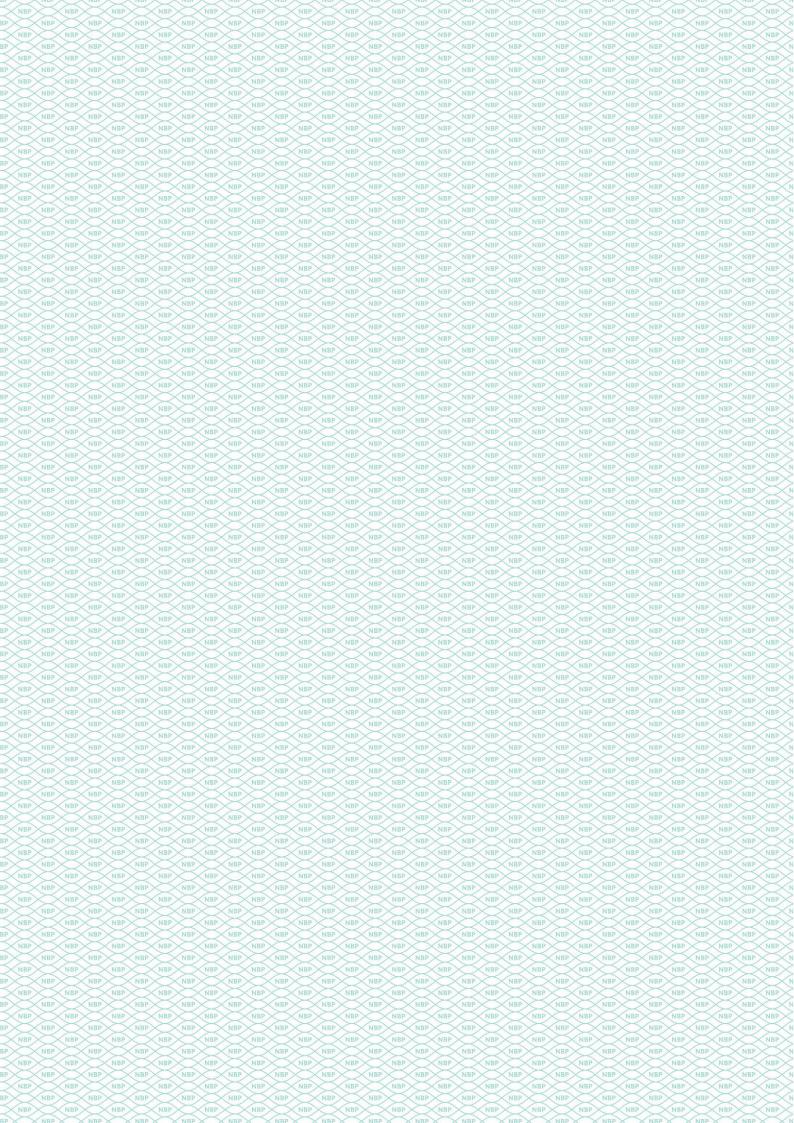
### 9.9 Cooperation with the scientific community, central banks and international institutions

### In 2017:

- As part of the cyclic NBP Visiting Researcher Program NBP hosted 7 researchers all presented the results of their research during scientific seminars.
- 7 reports from research projects carried out as part of competitions for NBP research projects to be implemented by NBP staff and persons from outside NBP were approved.
   Another eighth competition for research projects was also held (9 projects were approved).
- NBP representatives participated in works of working groups of the ESCB, EU bodies and
  other national and international institutions, focusing on issues and projects related to
  the main areas of NBP's analytical and research work.

### Highlights of 2017:

- enhancement of forecasting tools and execution of numerous model and analytical research works,
- publication of 65 research papers, including 18 in magazines from the ISI Master Journal list,
- organization of 5 international scientific conferences and 27 scientific seminars open to the public.



## **Statistics**



### Statistics<sup>1</sup>

Narodowy Bank Polski is a key institution conducting statistical research in Poland. The Bank's statistical research relates primarily to the operation of the financial sector, and the broadly understood external relations. The collected data and information is used in the implementation of monetary policy, financial sector risk monitoring, financial stability reports and macroprudential analyses.

NBP publishes a broad range of statistical data on a regular basis; it also submits reports to international institutions, in particular, the ECB, Eurostat and BIS. Since the Bank's data processing methodology is in compliance with the applicable standards, this enables international comparisons and the monitoring of Poland's position against the background of other European countries. NBP continues to expand the range of data collection, and develops methods of their acquisition, processing and publication.

### 10.1 Core tasks with respect to statistics

The core tasks of NBP relating to statistics include collection of data to be reported, above all, from financial sector entities, and – to a lesser degree – from non-financial entities. In parallel, the Bank carries out work on data processing methodology, its harmonisation with the changing international standards, and improvement of IT methods of collecting and presenting data. NBP also receives statistical data from other institutions, such as the Statistics Poland, the Financial Supervision Authority, and the National Securities Depositary.

In 2017, NBP continued to provide statistical compilations, analytical materials and publications addressed to both internal recipients at the bank and external recipients. The most important of these include:

- quarterly reports on the balance of payments, the International Investment Position of Poland annual report,
- quarterly data on Poland's external debt and international investment position,
- monthly data on the balance of payments,
- monthly consolidated balance sheet of monetary financial institutions, including key monetary aggregates (money supply M3 and its counterparts),
- monthly data on the average interest rate of bank deposits and loans,
- monthly financial data of the banking sector (assets, liabilities, profit and loss account),
- quarterly data on banking sector capital adequacy,
- quarterly data on domestic investment funds,
- quarterly and annual financial accounts, by institutional sectors.

Statistical information was submitted, among others, to national institutions, such as the Sejm (Parliament) of the Republic of Poland, the Council of Ministers, Statistics Poland, the Bank Guarantee Fund, the Office of the Polish Financial Supervision Authority, the Polish Bank

Tasks in this area are performed pursuant to Article 3 (2)(7), Article 17 (4)(13) and Article 23 of the Act of 29 August 1997 on Narodowy Bank Polski and Act the of 29 June 1995 on Public Statistics (Journal of Laws of 2016, item 1068, as amended).

Association and academic establishments. Information was also provided to the ECB and other international organisations, such as Eurostat, BIS, the IMF, the World Bank and the OECD.

### 10.2 Statistical tasks deriving from NBP participation in the European System of Central Banks and in other international institutions

In 2017, NBP continued to cooperate with international institutions in the area of statistics, above all, with the ECB, the European Commission (Eurostat), the Committee on Monetary, Financial and Balance of Payments Statistics (CMFB), the European Banking Authority (EBA), and the European Systemic Risk Board (ESRB).

### 10.2.1 Monetary and financial statistics

In 2017, NBP provided the ECB with harmonised monthly and quarterly data on the aggregated balance sheet of monetary financial institutions (MFIs), as well as monthly interest rate statistics, monthly and quarterly data on assets and liabilities of investment funds, selected annual data on the operation of insurance institutions and data required by the Register of Institutions and Affiliates Data (RIAD).

#### Moreover, in 2017 NBP:

- Completed the development of the new monetary statistics reporting system (MONREP).
   The system comprises modern technology solutions and an advanced concept of data model management. Also, the scope of data collection has been tailored to the current needs of users.
- Initiated work on modifications to the IT systems used to gather and process investment fund data (PEGAZ and INTER-FIN) in order to bring them in line with the revised legal regulations.<sup>2</sup>
- Participated in the activities of the ECB Working Group on Monetary and Financial Statistics, including work on a regulation concerning statistical reporting requirements for pension funds, and on creating the Integrated Reporting Framework for banks.
- Contributed to the Working Group on Analytical Credit Datasets and the Expert Group NEWS1, whose aim was to develop detailed guidelines on reporting relating to individual loans.
- Participated in work on the RIAD 4.0 system and the extension of the range of entities obliged to provide data under this system.

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Regulation of the Minister of Development of 21 September 2017 on the manner, detailed scope and dates for submission to Narodowy Bank Polski of data required in development of monetary policy, periodic assessments of the country's financial position and systemic risk analysis (Journal of Laws item 1803).

• For the first time, NBP provided to the ECB annual data as part of statistics of insurance institutions, drawn up based on the information made available by the Office of the Financial Supervision Authority.

#### 10.2.2 Prudential statistics

With regard to prudential statistics, in 2017 NBP:

- Implemented, within the statistical information system (SIS) new reporting requirements relating to the FINREP Solo and FINREP consolidated package, resulting from, among others, the amendment to the Regulation of the Commission (EU) No. 680/2014 and the coming into effect of the International Standard of Financial Reporting No. 9: Financial Instruments (IFRS 9).
- Extended the scope of data collected within the Additional Liquidity Monitoring Metrics (ALMM) package, as well as the COREP package.
- Introduced changes to reporting on clients which banks have considerable exposure to (the NB300 form), stemming from the ISRF 9 taking effect and new user needs.
- Participated in the activities of ECB working groups: Working Group on Supervisory Statistics and Expert Group on Data Quality.
- Participated in the activities of committees and subgroups operating within the European Banking Supervision, in particular of the Standing Committee on Accounting, Reporting and Auditing (SCARA).
- Continued submission of reports to the ECB in relation to financial reporting and capital adequacy (Consolidated Banking Data).

### 10.2.3 Statistics of the balance of payments and the international investment position

In 2017 NBP:

- Continued to submit to the ECB harmonised monthly and quarterly data on the balance
  of payments, international investment position, official reserve assets, liquid foreign
  exchange assets and liabilities, external debt, as well as annual data on trade in services
  and foreign direct investment (to Eurostat).
- Participated in the activities of international working groups: Working Group on External Statistics at the ECB, Working Group on Balance of Payments Statistics at Eurostat and Working Group on International Investment Statistics at the OECD.

Contributed to the work of the newly established Joint ESS (European Statistical System)
and ESCB Task Force on Foreign Direct Investment (TD-FDI), which deals with preparation
of extended data collection methodology, in accordance with the amended EU regulations.<sup>3</sup>

#### 10.2.4 Other statistics

Other key statistical activities covered the following areas:

- Modernisation of the method to collect and present statistical information. The first stage
  involved implementing a service called "Statistical HUB", targeted at NBP internal users,
  extracting statistical data from many sources to present them in a uniform, transparent
  manner.
- Financial accounts statistics. NBP submitted quarterly and annual financial accounts to the ECB and Eurostat, respectively, participated in the ECB Working Group on Financial Accounts and in the work on ensuring the quality of data used in the EU procedure of macroeconomic imbalances conducted by the Committee for Monetary, Financial and Balance of Payments Statistics (CMFB).
- General Government Sector statistics. In 2017, NBP submitted statistics relating to this
  sector on two occasions. Moreover, NBP participated in the activities of the Working
  Group on General Government Statistics appointed by the President of Statistics Poland
  as well as in the work of the Working Group on Government Finance Statistics at the ECB.
- Real sector statistics. NBP continued cooperation within the BACH group,<sup>4</sup> in particular on improving the quality of data. Among others, a study was drawn up on the impact of Directive 2013/34/EU<sup>5</sup> on reporting duties in individual countries. Furthermore, NBP continued activities in the Risk Assessment Working Group, whose aim is to standardise the methodology for risk assessment analyses conducted by national central banks in cooperation with the ECB. NBP carried out a comparative study of models of credit risk assessment in non-financial enterprises and continued to investigate sectoral risk.
- Statistics on securities investment. NBP started gathering reporting data on investments in securities made by investment institutions other than banks, and participated in the work of the Working Group on Securities Statistics at the ECB.

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Regulation (EU) 2016/1013 of the European Parliament and of the Council of 8 June 2016 amending Regulation (EC) No. 184/2005 on Community statistics concerning balance of payments, international trade in services and foreign direct investment (Official Journal of the EU of 8 June 2016).

<sup>&</sup>lt;sup>4</sup> Working Group on Bank for the Accounts of Companies Harmonised – the working group operating within the European Committee of Central Balance-Sheet Data Offices (ECCBSO).

<sup>&</sup>lt;sup>5</sup> Directive 2013/34/EU of the European Parliament and of the Council of 26 June 2013 on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC.

### Highlights of 2017:

- completion of the new monetary statistics reporting system MONREP,
- introduction of modifications to the reporting information system for the needs of macroprudential statistics, resulting from the amended Regulation of the Commission (EU) No. 680/2014 and the coming into effect of the IIRFS 9,
- implementation of the Statistical HUB service, extracting and presenting data from various sources,
- start of collection of data on statistics of investment in securities from new entities.

# **Education and information**



### **Education and information**

The educational activity of NBP is related to the tasks specified in Article 59 of the Act on Narodowy Bank Polski, pursuant to which the central bank carries out publishing and promotional activities. As part of these, the bank runs projects aiming to increase the transparency of the Bank's activities and to raise public awareness about the principles of operation of the central bank, the banking system and a market economy.

### 11.1 Education

### 11.1.1 Economic Education Programme

As part of its educational activity, NBP implements projects which aim to disseminate the knowledge of the principles of financial market operation, develop attitudes fostering its stability and growth, enhance the knowledge of economic issues, including in the area of the role and mission of the central bank as well as develop entrepreneurship-friendly behaviour, counteract financial exclusion and disseminate knowledge concerning the economic heritage, history of money and new trends in economics.

In 2017, NBP organised two competitions for dissertations in economic subjects: the tenth competition for the NBP President Award for the best MA dissertation and the 16th edition of the essay competition for young people. In 2017, NBP subsidised educational projects addressed to various social groups, including schools, universities, seniors citizens and persons at risk of financial exclusion. NBP's decisions on co-financing educational projects were preceded by a verification involving several stages. Opinions on projects with a value exceeding PLN 30 thousand were provided by the Council for Economic Education, the opinion-providing and advisory body at the Management Board of NBP. Projects with the value of less than PLN 30 thousand were evaluated by the Commission for the Support of Social Educational Initiatives established at NBP. In total, 139 projects were co-financed (24 projects with the opinion of the Council and 115 projects with the opinion of the Commission).

All educational projects implemented in 2017 have been evaluated. The evaluation is carried out by NBP staff as well as external research agencies selected under a tendering procedure. The Council for Economic Education and the Commission for the Support of Social Educational Initiatives play a significant role in this process. These groups formulate conclusions and recommendations providing the basis for the evaluation of the submitted projects.

<sup>&</sup>lt;sup>1</sup> The topic of the paper by seventh formers of primary schools was: Is intervention in unequal income distribution necessary? If so – whose intervention and what should it consist of, if not – why?, for upper secondary schools: Does GDP growth in a given country mean a growth of welfare and improvement in the quality of citizens' quality of life?

<sup>&</sup>lt;sup>2</sup> 100 thousand students and 3.2 thousand teachers were covered by the activities.

<sup>&</sup>lt;sup>3</sup> It comprises representatives of social and professional communities associated with the educational and scientific activity, social communication and financial policy.

### 11.1.2 Sławomir S. Skrzypek NBP Money Centre

The activities of the Sławomir S. Skrzypek NBP Money Centre, the exhibition and educational facility launched in 2016, aims to bring the history of money, along with its role in Poland's and the world's social and economic history, closer to the public. The Centre offers modern interactive exhibitions involving approx. 10 thousand exhibits, as well as educational programmes addressed mainly at school and university students. Visiting the exhibition and participation in the educational activity of the NBP Money Centre is free of charge.

In 2017, the facility received over 58 visitors, most of them school groups. At the same time, families with children, senior citizens and persons with various forms of disability accounted for a higher share of visitors in 2017 than the year before.

As part of the activities of the Centre, the following theme programmes were organised in 2017: the initiatives *Winter in the city* and *Summer in the city*, meetings devoted to the history of bullion reserves of Bank Polski SA, family visits involving the use of interactive maps of the facility and meetings with experts devoted to the security features of Polish banknotes.

### 11.1.3 Economic Education Portal - NBPortal.pl

NBPortal.pl is one of the first educational services in Poland. It is addressed mainly to the students of lower and upper secondary schools, university students and teachers. The portal's objectives include promoting knowledge of the economy, market mechanisms and running a business, the functioning of banks and financial markets. the portal offers educational materials, including presentations and multimedia games, crosswords, cartoon strips, quizzes, articles and reviews.

In 2017, NBPortal.pl was visited by 515 thousand users (in 2016 – 385 thousand).

### 11.1.4 IMPULS Club of Entrepreneurial Teachers

As part of NBPortal.pl, the IMPULS Club of Entrepreneurial Teachers operates, bringing together over 770 teachers from lower and upper secondary schools from all over Poland.

In 2017, IMPULS Club members had the opportunity to participate in 15 educational projects and competitions and 14 workshops in the area of economics, finance and entrepreneurship.

### 11.2 Information and promotion

### 11.2.1 Information and promotion campaigns

In 2017, NBP carried out the following information and promotion campaigns:

• Bezpieczne pieniądze ["Safe Money"]. The campaign was related to the introduction into circulation of the new banknote with the face value of 500 zł. The information activities

included, among others, preparation of the dedicated website, multimedia materials and an interactive training course concerning security features of banknotes in circulation. Information on the new banknote was also communicated by means of the broadest coverage media: TV stations, radio and press, via the Internet and in cooperation with institutional partners and national commercial chains.

- Uważaj na kryptowaluty [Beware of cryptocurrencies]. In 2017, Narodowy Bank Polski, jointly with the Polish Financial Supervision Authority initiated an information campaign warning against the risk associated with investing in so-called cryptocurrencies. NBP and KNF issued the joint communication concerning threats related to investing in these products and prepared a website addressed to this issue (uwazajnakryptowaluty.pl).
- *Nie daj się nabrać. Sprawdź, zanim podpiszesz.* ["Don't let yourself be cheated. Check before you sign"]. NBP continued activities aimed at drawing public attention to the risks associated with concluding financial agreements with institutions that are not subject to special state oversight.

### 11.2.2 Presentation of NBP's activity on the Internet

In 2017, the following activities of NBP were presented on the Internet:

- Live coverage (streaming with simultaneous interpretation) of the press conferences of the MPC and international conferences organised by NBP continued.
- The NBP Internet channel (NBPtv on YouTube) and NBP Facebook and Twitter websites were operated. At the end of 2017, the NBP channel on Youtube contained 81 new videos, 2.6 thousand persons declared its subscription and over 1.7 million persons visited the website (in 2016, respectively: 70 materials, 1.3 thousand subscriptions and approx. 1.2 million visits). A considerable growth of interest in NBP videos among Facebook and Twitter users was also recorded.
- A dedicated channel with NBP video materials was created in the service of Polish National Television (Telewizja Polska) vod.tvp.pl.
- The activity of the *ObserwatorFinansowy.pl* Internet portal (including its English version), created in cooperation with academic communities and economic experts, was continued. The websites of the service were visited by approx. 113 thousand users per month (a 30% growth in relation to 2016).

In 2017, the NBP.pl website was visited by more than 103 million users (102 million in 2016).

### 11.2.3 Liaising with the media and market analysts

While liaising with the media in 2017, NBP:

 informed of reports and analyses prepared at NBP, including reports on monetary policy, the financial system (in particular, macroprudential supervision), payment system and the development of the macroeconomic situation,

- presented the current activity of NBP, including issue policy and educational activity of the central bank,
- organised meetings with journalists and press conferences, including those following the Monetary Policy Council meetings and the publication of the most important NBP reports,
- organised the 15th edition of the Władysław Grabski competition,
- answered current questions of journalists on issues regarding NBP's activity.

### 11.2.4 Other information and promotion activities

Other information and promotion activities of NBP in 2017 included the following:

- promotion of collector coins and notes,
- organisation of the NBP Open Days (under the slogan: Poznaj NBP ["Get to Know NBP"])
  in six NBP regional branches,
- promotion of Sławomir S. Skrzypek NBP Money Centre.

### 11.3 Publishing and Library

NBP's publishing activity comprises issuing documents related to central bank tasks as well as documents aimed at dissemination of knowledge in the scope of economics and finance.

In 2017, the following publications were issued: *Annual Report*, *Narodowy Bank Polski Plan of Activity, Report on the Operations of Narodowy Bank Polski, Inflation Report*, *Financial System in Poland, Financial System Stability in Poland, Information on home prices and the situation in the housing and commercial real estate market in Poland, Balance of Payments of the Republic of Poland, International Investment Position, Information Bulletin, Bank i Kredyt* (Bank and Credit), *Materiały i Studia* (published in in Polish), *NBP Working Paper* (materials in English), *A Review of European Issues*, quarterly summaries of the *ECB Economic Bulletin* in Polish, *Bankoteka* (educational journal of the NBP Money Centre).

In 2017, the following publications were issued for the first time: *NBP Payment System Oversight Policy, Payment system oversight* and *Polish Payment System Oversight Report for 2016.* 

The NBP Central Library is a scientific library. It holds one of the biggest collections in the scope of economic sciences, in particular banking, finance and management. In 2017, the NBP Central Library was visited by approx. 8 thousand readers. A total of 19 thousand books and periodicals were made available. The collection of the NBP Central Library comprises over 146.5 thousand book volumes (in 2017, the collection expanded by approx. 3 thousand books).

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<sup>&</sup>lt;sup>4</sup> A detailed list of publications of *Materialy i Studia* and *NBP Working Paper* series issued in 2017 is contained in Appendix 6.

### 11.4 Petitions, complaints, requests and letters

In 2017, NBP considered 4,155 queries (4,533 in 2016), of which 3,956 in the form of letters (4,368 in 2016) and 199 as complaints and requests for public information (165 in 2016). Out of all these cases, 3,928 were examined directly at NBP, whilst 227 were handed over to banks and other institutions, in line with their remit and areas of responsibility.

Similar to 2016, issues handled at NBP concerned many issues, including: commercial banks' credit and deposit activity, historical information concerning the activity of commercial banks and financial institutions, indicating legal successors of liquidated banks, interpretation of legal regulations, cash and issue and collector issues, HR and social issues, applications for NBP patronage, statistical information, NBP monetary policy information, information on FX loans.

### Highlights of 2017:

- co-financing of 139 projects in the scope of economic education carried out all over the country,
- expanding the educational offer and promotion of educational and exhibition facility, Sławomir S. Skrzypek NBP Money Centre,
- initiating jointly with the KNF information campaign concerning so-called cryptocurrencies,
- development of NBP's information activity on the Internet launching new channels for communication with users.

# Legislative activity



### Legislative activity<sup>1</sup>

### 12.1 Legislation by the NBP governing bodies

In 2017, the governing bodies of NBP issued 147 legal acts, including 45 by the President of NBP, 9 by the Monetary Policy Council, and 93 by the Management Board of NBP. Out of the legal acts issued by the governing bodies of NBP, 34 were published in Monitor Polski (the Official Gazette of the Republic of Poland) and 25 in the Official Journal of Narodowy Bank Polski.

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

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

In 2017, NBP received:

- 63 draft acts from the Chancellery of the Sejm, the Chancellery of the Senate and the Chancellery of the President; for each of them an opinion was drawn up (NBP position);
- 163 documents submitted as part of inter-ministerial consultations, including 46 draft acts, for which 104 opinions were drawn up (NBP positions);
- 960 documents sent as part of the work of the Standing Committee of the Council of Ministers, including 221 draft acts, for which 13 opinions were drawn up (NBP positions);
- 33 draft legal acts as part of the work of the Committee for European Affairs, for which
   4 opinions (NBP positions) were drawn up.

In 2017, NBP representatives participated in 14 consultative conferences, 27 sessions of legal committees, as well as in 15 meetings of Sejm and Senate committees and subcommittees.

The most important draft legal acts on which NBP issued opinions in 2017 which do not directly regard the banking sector (the most important legal acts on the banking sector are discussed in detail in Section 12.3), include:

- bills which subsequently became:
  - the Act of 11 May 2017 on Statutory Auditors, Audit Firms and Public Oversight (Journal of Laws 6 June 2017, item 1089),

<sup>&</sup>lt;sup>1</sup> Tasks in this field are performed, among others, pursuant to Article 7, Article 12, Article 16(3), Article 17(3)(2) and 17(4), and Article 21(3) and (4) of the Act of 29 August 1997 on Narodowy Bank Polski and pursuant to the provisions of other acts in compliance with delegations included therein for the governing bodies of NBP to adopt legal acts.

- the Act of 8 June 2017 amending the Act on Bonds (Journal of Laws of 22 June 2017, item 1199),
- the Act of 15 December 2017 on Insurance Distribution (Journal of Laws of 29 December 2017, item 2486);

#### bills:

- government Bill the Law of Entrepreneurs and government Bill on the Provisions Implementing the Law of Entrepreneurs;
- government Bill on Real Property Rental Market Companies,
- government Bill amending the Restructuring Law and the Code of Administrative Procedure,
- government Bill amending the Act on Trading in Financial Instruments and Some Other Acts,
- government Bill amending the Act on Tax on Goods and Services and Some Other Acts,
- government Bill on the Protection of Personal Data and government Bill on Provisions
   Implementing the Act on the Protection of Personal Data,
- government Bill on the National System of Cyber Security,
- government Bill on Transparency of Public Life.

In 2017 NBP participated in the works of the Committee of European Affairs, in particular, by issuing opinions on selected draft national legislation referred to in item 12.2 and 12.3. NBP also took part in consultations and analytical work carried out by the government in relation to Brexit, both before and after the start of negotiations on the withdrawal of the United Kingdom from the EU.

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

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

### 12.3 Draft legislation related to the operation of the banking system

Narodowy Bank Polski issued opinions on:

- bills which subsequently became:
  - The Act of 29 September 2017 amending the Financial Market Supervision Act and the Insurance and Reinsurance Act (Journal of Laws of 14 November 2017, item 2102).

#### bills:

 bill proposed by the President of the Republic of Poland to amend the Act on Supporting Borrowers in Financial Difficulties Who Have Taken Housing Loans and the Corporate Income Tax Act,

- government Bill on Combating Money Laundering and Financing of Terrorism,
- government Bill amending the Act on Payment Services and Some Other Acts,
- government Bill amending the Acts on the Prevention of Using the Financial Sector for Fiscal Fraud,
- government Bill amending the Financial Market Supervision Act and Some Other Acts,
- government Bill amending Other Acts in Connection with the Development of Electronic Payments,
- parliamentary Bill amending the Public Finance Act and the Act on Narodowy Bank Polski.

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

In 2017, NBP participated in assessing 54 proposals for legislative acts on which the ECB issued opinions.<sup>2</sup> The ECB opinions on draft Community laws related to:

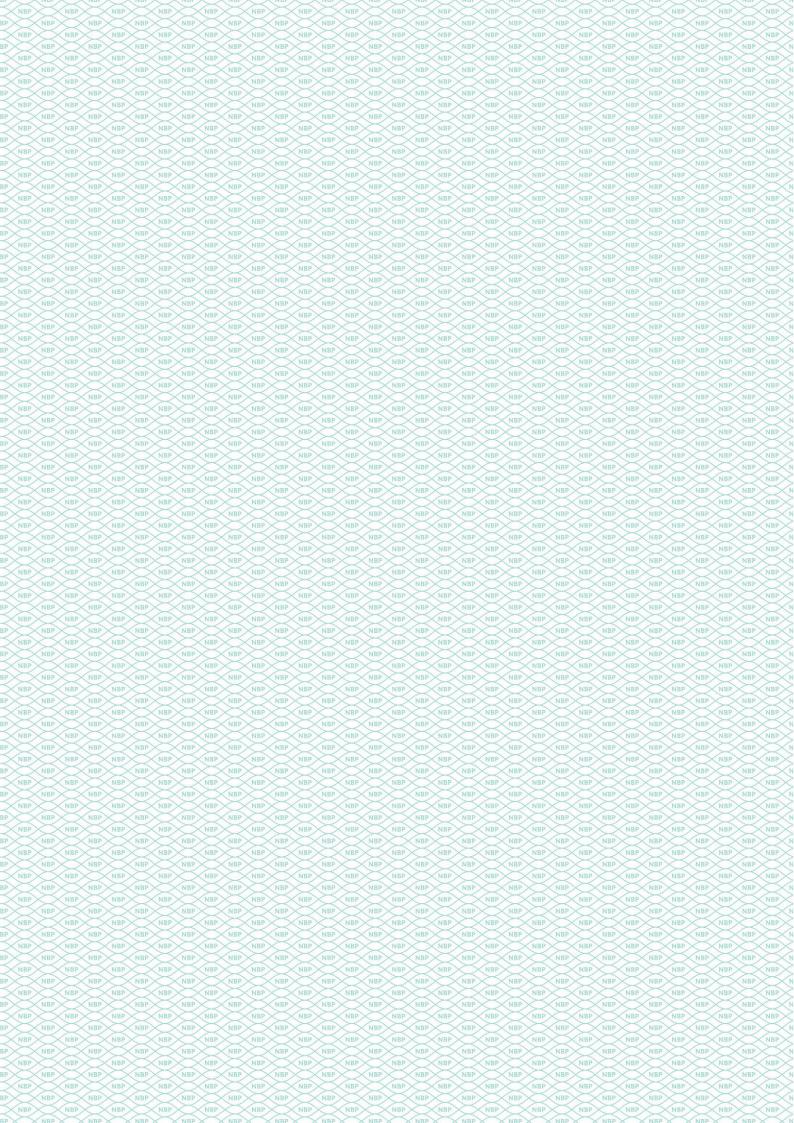
- a proposal for a Directive of the European Parliament and of the Council on amending Directive 2014/59/EU as regards the ranking of unsecured debt instruments in insolvency hierarchy,
- a proposal for a Directive of the European Parliament and of the Council on preventive restructuring frameworks, second chance and measures to increase the efficiency of restructuring, insolvency and discharge procedures and amending Directive 2012/30/EU,
- a proposal for a Regulation of the European Parliament and of the Council on a framework for the recovery and resolution of central counterparties and amending Regulations (EU) No. 1095/2010, (EU) No. 648/2012, and (EU) No. 2015/2365,
- a proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) No. 1095/2010 and amending Regulation (EU) No. 648/2012 as regards the procedures and authorities involved for the authorisation of CCPs and requirements for the recognition of third-country CCPs,
- a proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) No. 648/2012 as regards the clearing obligation, the suspension of the clearing obligation, the reporting requirements, the risk-mitigation techniques for OTC derivatives contracts not cleared by a central counterparty, the registration and supervision of trade repositories and the requirements for trade repositories.

Consultations also concerned numerous national draft acts of EU Member States, including selected Polish draft acts set out in item 12.2 and 12.3. They regulate, among other things, issues relating to financial supervision, bank credit and restrictions on cash payments.

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

### Highlights in 2017:

- participation in work of the state authorities concerning draft acts with relevance to the banking system,
- issuing opinions on proposals of EU legislation and draft acts from EU Member States on financial and banking issues, including financial supervision, bank lending and restrictions on cash payments.



# International activity



### International activity<sup>1</sup>

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

In 2017, NBP representatives participated in the activities of EU bodies, including: the General Council of the ECB, the General Council of the ESRB, committees and working groups of the ESCB and ESRB, the Council of ECOFIN (informal meetings), committees and working groups of the Council of the European Union and the European Commission.

NBP focused on the activities of the European institutions responsible for monitoring of systemic risk and protection of financial stability in the EU, and on issues related to risk mitigation in the EU banking sector. Moreover, NBP participated in drawing up the amendment to the Bank Recovery and Resolution Directive (BRRD), the Regulation on the Single Resolution Mechanism (SRM) as well as the Capital Requirements Directive (CRD IV) and the Capital Requirements Regulation (CRR). Finally, NBP took part in works concerning the creation of the common smoothing mechanism for the Single Resolution Fund (SRF).

### 13.1.1 Cooperation within the European System of Central Banks

NBP representatives participated in the work of the ESCB to the extent resulting from the status of the central bank of a Member State which remains outside the euro area. They took part in the quarterly meetings of the ECB General Council (one of the ECB's decision-making bodies) and in the work of the ESCB committees. Moreover, NBP organised four off-site meetings of ESCB committees and working groups in Poland.<sup>2</sup>

The ECB General Council's meetings primarily addressed issues relating to the macroeconomic situation of the EU Member States, monetary policy of the countries outside the euro area, stress tests and the monitoring of central bank activities with regard to the prohibition of financing of the public sector with central bank funds<sup>3</sup> and prohibition of privileged access<sup>4</sup>.

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

- the protection again cyber threats,
- the concept of the digital central bank money and so-called cryptocurrencies,
- creation of the central system of registration of European borrowers at the European level (AnaCredit) and at a level of national central banks,
- euro banknote counterfeiting,

<sup>&</sup>lt;sup>1</sup> Tasks in this field are performed pursuant to Article 5, Article 11(2) and (3), Article 23(7) of the Act on NBP of 29 August 1997 and the Statutes of the ECB and the ESCB.

<sup>&</sup>lt;sup>2</sup> In 2017, off-site meetings of two working groups were organised in Poland: Working Group on Analytical Credit Datasets, Working Group on Forecasting as well as two conferences: Risk Budgeting Workshop and 10th ES/ESCB Operational Risk Management and Business Continuity Management Conference.

<sup>&</sup>lt;sup>3</sup> This follows from Article 123 of the Treaty on the Functioning of the European Union.

<sup>&</sup>lt;sup>4</sup> This follows from Article 124 of the Treaty on the Functioning of the European Union.

- the legislative proposal of the European Commission concerning recovery and resolution of CCP clearing houses,
- accounting and financial reporting of central banks of the ESCB,
- observed and future effects of Brexit for the economic activity of the EU and individual countries.

#### 13.1.2 Collaboration with other EU bodies

In 2017, NBP representatives participated, directly or indirectly, in the activities of the following EU bodies:

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

NBP organised four meetings of members of the EU bodies, including the meeting of the Working Group on Risk Assessment and the Cash Issuance Committee Meeting acting under the European Banking Conference.

NBP drafted background information required for preparation of Poland's position to be presented by government representatives in the course of work of EU bodies dealing, among others, with draft regulations of the EU financial system.

### 13.2 Collaboration with international economic and financial institutions

### 13.2.1 The Organisation for Economic Co-operation and Development (OECD)

In 2017, NBP experts participated in meetings of committees and working groups of the OECD and in the activities under the OECD International Network on Financial Education.

In December 2017, NBP representatives and members of the MPC met members of the review mission by OECD Secretariat, preparing the next, 15th Economic Survey of Poland. The subjects discussed during the meetings included, among others, the current economic situation and issues related to the monetary policy and stability of the financial sector in Poland.

### 13.2.2 The World Bank Group

As part of cooperation with the World Bank Group (WB), representatives of NBP participated in the Spring Meetings of the Boards of Governors of the WB and the IMF in Washington (in April) and in the Annual Meetings of Governors of the WB and the IMF in Washington (in October). The subjects discussed during the meetings included, among others, a review of the membership quota in the WB constituent institutions, in this context – the potential selective increase in capital, the evaluation of the WB action strategy implementation and possible WB engagement in resolving global development problems.

NBP cooperated with ministries in issuing opinions concerning documents considered at the meetings of the WB Board of Executive Directors and in the works regarding the new WB Strategy for Poland<sup>5</sup>. It also organised – jointly with the World Bank – the presentation of the cyclical World Bank report entitled Global Economic Prospects. Weak Investment in Uncertain Times.

### 13.2.3 The International Monetary Fund (IMF)

As part of cooperation with the International Monetary Fund in 2017, NBP representatives participated in meetings with the IMF, including: during the Fund's mission to Poland held pursuant to article IV of the Agreement of the IMF, and the preparatory mission in connection with the review of the financial sector in Poland (Financial Sector Assessment Program) scheduled by the IMF in 2018. They also took part in issuing opinions on documents assessed by the Executive Board of the IMF<sup>6</sup>.

Pursuant to the joint application submitted to the IMF by the President of the NBP and the Minister of Development and Finance, Poland's access to the Flexible Credit Line (FCL) granted by the Fund in January 2017 was terminated.<sup>7</sup> The reasons for this decision of the Polish authorities included the improvement of the macroeconomic conditions in Poland's external environment, good global economic growth outlook, mainly in the euro area, and the sound foundations of the Polish economy.

Under the temporary increase of the IMF financial resources, Narodowy Bank Polski:

- stands ready to extend to the IMF an interest-bearing loan up to the amount corresponding to SDR 1.29 billion<sup>8</sup> – as a member of New Arrangements to Borrow (NAB);
- is a signatory of the bilateral loan agreement with the IMF for the amount of EUR
   6.27 billion; the agreement is effective until the end of 2019 and may be extended by one year, subject to NBP's approval.

The funds made available by NBP to the IMF both under the NAB and the bilateral loan agreement will retain their status as official foreign reserves. The IMF did not use the funds provided under the bilateral loan. Under the NAB, as at the end of 2017 the IMF had used the amount corresponding to SDR 142.1 million.<sup>9</sup>

<sup>&</sup>lt;sup>5</sup> The endorsement of the document is scheduled for the second quarter of 2018.

<sup>&</sup>lt;sup>6</sup> Since November 2016, a representative of Poland (appointed by the Minister of Finance as a Governor of the Republic of Poland in the IMF) has been acting as a chairman of the IMF constituent of which Poland is a member. The chairmanship is held on a rotation basis and it will last until November 2018.

<sup>&</sup>lt;sup>7</sup> On 13 January 2017 the IMF Executive Board decided to grant Poland access to the FCL for the consecutive two years in the amount of SDR 6.5 billion (approximately USD 8.8 billion according to the average exchange rate of NBP as at 12 January 2017). NBP operated the FCL as the financial agent of the Government of the Republic of Poland, under Article 52(3) of the Act on NBP.

<sup>8</sup> In February 2017, the Management Board of NBP approved the continuation of NBP share in NAB until November 2022 under the current terms.

<sup>&</sup>lt;sup>9</sup> In 2011–2017 NBP granted loans to the IMF under the NAB in the total amount of SDR 451.2 million and received the repayment of the loan in the total amount of SDR 309.1 million.

### 13.2.4 The European Bank for Reconstruction and Development (EBRD)

NBP's cooperation with the EBRD in 2017 included, among others:

- participation of NBP representatives in the 26th Annual Meeting of the EBRD Board of Governors in Nicosia,
- issuing opinions concerning documents considered at the meetings of the EBRD Board of Directors and participation in the preparation of the EBRD Strategy for Poland for 2018–2023, <sup>10</sup> in cooperation with ministries,
- meeting of the President of the NBP with the President of the EBRD, Suma Chakrabarti during his visit to Poland,
- organising jointly with the Ministry of Foreign Affairs and the EBRD Regional Office in Warsaw – two international seminars for Polish entrepreneurs concerning the opportunities for participation in projects implemented by the EBRD outside Poland (Western Balkans, Bulgaria, Romania and Belarus),
- organising in cooperation with the Resident Office of the EBRD the presentation of the cyclical report entitled *Transition Report 2016–17. Transition for all: Equal opportunities* in an unequal world.

### 13.2.5 The Bank for International Settlements (BIS)

In 2017, NBP representatives participated in six Governors' meetings of BIS. In June 2017, the annual General Meeting of BIS Shareholders was held, which approved the BIS 87th Annual Report and the balance sheet of the Bank as at 31 March 2017. The profit and loss account posted a net profit of SDR 827.6 million, of which SDR 167.4 million was allocated for the payment of the dividend. Narodowy Bank Polski received a dividend amounting to SDR 2.4 million.

#### 13.2.6 The International Bank for Economic Cooperation (IBEC)

In 2017, representatives of NBP, together with representatives of the Ministry of Finance, participated in meetings of the IBEC Council and working meetings related to the activities of the Bank.

### 13.2.7 The Asian Infrastructure Investment Bank (AIIB)

NBP continued cooperation with the Ministry of Finance involving issuing opinions on documents and formulating Poland's position concerning the activity of the Asian Infrastructure Investment Bank.<sup>11</sup>

In 2017, a representative of NBP participated in the annual meeting of the AIIB Board of Governors during which the current activity of the bank as well as the challenges facing the AIIB were discussed.

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 $<sup>^{10}</sup>$  The document was approved by the EBRD Board of Directors on 11 April 2018.

<sup>&</sup>lt;sup>11</sup> The NBP representative acts in the capacity of the Vice-Governor at the AIIB; the Minister of Finance acts in the capacity of the Governor.

#### 13.2.8 Other activities on the international arena

As part of its activity on the international arena, NBP participates in the organisation of international conferences (including, in cooperation with foreign institutions) and provides technical assistance to central banks of developing countries.

In 2017, NBP organised or co-organised 2 international conferences (besides conferences discussed above and in Chapter 9), including:

- on 27 February 2017 a conference organised in cooperation with the European Investment Bank (entitled *Investment and Investment Finance – the Polish Story*),
- on 9 June 2017 the macroeconomic workshop organised with the National Bank of Austria (Oesterreichische Nationalbank, OeNB) for participants of the Vienna Initiative member states (entitled NBP – OeNB Macroprudential Workshop – What we have learned by doing).

In the framework of the technical cooperation of Narodowy Bank Polski with central banks and institutions from developing countries performing tasks corresponding to those carried out by NBP, NBP implemented a total of 63 projects (with participation of 327 persons<sup>12</sup> from 27 central banks), including:

- 26 study visits, 29 expert visits and 1 internship,
- 3 seminars (including one in cooperation with the Polish Security Printing Works (PWPW SA) and the Polish Mint (Mennica Polska SA) devoted to the payment systems and non-cash settlements, cash transactions, production of coins and banknotes as well as legal conditions of central bank activity,
- 4 workshops related to: modelling of monetary transmission on the emerging markets, monetary policy tools, methods of presentation of direct foreign investment (FDI) and transport of cash.

In 2017, in the consortium with Deutsche Bundesbank and the Bank of Lithuania, NBP won the competition for the implementation of the European Commission twinning project for the National Bank of the Republic of Belarus. The project will be carried out in 2018–2019.

### Highlights of 2017:

- involvement of NBP in activities of the European institutions responsible for systemic risk monitoring and protection of the financial stability within the EU,
- termination on request of the Ministry of Finance and NBP of Poland's access to the IMF Flexible Credit Line,
- winning the competition by NBP, in the consortium with central banks of Germany and Lithuania, for the implementation of the project financed by the European Commission for the National Bank of the Republic of Belarus.

 $<sup>^{\</sup>rm 12}$  The number does not include persons trained during expert visits.

# Internal development of NBP



### **Internal development of NBP**

### 14.1 Human resources management

#### 14.1.1 NBP head count

In 2017, the average head count at NBP was 15 full-time posts lower than in 2016, amounting to 3,281 full-time posts. The reduction in the head count is the effect of the centralisation of services to account holders in the scope of cash transactions and concentration of the banknote counting and sorting process.

Expenses related to the remuneration of employees, along with the related provisions and payroll tax expenses in 2017, were 2.4% higher than in 2016 and, including provisions for future liabilities to employees, they went up by 2%.

The change in the NBP average head count in 2014–2017 is presented in Table 14.1.

Table 14.1 Change in the NBP average head count in 2014–2017

Specification	2014	2015	2016	2017	2017–2016
Total	3,622	3,387	3,296	3,281	-15
Head Office and ZUG*	1,983	1,926	1,934	1,949	15
Regional branches	1,639	1,461	1,362	1,332	-30

<sup>\*</sup> ZUG – a former organisational unit of NBP, separate from the NBP Head Office, liquidated on 31 December 2014.

Source: NBP data.

### 14.1.2 Developing NBP staff qualifications

The purpose of the NBP training activity is to ensure competence and efficiency of the staff. In 2017, every employee participated, on average, in 2.5 training events. The evaluation by NBP of the effectiveness of training sessions continued to be very high and reached 4.8 (on a scale from 1 to 5).

In 2017, training events within the European System of Central Banks were organised, the NBP Management Development Programme was continued, and measures to support new employee adaptation were undertaken. Internships for 25 students of Polish universities and 14 students of foreign universities were also organised (the prerequisite for participation in the internship is the preparation of a thesis in finance and banking).

### 14.2 Organisational changes

The most important organisational changes at NBP in 2017 included:

- As of 15 February 2017 within the structure of the Economic Institute, the Bureau for Integration with the Euro Area (BISE) was liquidated, whereas the Bureau for Competitiveness and Convergence was converted into the Bureau for Competitiveness which took over a part of tasks of the liquidated BISE. These changes were associated with the decision of the Council of Ministers to liquidate the office of the Government Plenipotentiary for the Introduction of the Euro by the Government of Poland as well as the fact that the government of Poland does not carry out any activities related to Poland's accession to the euro area.
- As of 20 March 2017, the Economic Institute was converted into the Economic Research
  Department and the Economic Analysis Department. The organisational separation of
  the research area from the analytical area allowed to improve the use of resources and
  increase the specialisation of both departments' staff.

### 14.3 Operational risk management

The objective of monitoring the operational risk level at NBP is to minimise the probability of the materialisation of events disrupting the implementation of tasks, resulting in financial losses, or deteriorating NBP's reputation.

In 2017, current and future threats were identified and analysed on an on-going basis, the IT system supporting operational risk management was expanded and the cycle of training events for NBP employees was conducted. The promotion of attitudes corresponding to the standards described in the *Code of Ethics for NBP Employees* was also continued.

### 14.4 Investment activity

In 2017, expenditure on investment purchases of NBP amounted to PLN 93.3 million (compared to PLN 119.0 million in 2016). The PLN 25.7 million decline was mainly a result of the fact that the bank incurred considerable expenditure in 2016 – for the modernisation of the NBP server infrastructure, completion of the construction of the NBP Money Centre and for the purchase of high-performance banknote sorting machines, including the supplementary equipment.

The ITC investment in 2017 concerned mainly the implementation of new or upgrading of used IT systems and applications, cyber security systems, and modernisation of the network and data storage infrastructure. The most important construction investments included the following continued multiannual tasks, i.e. the reconstruction of the building of the NBP Regional Branch in Kraków and the programme of modernisation of technical security systems at NBP.

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### 14.5 IT support for the banking system and NBP

The most important activities in the IT area performed in 2017 at NBP included:

- enhancing the level of cyber security of the State budget settlements owing to the implementation of new protection mechanisms in the NBE electronic banking system,
- launching the Security Operations Centre, enabling efficient tracking of incidents and faster response,
- completion of the construction of the Target 2 Securities system (T2S-NBP),
- participation in the activities of technical groups operating at the ECB and the SWIFT
   Forum of the European Central Banks.

Moreover, in 2017, new – upgraded and extended in technological terms – versions of IT systems in the following areas were introduced: monetary policy, own administrative activities, cash-and-issue activity, State Treasury service, accounting and statistics.

### 14.6 Internal audit

In 2017, 36 audits were conducted<sup>1</sup> (in 2016 – 27 audits and one advisory task). The audits covered most of the activities of NBP, including in particular cash-and-issue activities, IT, foreign exchange activity, activities for the financial system stability, management of foreign exchange reserves and the State Treasury service. The oversight of the security of IT systems at NBP, educational activities, statistics, accounting and internal organisation were also audited.

The audit covered 23 departments of the NBP Head Office and 10 NBP regional branches. The audits resulted in instructions and recommendations aimed at removing irregularities, increasing the efficiency of operations and improving the organisational solutions applied.

### 14.7 Activity of NBP regional branches

Narodowy Bank Polski carries out its activity in the field through 16 regional branches located in each voivodeship city.

In 2017, the regional branches:

- participated in analytical research in the area of statistics and foreign exchange, including new surveys on the real estate market, labour market and research related to micro-enterprises,
- organised 9 conferences addressed to local governments, academic and scientific communities and entrepreneurs, the subjects of which included the economy, finance, money and banking,
- carried out optimisation work in the organisational and administrative area and continued similar activities in the cash-and-issue area.

 $<sup>^{\</sup>rm 1}$  Including two tasks commissioned by the ESCB Internal Auditors Committee.

In 2017, NBP joined the central information on accounts under the Ognivo CI system. This system handles documents related to the European Account Preservation Order. Moreover, NBP joined the System for Early Warning of Threats (SWOZ) used for the exchange of information on attempts and mechanisms of committing offence in financial transactions.

### 14.8 Safety and security

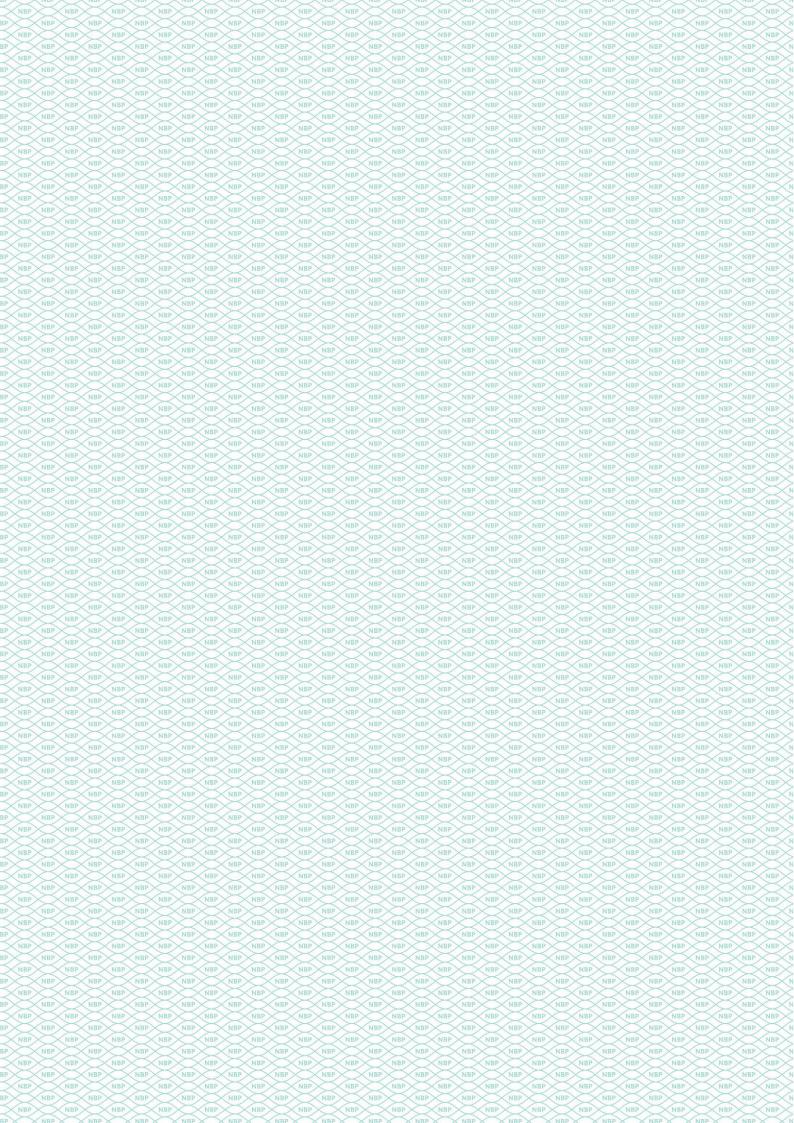
In 2017, activities aimed at ensuring and maintaining an adequate level of security at NBP were carried out, including:

- the expansion of the NBP cyber protection system, for example, through the decision to establish the Security Operations Centre at NBP,
- the launch of a project leading to advanced prevention of unauthorised disclosure of sensitive information processed in NBP ITC systems,
- an increase in the level of security of cryptographic services provided at NBP,
- the continuation of modernisation of technical security at NBP.

### Highlights in 2017:

- introduction of organisational changes in the analytical and research activity at NBP,
- expansion of the scope of activities of regional branches in the area of statistics and foreign exchange by additional analytical research and conferences,
- launch of the Security Operations Centre at NBP.

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# Economic developments abroad



## Economic developments abroad

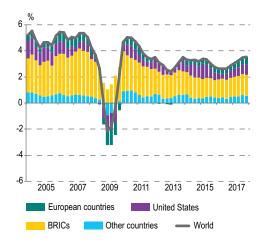
In 2017, global economic recovery continued (Figure A1.1, Figure A1.2). In many countries, favourable economic conditions were supported by rising consumer demand and investment activity, coupled with a recovery in global trade. Despite the global upturn, price growth abroad remained moderate.

In the euro area, Poland's main trading partner, GDP growth accelerated in 2017 (to 2.4% against 1.8% in 2016, Figure A1.2). Growth in this economy was still driven mainly by domestic factors, both private consumption and investment activity. Further increase in domestic demand was backed by a steady rise in employment and wages, good consumer and business sentiment as well as the ECB's expansionary monetary policy. In the second half of 2017, GDP growth was additionally propped up by increasing exports. Higher growth in the euro area translated into better conditions in the Central and Eastern European economies.

In the United States, GDP growth also accelerated (to 2.3% versus 1.5% in 2016), supported by a recovery in corporate investment. The major factor behind economic growth in this country was still consumption, backed by rising employment and wages and an increase in households' wealth amid growing financial asset prices.

**Figure 1.1** Annual global GDP growth in 2004–2017 by country groups

**Figure 1.2** Annual GDP growth in selected economies in 2004–2017





GDP-weighted average GDP growth in economies accounting for 80% of the global GDP (Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Korea, Mexico, Russia, Switzerland, the United Kingdom and the United States).

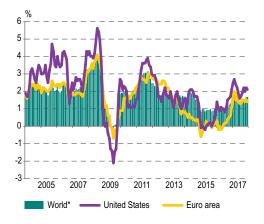
Source: Bloomberg, Eurostat, IMF data, NBP calculations.

Source: Bloomberg data.

In 2017, economic conditions improved in the emerging market economies as well. Most notably, in China, GDP growth levelled off after a few years of slowdown, yet concerns about imbalances building up in this economy remained.

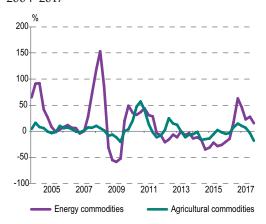
Following a rise in early 2017, global inflation remained moderate amid low core inflation in many economies. This was especially true of the euro area, where price growth remained below the ECB's inflation target. In the United States, inflation was close to the Fed's target (Figure A1.3). The pick-up in global inflation resulted mainly from steeper growth in energy prices, stemming from a rise in energy commodity prices. The latter was related to improved global economic conditions, which translated into higher demand for energy commodities. Oil prices were boosted additionally by supply cuts agreed among OPEC members and some other exporters in late 2016. At the same time, global prices of most agricultural commodities declined, notwithstanding the robust global consumption growth.

Figure A1.3 Annual consumer price growth Figure A1.4 Annual growth in energy and in the environment of the Polish economy in 2004-2017



\* GDP-weighted average annual consumer price inflation in the economies accounting for 80% of the global GDP. United States - annual CPI inflation. Euro area - annual HICP inflation.

agricultural commodity prices in USD in 2004-2017



The agricultural commodity price index comprises the prices of wheat, colza, pork, potatoes, sugar, cocoa, coffee, skimmed powdered milk, butter and condensed frozen orange juice. The system of weights reflects the consumption structure in Polish households. The energy commodity price index includes the prices of coal, oil and gas. The system of weights reflects the structure of primary energy carrier consumption in the Polish economy.

Source: Bloomberg data, NBP calculations.

Source: Bloomberg data, NBP calculations.

Given moderate inflation in the euro area, the ECB was keeping its interest rates close to zero in 2017, including the deposit rate below zero, and continued to purchase financial assets. In October 2017, the ECB also decided to extend the quantitative easing programme until at least September 2018, simultaneously reducing the scale of monthly purchases from EUR 60 billion to EUR 30 billion starting from January 2018. The ECB was also indicating that the interest rates would remain unchanged for some time after the end of the asset purchase programme. In the United States, in turn, the Fed raised the target range for the fed funds rate three times (by 0.25 percentage points each time) to 1.25–1.50%. Furthermore, it started to gradually reduce its balance sheet by limiting the reinvestment of assets. Yet, it signalled

that in the coming years the balance sheet would not return to its pre-crisis level, and that the interest rates would probably stay lower than before the financial crisis.

Amid global economic recovery and relatively accommodative monetary policy of major central banks, global stock prices rose markedly in 2017. The expansionary monetary policy of these banks also contributed to an appreciation of emerging market currencies. It also helped to keep the government bond yields relatively low, particularly in the major euro area member states, where the yields, despite rising somewhat, were still close to zero. In the United States, in turn, given the gradual monetary policy tightening by the Fed, the yields were markedly higher than in the euro area.

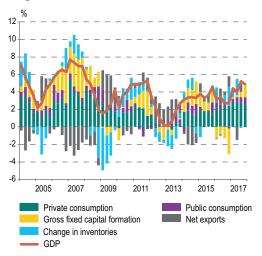
# Gross domestic product



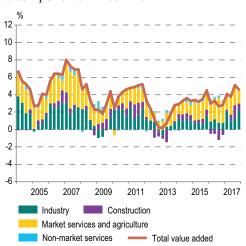
## Gross domestic product

In 2017, real GDP growth accelerated to 4.6% from 3.0% a year before (Figure A2.1, Table A2.1). Economic growth was primarily driven by consumer demand. In addition, investment activity started to recover. GDP growth was also supported by good economic conditions abroad, even if, with a slight slowdown in exports and some acceleration in imports, net exports contributed to GDP growth only to a marginal extent.

**Figure A2.1** Annual GDP growth and its components in 2004–2017



**Figure A2.2** Annual value added growth and its components in 2004–2017



Market services and agriculture cover categories A and G–N of the PKD classification (Polish equivalent of NACE): agriculture, trade, transportation, accommodation and catering, information and communication, financial and insurance activity, real estate activities, professional, scientific and technical activities, administrative and support service activities.

Non-market services comprise categories O, P and Q of the PKD classification: public administration, education, human compulsory social security and defence, health and social work activities.

Source: GUS data.

Source: GUS data, NBP calculations.

Private consumption growth in 2017 was backed by an increase in household disposable income resulting from a further rise in employment, wages growing faster than a year before and the disbursement of child benefits under the "Family 500 plus" programme. Private consumption growth also benefited from robust consumer sentiment. Yet, in real terms, it was hindered by consumer price growth that was higher than in previous years.

Following a fall in 2016, gross fixed capital formation rebounded in 2017. Public investment was the main contributor, which was related to a gradual increase in the absorption of EU funds under the 2014–2020 financial framework. Residential estate investment was also on

a rise, along with an increase in housing affordability of households underpinned by higher disposable personal incomes and relatively low lending rates.

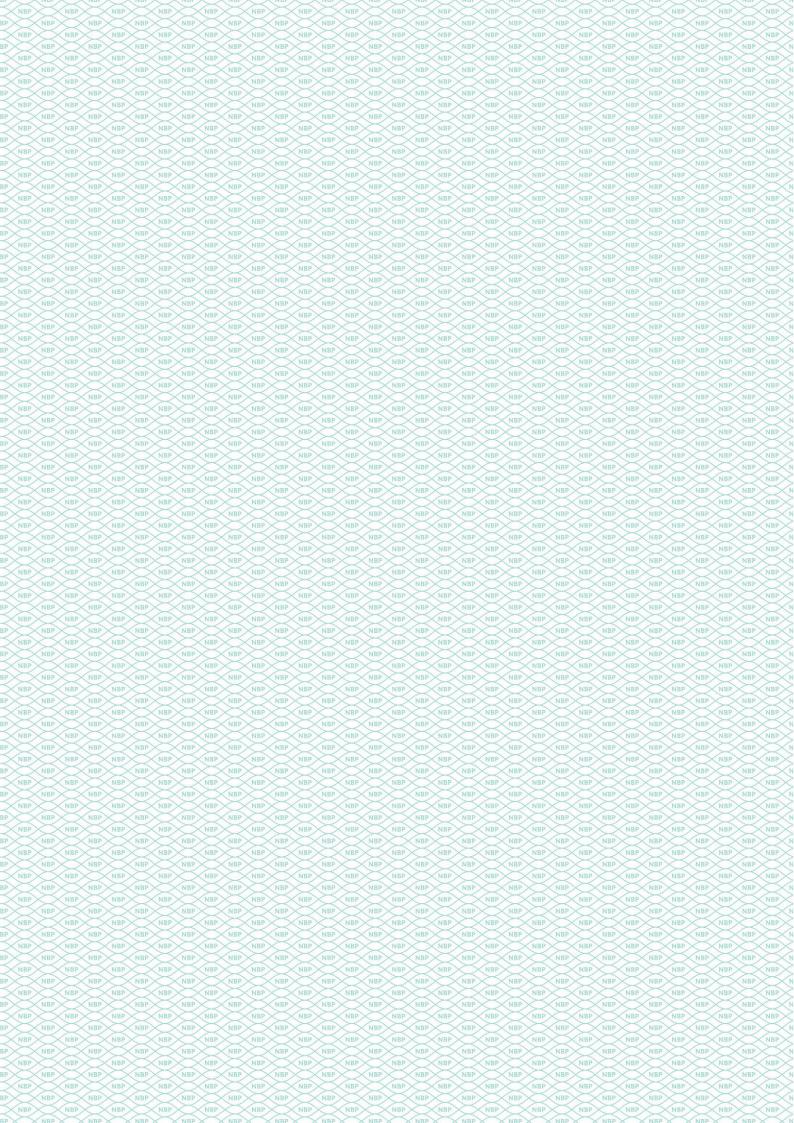
Net exports contributed positively to GDP growth in 2017, yet to a lesser extent than a year before. This resulted from somewhat weaker increase in exports coupled with an acceleration in import growth.

Table A2.1 Table GDP and its components in 2009–2017

	Current prices PLN bn	per- cent of GDP		Annual growth at the previous year's prices (in per cent)											
	20	47	2009	2010	2011	2012	2013	2014	2015	2016	2017		20	17	
	20	17	2009	2009   2010	2011	2012	2013	2014	2015	2010	2017	Q1	Q2	Q3	Q4
GDP	1982.1	100.0	2.8	3.6	5.0	1.6	1.4	3.3	3.8	3.0	4.6	4.4	4.0	5.2	4.9
Domestic demand	1900.4	95.9	-0.2	4.2	4.2	-0.5	-0.6	4.7	3.3	2.2	4.7	4.1	5.8	4.0	5.1
Consumption	1510.9	76.2	3.6	2.8	2.0	0.5	0.8	2.8	2.8	3.4	4.4	3.9	4.4	4.3	4.9
Industrial consumption	1145.6	57.8	3.5	2.6	3.3	0.8	0.3	2.6	3.0	3.9	4.8	4.5	4.9	4.7	5.0
Capital formation	389.6	19.7	-12.6	9.4	12.8	-3.9	-5.8	12.8	4.9	-2.4	6.2	5.0	11.9	2.8	5.5
Gross fixed capital formation	350.3	17.7	-2.7	0.0	8.8	-1.8	-1.1	10.0	6.1	-8.2	3.4	1.4	1.3	3.6	5.4
Exports	1070.9	54.0	-5.9	13.1	7.9	4.6	6.1	6.7	7.7	8.8	8.2	11.2	4.5	9.2	8.2
Imports	989.3	49.9	-12.4	14.3	5.8	-0.3	1.7	10.0	6.6	7.6	8.7	11.1	8.0	7.0	8.9
Value added	1743.3	88.0	3.1	3.5	5.0	1.7	1.5	3.3	3.7	2.9	4.4	4.1	3.8	5.1	4.6
Industry	473.4	23.9	0.3	8.4	7.9	2.8	0.9	4.5	3.8	3.5	6.2	7.3	3.9	5.4	7.7
Construction	128.0	6.5	10.1	4.9	13.5	-4.0	-5.0	9.0	6.4	-8.5	11.5	4.9	10.0	19.5	9.6
Market services and agriculture	893.8	45.1	2.7	1.9	3.4	2.6	2.9	2.3	3.7	4.9	3.5	3.1	3.8	4.3	3.0
Non-market services	248.1	12.5	5.3	-0.3	1.1	0.1	0.9	1.7	2.0	1.3	0.7	1.5	0.3	0.0	1.0
		Conti	ibutior	to ann	ual GD	P grow	th at th	e previ	ous yea	ar price	s (in pe	rcenta	ge poin	ts)	
Domestic demand	-	-	-0.2	4.2	4.3	-0.5	-0.6	4.7	3.2	2.2	4.5	3.9	5.5	3.9	4.9
Consumption	-	-	2.9	2.3	1.6	0.4	0.6	2.2	2.2	2.7	3.3	3.2	3.4	3.4	3.4
Industrial consumption	-	-	2.1	1.6	2.0	0.5	0.2	1.5	1.8	2.3	2.7	2.8	2.9	2.8	2.5
Capital formation	-	-	-3.1	1.9	2.7	-0.9	-1.2	2.5	1.0	-0.5	1.2	0.7	2.1	0.5	1.5
Gross fixed capital formation	-	-	-0.6	0.0	1.8	-0.4	-0.2	1.9	1.2	-1.7	0.6	0.2	0.2	0.6	1.4
Net exports	-	-	3.1	-0.6	0.7	2.1	2.0	-1.4	0.6	0.8	0.1	0.5	-1.5	1.3	0.0
	С	ontribu	tion to	annual	value a	dded g	rowth a	at the p	revious	year p	rices (i	n perce	ntage p	ooints)	
Industry	-	-	0,1	2,1	1,9	0,7	0,2	1,1	1,0	0,9	1,6	2,1	1,0	1,3	2,2
Construction	-	-	0,8	0,4	1,1	-0,3	-0,4	0,7	0,5	-0,7	0,8	0,2	0,7	1,5	0,8
Market services and agriculture	-	-	1,4	1,0	1,7	1,3	1,5	1,2	1,9	2,5	1,8	1,6	2,1	2,3	1,5
Non-market services	-	-	0,8	0,0	0,2	0,0	0,1	0,3	0,3	0,2	0,1	0,2	0,0	0,0	0,1

Source: GUS data, NBP calculations.

At the sectoral level, economic growth in 2017 was also broad-based, with services and industry being the major factors behind it. Construction, both residential and non-residential, also added to growth (Figure A2.2, Table A2.1).



# **Consumer prices**

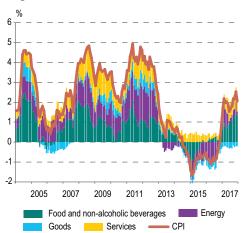


## Consumer prices

Average consumer price growth increased in 2017, reaching 2.0% (against -0.6% in the previous year), and thus was close to the NBP inflation target (Figure A3.1, Figure A3.2).

**Figure A3.1** Annual growth in CPI and the inflation target in 2004–2017

**Figure A3.2** Consumer price growth and its components in 2004–2017



Source: GUS data.

Source: GUS data, NBP calculations.

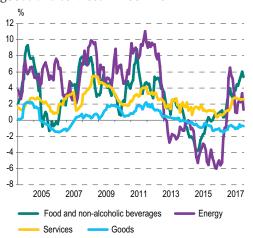
Faster average price growth in Poland in 2017 was driven mainly by stronger growth in food and energy prices, amid still low, albeit higher than in a year before, core inflation (Figure A3.2, Figure A3.4).

Higher food price growth was related to a decline in the global supply of some agricultural products (meat, dairy products and butter), amid robust global demand for these products. Another factor behind this development was unfavourable weather, first in southern Europe and then in Poland, which had a negative effect on the supply of fruit and vegetables. At the same time, together with rising households' income, consumer demand was increasing, additionally driving up domestic food prices.

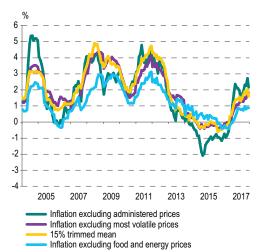
Annual energy price growth in 2017 was markedly higher than in previous years (Figure A3.2, Figure A3.3). This resulted from a rise in global prices of oil and other energy commodities. In late 2017, energy price growth slowed down due to base effects.

The continued low core inflation in 2017 was supported by a further decline in prices of goods, related to moderate inflation abroad and the appreciation of the zloty. At the same time, domestic demand pressure, despite a gradual increase, remained subdued. Although rising consumer demand boosted prices of services, in the second half of 2017 their growth stabilised at a moderate level (Figure A3.3, Figure A3.4).

**Figure A3.3** Annual growth in the prices of food and non-alcoholic beverages, energy, goods and services in 2004–2017



**Figure A3.4** Core inflation indices in 2004–2017 (y/y)



The category of energy comprises energy products (electricity, gas and heating fuel), as well as engine fuels (for private means of transport). The category of goods excludes food, non-alcoholic beverages and energy.

Source: GUS data, NBP calculations.

Source: GUS data, NBP calculations.

**Table A3.1** Annual growth in consumer goods and services prices and the contribution of the main price categories to CPI

	Weights						Change	(y/y, %	)					Annual
	2017,						20	17						Annual average
	%	1	Ш	Ш	IV	٧	VI	VII	VIII	IX	X	XI	XII	uvolugo
CPI	100.0	1.7	2.2	2.0	2.0	1.9	1.5	1.7	1.8	2.2	2.1	2.5	2.1	2.0
Core inflation	59.6	0.2	0.3	0.6	0.9	0.8	0.8	0.8	0.7	1.0	0.8	0.9	0.9	0.7
Goods	31.1	-0.8	-0.7	-0.6	-0.8	-0.9	-1.1	-0.9	-1.0	-0.5	-0.8	-0.7	-0.7	-0.8
Services	28.5	1.2	1.4	1.9	2.7	2.7	2.8	2.7	2.6	2.6	2.6	2.6	2.6	2.4
Food and non-alcoholic beverages	24.2	3.3	3.9	3.1	2.8	3.7	3.7	4.4	4.3	5.0	5.4	6.0	5.4	4.2
Processed	13.2	2.6	2.7	2.9	2.5	3.3	3.5	4.1	4.6	4.8	4.6	5.6	5.2	3.9
- milk, cheeses and eggs	3.1	2.5	3.4	3.8	4.0	4.6	4.9	5.4	5.9	6.5	7.1	11.5	11.4	5.9
- oils and fats	1.0	9.6	10.4	11.4	8.9	12.3	12.8	16.9	21.5	23.9	23.2	21.9	17.5	16.0
Unprocessed	11.1	4.1	5.3	3.4	3.1	4.1	3.9	4.8	3.9	5.2	6.3	6.6	5.7	4.7
- meat	6.2	3.2	3.8	4.1	5.1	5.9	5.8	5.7	4.8	4.9	4.6	4.6	4.8	4.8
- vegetables	2.5	4.1	8.7	1.3	-1.0	-2.2	-2.0	1.6	0.8	5.2	7.6	8.0	4.9	2.9
- fruit	1.5	7.4	5.6	3.7	2.4	8.1	6.2	6.6	5.3	7.9	14.4	16.3	13.3	8.0
Energy	16.1	5.2	6.5	5.6	5.1	3.2	1.0	0.9	2.1	2.5	2.2	3.4	1.3	3.2
Energy carriers	11.3	0.7	0.8	0.6	1.4	1.3	1.3	1.4	1.6	2.1	2.5	2.8	2.6	1.6
Fuels	4.8	16.5	21.2	18.1	14.4	7.6	0.4	-0.1	3.5	3.6	1.6	4.7	-1.3	7.2

	According to COICOP													
Food and non-alcoholic														
beverages	24.2	3.3	3.9	3.1	2.8	3.7	3.7	4.4	4.3	5.0	5.4	6.0	5.4	4.2
Alcoholic beverages and tobacco products	6.4	0.9	1.1	1.3	8.0	0.9	0.7	1.0	0.9	1.2	0.9	1.0	0.9	1.0
Clothing and footwear	5.7	-5.5	-5.5	-5.5	-5.3	-5.1	-5.4	-5.7	-5.7	-4.6	-4.7	-4.6	-4.8	-5.2
Home maintenance and energy carriers	20.5	1.2	1.3	1.3	1.8	1.8	1.8	1.9	2.0	2.3	2.6	2.7	2.6	1.9
Home equipment and household maintenance	5.1	0.5	0.6	0.9	0.3	0.4	0.4	0.2	0.1	0.0	-0.1	0.3	0.1	0.3
Health	5.6	0.6	0.9	1.2	1.2	0.2	0.3	1.1	1.0	2.0	2.0	1.9	1.8	1.2
Transportation	8.7	8.7	11.2	9.4	8.7	4.2	0.0	-0.8	1.8	1.6	0.4	2.3	-0.8	3.8
Telecommunications	5.2	-1.1	-1.2	-1.3	-0.7	1.7	1.6	1.7	1.2	1.7	1.6	1.5	1.5	0.7
Recreation and culture	6.9	-1.2	-0.7	1.1	2.4	2.1	2.5	2.3	1.8	1.9	1.4	1.7	1.7	1.4
Education	1.0	0.8	0.8	0.8	0.9	1.0	0.9	1.0	1.0	1.3	1.8	1.8	1.9	1.2
Restaurants and hotels	5.2	1.8	1.9	1.9	1.8	1.9	2.1	2.3	2.4	2.2	2.5	2.7	2.8	2.2
Other goods and services	5.5	3.3	3.5	3.2	3.1	2.7	2.1	2.2	1.7	1.9	1.3	0.7	0.7	2.2
	Weights			Co	ontribut	ion to C	PI grow	th (in p	ercenta	ge poin	ts)			
	2017,						20	17						Annual average
	%	ı	II	III	IV	٧	VI	VII	VIII	IX	Х	ΧI	XII	average
CPI	100.0	1.7	2.2	2.0	2.0	1.9	1.5	1.7	1.8	2.2	2.1	2.5	2.1	2.0
Core inflation	59.6	0.1	0.2	0.3	0.5	0.5	0.5	0.5	0.4	0.6	0.5	0.5	0.5	0.4
Goods	31.1	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2
Services	28.5	0.3	0.4	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7
Food and non-alcoholic beverages	24.2	0.8	1.0	0.8	0.7	0.9	0.9	1.1	1.0	1.2	1.3	1.5	1.3	1.0
Processed	13.2	0.3	0.4	0.4	0.3	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.5
- milk, cheeses and eggs	3.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.2
- oils and fats	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Unprocessed	11.1	0.5	0.6	0.4	0.4	0.5	0.4	0.5	0.4	0.6	0.7	0.7	0.6	0.5
- meat	6.2	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3
- vegetables	2.5	0.1	0.2	0.0	0.0	-0.1	-0.1	0.0	0.0	0.1	0.2	0.2	0.1	0.1
- fruit	1.5	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1
Energy	16.1	0.8	1.0	0.9	0.8	0.5	0.2	0.1	0.3	0.4	0.4	0.6	0.2	0.5
Energy carriers	11.3	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.2
Fuels	4.8	0.8	0.9	0.8	0.7	0.4	0.0	0.0	0.2	0.2	0.1	0.2	-0.1	0.3
						Acc	ording	to COIC	OP					
Food and non-alcoholic beverages	24.2	0.8	1.0	0.8	0.7	0.9	0.9	1.1	1.0	1.2	1.3	1.5	1.3	1.0
Alcoholic beverages and tobacco products	6.4	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Clothing and footwear	5.7	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
Home maintenance and energy	20.5	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.5	0.4
Home equipment and household maintenance	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Health	5.6	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Transportation	8.7	0.7	0.9	0.8	0.7	0.4	0.0	-0.1	0.2	0.1	0.0	0.2	-0.1	0.3
Telecommunications	5.2	-0.1	-0.1	-0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Recreation and culture	6.9	-0.1	0.0	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Education	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Restaurants and hotels	5.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other goods and services	5.5	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1

Source: GUS data, NBP calculations. The core inflation quoted in the table denotes CPI inflation excluding prices of food and energy.

# Balance of payments

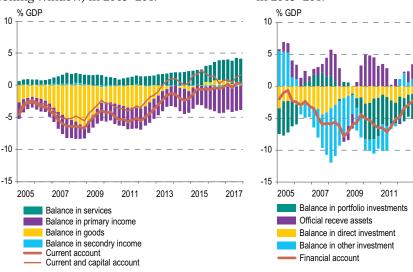


## Balance of payments

The current account balance was slightly positive in 2017 (amounting to PLN 6.5 billion and 0.3% of GDP against -0.3% of GDP in the year before). As a result, most external imbalance indicators improved or stayed at approximately the same level as in 2016 (Table A4.2).

**Figure A4.1** Current and capital account balance and its decomposition (4-quarter rolling window) in 2005–2017

**Figure A4.2** Financial account balance and its decomposition (4-quarter rolling window) in 2005–2017



Source: NBP and GUS data, NBP calculations.

Source: NBP and GUS data, NBP calculations.

2015

The positive current account balance in 2017 resulted primarily from a large trade surplus (Figure A4.1, Table A4.1). A factor which kept the trade balance positive was the rising surplus in trade in services. The value of Polish merchandise exports also increased, supported by recovery abroad. At the same time, the value of merchandise imports rose on the back of higher global oil prices and the acceleration in domestic demand growth. As a result, the balance of trade was lower than in 2016, yet still positive. The primary income balance, in turn, remained significantly negative due to high income of foreign direct investors stemming from good financial standing of enterprises operating in Poland.

The surplus on the capital account also increased in 2017, propped up by higher inflow of EU funds, especially under the European Regional Development Fund and the Cohesion Fund. In effect, the combined balance of the current and capital accounts rose to 1.6% of GDP from 0.8% of GDP in 2016.

The financial account balance remained nearly in balance in 2017, helped, in particular, by one substantial transaction of purchase by a domestic entity of one of the largest Polish banks from a foreign investor, which translated into lower participation of foreign investors in Poland (Figure A4.1). At the same time, considerable portfolio capital inflows to the Polish government bond market continued amid robust sentiment in the global markets and

Table A4.1 Balance of payments in 2009–2017 (PLN million)

Balance of payments	2009	2010	2011	2012	2013	2014	2015	2016	2017
Current account	-54,261	-77,770	-81,497	-60,477	-21,039	-35,655	-10,229	-5,380	6,498
Balance of trade in goods	-33,187	-43,677	-54,790	-34,128	-1,345	-13,634	9,326	12,834	3,541
Balance of services	21,715	13,174	21,073	25,145	32,070	37,922	45,610	61,428	79,117
Balance of primary income	-38,603	-47,108	-50,914	-50,874	-50,016	-58,369	-61,535	-73,544	-75,712
Balance of secondary income	-4,186	-159	3,134	-620	-1,748	-1,575	-3,630	-6,098	-448
Capital account	22,097	25,705	30,618	35,711	37,857	41,990	42,510	19,536	25,038
Financial account	-60,189	-92,928	-80,227	-37,276	-18,676	-19,557	2,296	-2,111	5,523
Direct investment: assets	19,262	28,075	12,944	4,237	-10,502	21,297	18,194	44,732	16,247
Direct investment: liabilities	43,754	53,939	53,575	23,929	2,809	62,025	56,860	66,444	23,178
Portfolio investment: assets	4,270	-488	-2,796	1,395	6,891	17,603	41,711	-24,840	4,776
Portfolio investment: liabilities	47,935	87,130	47,426	65,455	7,289	9,964	29,846	-9,403	23,652
Other investment: assets	-17,026	11,878	11,060	7,179	5,286	12,751	19,478	9,547	19,182
Other investment: liabilities	25,254	39,231	18,942	-11,668	11,067	1,097	-10,166	64,316	-47,072
Derivative financial instruments	5,850	1,789	525	-8,942	-2,200	-62	-3,663	539	-4,372
Official reserve assets	44,398	46,118	17,983	36,571	3,014	1,940	3,116	89,268	-30,552
Balance of errors and omissions	-28,025	-40,863	-29,348	-12,510	-35,494	-25,891	-29,985	-16,267	-26,013

With regard to the financial account, the presented figures should be interpreted as follows. A positive (negative) value of residents' investment abroad (items: direct investment: assets, portfolio investment: assets, other investment: assets, official reserve assets) denotes an increase (decrease) in Polish assets abroad. Conversely, a positive (negative) value of non-residents' investment in Poland (items: direct investment: liabilities, portfolio investment: liabilities, other investment: liabilities) means an increase (decrease) in Polish liabilities against non-residents.

Source: NBP data.

favourable data from the Polish economy. Yet, the greatest change on the current account was in other investment balance and the value of official reserve assets in the Polish zloty, mainly resulting from NBP transactions<sup>1</sup> (Figure A4.2, Table A4.1).

Table A4.2 Selected external stability indicators in 2009–2017

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Current account balance / GDP (%)	-4.0	-5.4	-5.2	-3.7	-1.3	-2.1	-0.6	-0.3	0.3
Current and capital account balance / GDP (%)	-2.3	-3.6	-3.2	-1.5	1.0	0.4	1.8	0.8	1.6
Balance of trade in goods and services / GDP (%)	-0.8	-2.1	-2.2	-0.6	1.9	1.4	3.1	4.0	4.2
Official reserve assets in terms of monthly imports of goods and services	5.2	5.5	5.7	5.5	5.2	5.3	5.3	6.4	4.8
Gross foreign debt / GDP (%)	58.3	65.5	70.7	70.2	69.8	72.7	71.8	75.9	66.5
Net international investment position / GDP (%)	-57.3	-65.1	-62.4	-65.3	-68.9	-69.1	-62.1	-60.7	-60.7

Source: NBP and GUS data, NBP calculations.

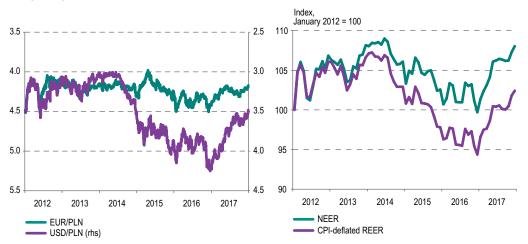
Favourable data from the Polish economy and robust sentiment in the financial markets, related in particular to the expansionary monetary policy of the major central banks, resulted in an appreciation of emerging market currencies, including the zloty. As a result, the zloty

<sup>&</sup>lt;sup>1</sup> The change in the balance in other investment was primarily connected with the closure of repo transactions by NBP. NBP transactions were aimed at managing the liquidity of the reserve assets and increasing their profitability. This was accompanied by a decline in the official reserve assets.

strengthened in 2017 against the major currencies, which also led to an appreciation of its effective exchange rate, i.e. against the currencies of Poland's most important trading partners (Figure A4.3, Figure A4.4).

Figure A4.3 Nominal effective zloty exchange rate against major currencies in 2012-2017

Figure A4.4 Real and nominal effective exchange rate in 2012–2017



Values on the vertical axes are in a reverse order, Increase denotes appreciation of the zloty. so an increase denotes appreciation of the zloty.

Source: NBP data. Source: BIS data.

# Money and credit

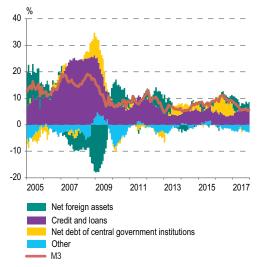


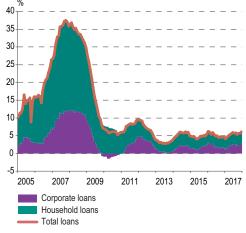
## Money and credit

Like in previous years, in 2017 the broad money aggregate (M3) increased, albeit at a slower pace than in 2016. The average annual M3 growth rate was 6.5% y/y in 2017 against 9.7% y/y in 2016 (Figure A5.1). M3 growth in 2017 was mainly driven by a stable, yet slower than nominal GDP growth, rise in loans to the non-financial sector (5.4% y/y compared with 5.1% y/y in 2016, Figure A5.2). This was accompanied by a slower growth in net debt of central government institutions (1.6% y/y in 2017 compared with 37.7% y/y in 2016).

**Figure A5.1** Annual growth rate of M3 aggregate and contribution of the main components in 2005–2017 (transaction data)

Figure A5.2 Annual growth rate of loans to non-financial sector and contribution of the main components in 2005–2017 (transaction data)





Besides loans to enterprises and households,

the series Total loans comprises loans to non-profit institutions serving households. Due to its

insignificant impact on total lending growth, it was

The category Other covers: (i) receivables of monetary financial institutions arising from debt and equity securities; (ii) fixed assets (excluding financial assets); and (iii) financial liabilities with a maturity of over two years, which are not included in the M3 aggregate and for this reason, in order to ensure comparability, are included in the statistics of the main components of money creation with a minus sign.

Source: NBP data.

not marked separately in the chart.

Source: NBP data.

\_\_\_\_

The main source of lending growth in 2017 was a steady rise in loans to households (4.7% y/y in 2017 compared with 4.5% y/y in 2016). The increase in this sector resulted almost equally from a rise in consumer loans (8.2% y/y, both in 2017 and in 2016) and housing loans (3.3% y/y in 2017 against 2.8% y/y in 2016, Figure A5.3). The growth in lending to households

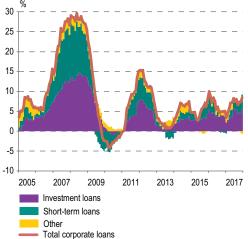
<sup>&</sup>lt;sup>1</sup> Nominal GDP growth stood at 6.7% y/y in 2017.

was underpinned by labour market conditions favourable for employees, robust consumer confidence and stable lending rates.<sup>2</sup>

Another substantial source of the 2017 growth in lending to the non-financial sector was an increase in corporate loans, which grew at a similar pace as a year before (6.8% y/y in 2017 versus 6.5% y/y in 2016, Figure A5.4). Corporate lending growth was backed by good financial standing of enterprises and lending rates for these entities remaining close to 2016.<sup>3</sup> It was still mainly driven by rising investment loans (8.0% y/y in 2017 against 8.2% y/y in 2016), resulting from the acceleration in economic growth. The growth rate of short-term loans picked up in 2017 (4.9% y/y in 2017 compared with 2.6% y/y in 2016).<sup>4</sup>

**Figure A5.3** Annual growth rate of household loans and contribution of main components in 2005–2017 (transaction data)

**Figure A5.4** Annual growth rate of corporate loans and contribution of main components in 2005–2017 (transaction data)



The category Other covers operating and investment loans to small enterprises.

2011

2013

0 -5

2007

Consumer loans

Total household loans

Housing loans

Other

2009

The category Other covers, among others, loans for the purchase of securities.

Source: NBP data. Source: NBP data.

Lending growth stimulated an increase in deposits, mainly current deposits. Current deposits, which accounted for 60.9% of total deposits in 2017, rose at a similar pace as in 2016 (15.0% y/y, both in 2017 and in 2016). 2-year deposits declined by 5.7% y/y in 2017 (in 2016 they rose by 2.8% y/y). At the same time, the amount of cash in circulation increased, yet less than in 2016 (9.4% y/y in 2017 against 16.0% y/y in 2016).

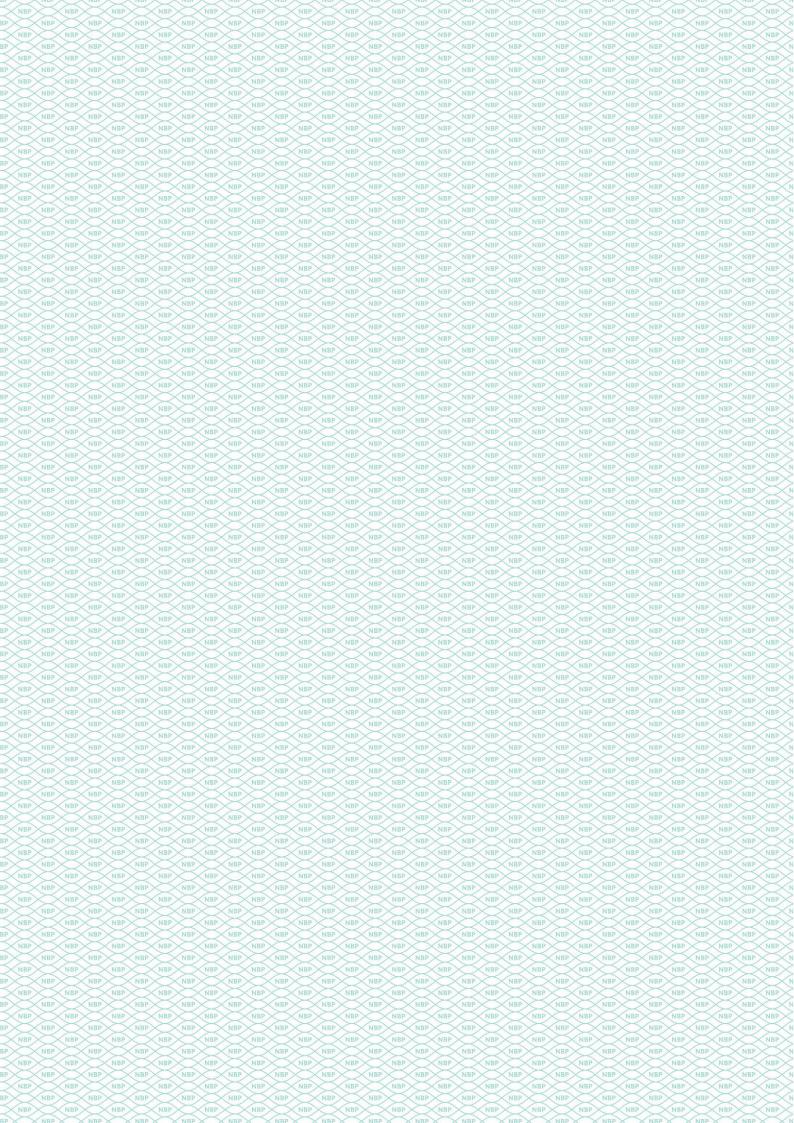
2017

2015

<sup>&</sup>lt;sup>2</sup> Average interest on PLN-denominated loans to households and non-profit institutions serving households, according to new and renegotiated agreements, stood at 6.2% in 2017 compared with 6.3% in 2016.

<sup>&</sup>lt;sup>3</sup> Average interest on PLN-denominated corporate loans, according to new and renegotiated agreements, stood at 3.7% in 2017 compared with 3.5% in 2016.

<sup>&</sup>lt;sup>4</sup> Higher growth in corporate loans in the first half of 2017 could result in part from a one-off transaction made by one economic entity in March. The transaction involved a conversion of foreign debt into domestic debt, in the amount of around PLN 7 billion, contributing to 32% of the total annual increase in corporate loans.



# The list of open-to-public academic seminars and selected publications of NBP



# The list of open-to-public academic seminars and selected publications of NBP

In 2017, NBP 27 open-to-public academic seminars were held at NBP (the title of the seminar is followed by the name(s) and affiliation of the speaker(s)):

- The Hierarchy of Institutions Reconsidered: Monetary Policy and its Effect on the Rule of Law in Interwar Poland, Christopher A. Hartwell Leon Koźmiński Academy; Center for Social and Economic Research.
- Monetary Policy, the Financial Cycle and Ultra-low Interest Rates, Mikael Juselius Suomen Pankki (Narodowy Bank Finlandii).
- State Dependence in Labor Market Fluctuations and the Timing of Structural Reforms, Francesco Zanetti Oxford University.
- The Political Economy of Fiscal Transparency and Independent Fiscal Councils: Theory and Evidence, Roel Beetsma University of Amsterdam, CEPR, CESifo, European Fiscal Board.
- Overoptimism and House Price Bubbles, Kim Abildgren Danmarks Nationalbank (Narodowy Bank Danii).
- Income Inequality in the European Union and its Member States, Wiemer Salverda University of Amsterdam.
- Putting the Cycle Back into Business Cycle Analysis, Paul Beaudry Vancouver School of Economics, University of British Columbia.
- Rethinking Core and Periphery in the European Union, Nauro F. Campos Brunel University London.
- Postawy Polaków wobec obrotu bezgotówkowego (2016 issue), Dominika Maison University of Warsaw
- Austerity in the Aftermath of the Great Recession, Linda L. Tesar University of Michigan;
   National Bureau of Economic Research.
- Nonlinear Phillips-Curve, Inflation Targeting, and Credit Cycles, Willi Semmler The New School, New York.
- O optymalnym wyborze technologii specyficznych dla poszczególnych czynników produkcji, Jakub Growiec Warsaw School of Economics, Narodowy Bank Polski.
- Monetary Policy and the Redistribution Channel, Adrien Auclert Stanford University; National Bureau of Economic Research.

- Optimal Trend Inflation, Klaus Adam Mannheim University; CEPR.
- Borrower heterogeneity within a risky mortgage-lending market, Maria Teresa Punzi Vienna Univerity of Business and Economics.
- *Central Banking and Crisis Management from the Perspective of Austrian Business Cycle Theory*, Gunther Schnabl University of Leipzig.
- Evolving Beliefs and Animal Spirits in the Euro Area, Fabio Milani University of California.
- Fiscal Recipes for Growth in a High Debt Environment, Jesper Lindé Sveriges Riksbank (Narodowy Bank Szwecji).
- Agent-based Macroeconomics: Endogenous credit-driven business cycles in Eurace, Silvano Cincotti University of Genoa.
- Stabilizing an Unstable Economy: in a global system of market-based credit, Perry Mehrling Columbia University.
- Modelowanie sektorów przemysłowego, finansowego i energetycznego i ich interakcji: podejście makroewolucyjne, Karolina Safarzyńska University of Warsaw.
- Czy można było zapobiec niestabilnym boomom w strefie euro?, Michał Brzoza-Brzezina Narodowy Bank Polski; Warsaw School of Economics.
- Ekonomiczna dezintegracja UE: nie nieuchronna, lecz prawdopodobna, Leon Podkaminer The Vienna Institute of International Economic Studies.
- Cost Channel of Monetary Policy: How effective is the ECB's low interest rate policy?, Andreas Stephan Linnæus University, Ratio Institute and Jönköping International Business School.
- Wpływ demografii na politykę pieniężną w małej otwartej gospodarce, Marcin Bielecki Narodowy Bank Polski; University of Warsaw.
- Badanie czynników oddziałujących na wielkość obrotu gotówkowego w Polsce, Arkadiusz Manikowski – Narodowy Bank Polski; University of Warsaw.
- Risk Sharing among Large and Small Countries, Anna Lipińska Board of Governors of the Federal Reserve System.

In 2017, the following publications by NBP staff were included in the ISI Master Journal List::

 Beata Bierut, Kamila Kuziemska-Pawlak, Competitiveness and Export Performance of CEE Countries, Eastern European Economics, vol. 55, Issue 6, 522–542.

- Paola Bongini, Małgorzata Iwanicz-Drozdowska, Paweł Smaga, Bartosz Witkowski, Financial Development and Economic Growth: The Role of Foreign-Owned Banks in CESEE Countries, Sustainability, 9(3), 335.
- Michał Brzoza-Brzezina, Marcin Kolasa, Krzysztof Makarski, Monetary and Macroprudential Policy with Foreign Currency Loans, Journal of Macroeconomics, vol. 54, Part B, 352–372.
- Michele Ca'Zorzi, Marcin Kolasa, Michał Rubaszek, Exchange Rate Forecasting with DSGE models, Journal of International Economics, vol. 107, 127–146.
- Małgorzata Iwanicz-Drozdowska, Paweł Smaga, Bartosz Witkowski, Role of Foreign Capital in Stability of Banking Sectors in CESEE Countries, Finance a úvěr-Czech Journal of Economics and Finance, vol. 67, Issue 6, 492–511.
- Krzysztof Gajewski, Oskar Krzesicki, *International Banking and Cross-Border Effects of Regulation: Lessons from Poland*, International Journal of Central Banking, vol. 13, Issue 2, 315–340.
- Karolina Goraus, Joanna Tyrowicz, Lucas Van der Velde, *Which Gender Wage Gap Estimates to Trust? A Comparative Analysis*, Review of Income and Wealth, International Association for Research in Income and Wealth, vol. 63(1), 118–146.
- Jan Hagemejer, Krzysztof Makarski, Joanna Tyrowicz, *Analyzing The Efficiency Of Pension Reform: the Role of the Welfare Effects of Fiscal Closures*, Macroeconomic Dynamics, vol. 21, Issue 05, 1205–1234.
- Aleksandra Hałka, Jacek Kotłowski, Global or Domestic? Which Shocks Drive Inflation in European Small Open Economies?, Emerging Market Finance and Trade, vol. 53, Issue 8, 1812–1835.
- Mariusz Kapuściński, *The Role of Bank Balance Sheets in Monetary Policy Transmission: Evidence from Poland*, Eastern European Economics, vol. 55, Issue 1, 50–69.
- Łukasz Kamil Kurowski, Karol Rogowicz, *Negative Interest Rates as Systemic Risk Event*, Finance Research Letters, vol. 22, 153–157.
- Anna Kosior, Michał Rubaszek, Kamil Wierus, The Potential Effects of Labour Market Duality for Countries in a Monetary Union, International Labour Review, vol. 155, No. 4, 509–534.
- Robert Leszczyński, Krzysztof Olszewski, An Analysis of the Primary and Secondary Housing Market in Poland: evidence from the 17 largest cities, Baltic Journal of Economics, vol. 17, Issue 2, 136–151.
- Tomasz Łyziak, Maritta Paloviita, *Anchoring of Inflation Expectations in the Euro Area: Recent evidence based on survey data*, European Journal of Political Economy, vol. 46, Issue C, 52–73.

- Krzysztof Olszewski, Joanna Waszczuk, Marta Widłak, *Spatial and Hedonic Analysis of House Price Dynamics in Warsaw, Poland*, Journal of Urban Planning and Development, vol. 143, Issue 3.
- Filip Premik, Ewa Stanisławska, *The Impact of Inflation Expectations on Polish Consumers' Spending and Saving,* Eastern European Economics, vol. 55, Issue 1, 3–28.
- Karol Szafranek, Flattening of the New Keynesian Phillips Curve: Evidence for an Emerging, Small Open Economy, Economic Modelling vol. 63, 334–348.
- Joanna Tyrowicz, Lucas Van der Velde, Jan Svejnar, *Effects of Labor Reallocation on Productivity and Inequality Insights from Studies on Transition*, Journal of Economic Surveys, vol. 31, Issue 3, 712–732.

In the series Materiały i Studia, the following papers were published in 2017:

- Paweł Borys, *Instytucje rynku pracy w unii walutowej*. *Analiza przypadku strefy euro.*
- Elżbieta Adamowicz, Michał Bernardelli, Monika Dędys, Justyna Łupińska, Konrad Walczyk, Antycykliczny bufor kapitałowy polskiego sektora bankowego. Propozycja jego optymalnej wielkości i analiza zmian w czasie z wykorzystaniem złożonego wskaźnika wczesnego ostrzegania.
- Krzysztof Jajuga, Marta Karaś, Katarzyna Kuziak, Witold Szczepaniak, Ryzyko systemu finansowego. Metody oceny i ich weryfikacja w wybranych krajach.

In the series NBP Working Papers, the following papers were published in 2017:

- Jakub Borowski, Krystian Jaworski, Jakub Olipra, Economic, institutional and socio-cultural determinants of consumer credit in the context of monetary integration.
- Filip Premik, Ewa Stanisławska, The impact of inflation expectations on Polish consumers' spending and saving.—
- Alessia Paccagnini, Forecasting with FAVAR: macroeconomic versus financial factors.
- Piotr Bańbuła Marcin Pietrzak, Early warning models of banking crises applicable to non-crisis countries.
- Siem Jan Koopman, André Lucas, Marcin Zamojski, Dynamic term structure models with score-driven time-varying parameters: estimation and forecasting.
- Valentina Meliciani, Grzegorz Tchorek, *Global value chains, innovation and firms' performance during the crisis.*
- Michele Ca' Zorzi, Marcin Kolasa, Michał Rubaszek, Exchange rate forecasting with DSGE models.

- Tomasz Łyziak, Maritta Paloviita, Formation of inflation expectations in turbulent times.
- Karol Szafranek, Bagged artificial neural networks in forecasting inflation: An extensive comparison with current modelling frameworks.
- Marcin Bielecki, Michał Brzoza-Brzezina, Marcin Kolasa, Krzysztof Makarski, Could the boombust in the eurozone periphery have been prevented?
- Marcin Grela, Aleksandra Majchrowska, Tomasz Michałek, Jakub Mućk, Agnieszka Stążka-Gawrysiak, Grzegorz Tchorek, Marcin Wagner, Is Central and Eastern Europe converging towards the EU-15?
- Jakub Growiec, Factor-specific technology choice.
- Dániel Baksa, István Kónya, Interest premium and economic growth: the case of CEE.
- Karol Szafranek, Aleksandra Hałka, Determinants of low inflation in an emerging, small open economy. A comparison of aggregated and disaggregated approaches.
- Łukasz Goczek, Dagmara Mycielska, Exchange rate volatility and exports in the run-up to the EMU accession.
- Piotr Ciżkowicz, Bartosz Radzikowski, Andrzej Rzońca, Wiktor Wojciechowski, *Fiscal devaluation and economic activity in the EU.*
- Anna Sznajderska, The role of China in the world economy: evidence from global VAR model.
- Jakub Mućk, Elasticity of substitution between labor and capital: robust evidence from developed economies.
- Renata Karkowska, Małgorzata Pawłowska, *The concentration and bank stability in Central and Eastern European countries.*
- Mariusz Kapuściński, How far does monetary policy reach? Evidence from factor-augmented vector autoregressions for Poland.
- Marcin Flotyński, Basel III long-term liquidity standard in the context of the profitability of banks and volatility of their stock prices quantitative analysis for the euro area.

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

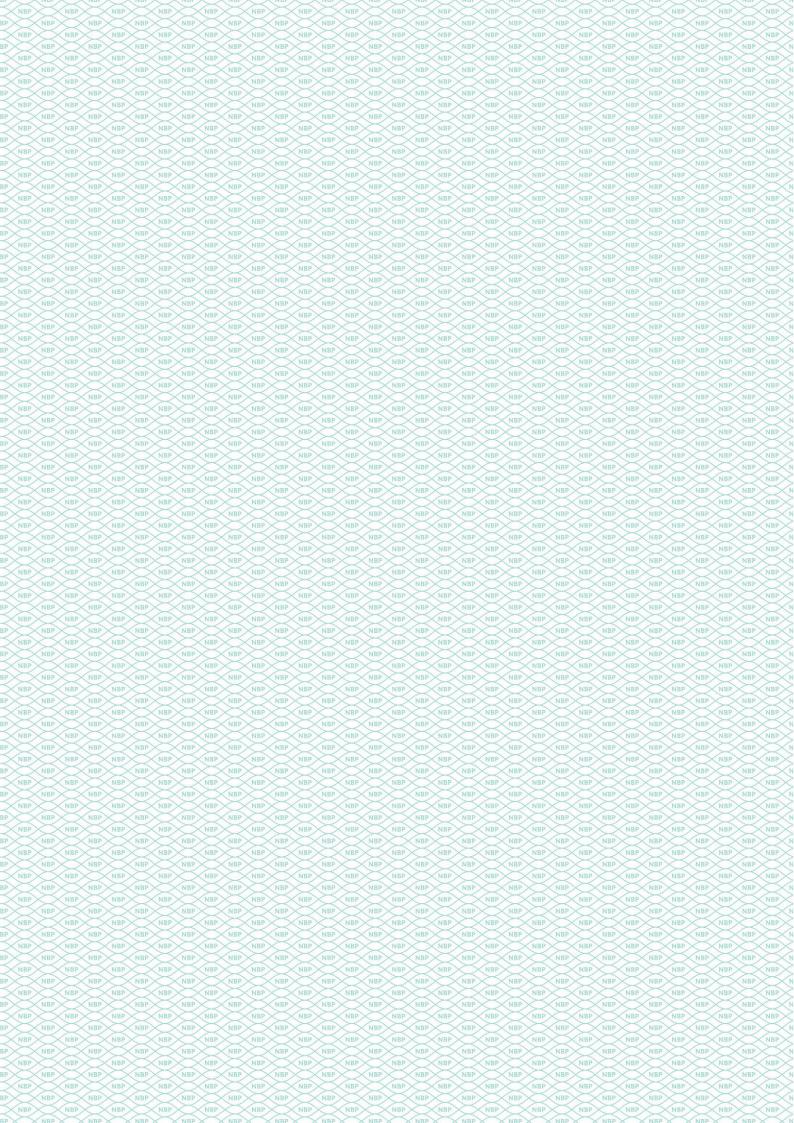


## Voting records of the Monetary Policy Council members on motions and resolutions

Voting records of the Monetary Policy Council members on motions and resolutions in 2017 are presented below.

		Voting of the	MPC members:			
Date	Subject matter of motion or resolution	For	Against			
4 April 2017	Resolution No. 1/2017 of 4 April 2017 on approving the Annual Financial Report of Narodowy Bank Polski prepared as of 31 December 2016	A. Glapiński G.M. Ancyparowicz Ł.J. Hardt E.M. Łon E.J. Osiatyński R. Sura J. Żyżyński	E. Gatnar J.J. Kropiwnicki K. Zubelewicz			
17 May 2017	Resolution No. 2/2017 of 17 May 2017 on approving the report on monetary policy implementation in 2016	A. Glapiński G.M. Ancyparowicz E. Gatnar Ł.J. Hardt E.M. Łon E.J. Osiatyński R. Sura K. Zubelewicz J. Żyżyński				
		J.J. Kropiwnicki was absent.				
17 May 2017	Resolution No. 3/2017 of 17 May 2017 on the evaluation of the activities of the NBP management as regards the implementation of the monetary policy guidelines in 2016	A. Glapiński: G.M. Ancyparowicz E. Gatnar Ł.J. Hardt E.M. Łon E.J. Osiatyński R. Sura K. Zubelewicz J. Żyżyński				
		J.J. Kropiwnicki was absent.				
30 May 2017	Resolution No. 4/2017 of 30 May 2017 on approving the report on the operations of Narodowy Bank Polski in 2016	A. Glapiński G.M. Ancyparowicz Ł.J. Hardt J.J. Kropiwnicki E.M. Łon E.J. Osiatyński K. Zubelewicz J. Żyżyński				
		E. Gatnar and R. Sura were	absent.			
4 July 2017	Resolution No. 1/DRF/2017 of 4 July 2017 on the appointment of a certified auditor to audit the annual financial statements of NBP for the financial years 2017 and 2018	A. Glapiński G.M. Ancyparowicz E. Gatnar Ł.J. Hardt J.J. Kropiwnicki E.M. Łon E.J. Osiatyński R. Sura K. Zubelewicz J. Żyżyński				

Date		Voting of the M	MPC members:
Date	Subject matter of motion or resolution	For	Against
19 September 2017	Resolution No. 5/2017 of 19 September 2017 on setting the Monetary Policy Guidelines for 2018	A. Glapiński G.M. Ancyparowicz E. Gatnar Ł.J. Hardt J.J. Kropiwnicki E.M. Łon E.J. Osiatyński R. Sura J. Żyżyński	K. Zubelewicz
8 November 2017	Resolution No. 6/2017 of 8 November 2017 amending the resolution on the ratio of the required reserve for banks, credit unions and National Association of Credit Unions and the remuneration of the required reserve	A. Glapiński G.M. Ancyparowicz E. Gatnar Ł.J. Hardt E.M. Łon R. Sura K. Zubelewicz J. Żyżyński	
		J.J. Kropiwnicki and E.J. Osi	atyński were absent.
5 December 2017	Resolution No. 7/2017 of 5 December 2017 amending the resolution on the ratio of the required reserve for banks, credit unions and National Association of Credit Unions and the remuneration of the required reserve	A. Glapiński E. Gatnar J.J. Kropiwnicki E.M. Łon R. Sura K. Zubelewicz J. Żyżyński	G.M. Ancyparowicz Ł.J. Hardt E.J. Osiatyński
19 December 2017	Resolution No. 8/2017 of 19 December 2017 on approving the Financial Plan of Narodowy Bank Polski for 2018	A. Glapiński G.M. Ancyparowicz E. Gatnar Ł.J. Hardt J.J. Kropiwnicki E.M. Łon E.J. Osiatyński R. Sura J. Żyżyński	K. Zubelewicz



Financial statements
of NBP as at 31 December 2017,
together with the independent
auditor's report on the audit
of the financial statements of NBP
as at 31 December 2017



# Balance Sheet of NBP as at 31 December 2017

		Acceta		31.12.2016	31.12.2017
		Assets	Note	PLN the	ousand
1.	Gold a	and gold receivables	1	16,035,770.9	14,942,147.1
2.	Claim	s on non-residents denominated in foreign currency		463,246,904.8	379,434,903.9
	2.1.	Receivables from the IMF	2	4,394,707.8	3,374,388.1
	2.2.	Balances with foreign institutions, securities, loans granted and other foreign assets	3	458,852,197.0	376,060,515.8
3.	Claim	s on residents denominated in foreign currency		0.0	0.0
4.	Claim	s on non-residents denominated in domestic currency		0.0	0.0
5.		s on other domestic monetary financial institutions related to cary policy operations denominated in domestic currency		0.0	0.0
	5.1.	Main refinancing operations		0.0	0.0
	5.2.	Long-term refinancing operations		0.0	0.0
	5.3.	Fine-tuning operations		0.0	0.0
	5.4.	Structural operations		0.0	0.0
	5.5.	Marginal lending facilities		0.0	0.0
6.		claims on other domestic monetary financial institutions ninated in domestic currency	4	424.0	529.0
7.	Secur	ities of residents denominated in domestic currency		0.0	0.0
8.	Claim	s on general government denominated in domestic currency		0.0	0.0
9.	Items	in course of settlement		0.0	0.0
10.	Other	assets		1,605,404.8	1,443,867.6
	10.1.	Tangible and intangible fixed assets	5	916,396.1	915,063.0
	10.2.	Other financial assets	6	278,268.3	265,901.7
	10.3.	Off-balance-sheet instruments revaluation differences	7	52,667.6	23,022.7
	10.4.	Accruals and prepaid expenses	8	29,917.4	33,156.3
	10.5.	Sundry	9	328,155.4	206,723.9
Total	assets	3		480,888,504.5	395,821,447.6

		Liekilitiee		31.12.2016	31.12.2017
		Liabilities	Note	PLN tha	ousand
1.	Bankr	notes and coins in circulation	10	187,574,849.5	198,715,915.2
2.		ties to other domestic monetary financial institutions related to tary policy operations denominated in domestic currency	11	114,553,118.7	128,003,831.0
	2.1.	Current accounts (incl. the required minimum reserve accounts)		25,878,583.9	28,301,807.1
	2.2.	Deposit facilities		7,366,064.8	5,278,903.9
	2.3.	Fixed-interest deposits		0.0	0.0
	2.4.	Other monetary policy operations		81,308,470.0	94,423,120.0
3.		liabilities to other domestic monetary financial institutions ninated in domestic currency	12	468,823.0	471,354.0
4.	Liabili	ties to other residents denominated in domestic currency	13	4,980,569.3	7,581,248.1
	4.1.	Liabilities to general government		4,962,840.1	7,560,576.7
	4.2.	Other liabilities		17,729.2	20,671.4
5.	Liabili	ties to non-residents denominated in domestic currency	14	4,369,292.4	2,862,039.9
6.	Liabili	ties to residents denominated in foreign currency	15	27,269,408.7	19,304,330.0
7.	Liabili	ties to non-residents denominated in foreign currency	16	77,748,365.9	29,178,544.7
8.	Liabili	ties to the IMF	17	7,401,999.6	6,485,630.0
9.	Items	in course of settlement		0.0	0.0
10.	Other	liabilities		367,570.5	226,796.1
	10.1. 10.2. 10.3.	Off-balance-sheet instruments revaluation differences Accruals and deferred income Sundry	18 19 20	114,071.4 131,628.2 121,870.9	13,681.4 113,940.2 99,174.5
11.	Provis	sions for future liabilities	21	133,314.0	133,784.0
12.	Reval	uation accounts	22	44,312,771.7	13,223,338.0
13.	Capita	al and reserves	23	13,315,346.1	2,967,483.8
	13.1.	Statutory fund		1,500,000.0	1,500,000.0
	13.2.	Reserve fund		1,007,434.5	1,467,483.8
	13.3.	Reserves		10,807,911.6	0.0
14.	Finan	cial result	24	-1,606,924.9	-13,332,847.2
	14.1.	Financial result for the current year		9,200,986.7	-2,524,935.6
	14.2.	Loss of previous years		-10,807,911.6	-10,807,911.6
Total	liabilit	ies		480,888,504.5	395,821,447.6

Director of the Accounting and Finance Department of Narodowy Bank Polski:

/-/ Krzysztof Kruszewski

Management Board of Narodowy Bank Polski:

/-/ Adam Glapiński

/-/ Piotr Wiesiołek

/-/ Anna Trzecińska

/-/ Jacek Bartkiewicz /-/ Andrzej Kaźmierczak

/-/ Ryszard Kokoszczyński

/-/ Paweł Samecki

/-/ Paweł Szałamacha

/-/ Katarzyna Zajdel-Kurowska

Warsaw, 21 March 2018

# Profit and Loss Account of NBP for the year ended 31 December 2017

			2016	2017
		Note	PLN th	ousand
1.	Net result on interest, discount and premium	28	867,087.6	810,923.8
	1.1. Interest, discount and premium income		6,240,080.7	6,253,315.0
	1.2. Interest, discount and premium expenses		5,372,993.1	5,442,391.2
2.	Net result on financial operations		9,285,022.2	-2,388,017.7
	2.1. Income on financial operations	29	15,175,692.6	6,101,229.4
	2.2. Expenses on financial operations	29	4,190,076.0	5,545,164.0
	2.3. Unrealised losses	30	2,100,594.4	13,751,994.7
	2.4. Income on transfers from risk provisions and on reversal of write-downs on financial assets	31	400,000.0	10,807,911.6
	2.5. Expenses on transfers to risk provisions and on write-downs on financial assets		0.0	0.0
3.	Net result on fees and commissions		5,706.2	11,773.8
	3.1. Fees and commissions income	32	59,667.6	47,000.6
	3.2. Fees and commissions expenses	33	53,961.4	35,226.8
4.	Income on shares and participating interests	34	15,016.7	17,289.4
5.	Other income	35	84,923.6	112,997.1
A.	Total net income [1+2+3+4+5]		10,257,756.3	-1,435,033.6
6.	Salaries and social contributions	36	477,380.6	486,955.0
7.	Administrative expenses	37	232,602.7	228,260.6
8.	Depreciation and amortisation expenses	38	84,840.3	81,991.8
9.	Expenses on issue of banknotes and coins	39	250,932.1	280,088.9
10.	Other expenses	40	11,013.9	12,605.7
В.	Financial result for the current year [A-6-7-8-9-10]	41	9,200,986.7	-2,524,935.6

Director of the Accounting and Finance Department of Narodowy Bank Polski:

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/-/ Ryszard Kokoszczyński

/-/ Paweł Samecki

/-/ Paweł Szałamacha

/-/ Katarzyna Zajdel-Kurowska

Warsaw, 21 March 2018

### **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 the following acts and regulations:

- the Act of 29 August 1997 on Narodowy Bank Polski (Journal of Laws of 2017, item 1373), hereinafter referred to as the "Act on NBP",
- the Act of 29 August 1997 Banking Law (Journal of Laws of 2017, item 1876, 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, NBP 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. President of NBP (appointed for a six-year term of office),

Łukasz Hardt

- 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 2017 was as follows:

#### President of NBP

Adam Glapiński

#### **Monetary Policy Council**

Chairperson	Adam Glapiński		
Members	Grażyna Ancyparowicz	Jerzy Kropiwnicki	Rafał Sura
	Eugeniusz Gatnar	Eryk Łon	Kamil Zubelewicz

Jerzy Osiatyński

Jerzy Żyżyński

#### Management Board of NBP

Chairperson	Adam Glapiński		
Vice President of NBP - First Deputy President of NBP	Piotr Wiesiołek		
Vice President of NBP	Anna Trzecińska		
Members	Jacek Bartkiewicz	Ryszard Kokoszczyński	Paweł Szałamacha
	Andrzej Kaźmierczak	Paweł Samecki	Katarzyna Zajdel-Kurowska

## 1.2. Legal basis of preparation of the financial statements

The financial statements of NBP as at 31 December 2017 were prepared on the basis of the following provisions:

• the Act on NBP,

- Resolution No. 16/2003 of the Monetary Policy Council of 16 December 2003 on the accounting principles, format of the balance sheet and the profit and loss account of Narodowy Bank Polski (NBP Official Journal, item 38, as amended),
- Resolution No. 12/2010 of the Monetary Policy Council of 14 December 2010 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 19), hereinafter referred to as "Resolution
  No. 12/2010",
- Resolution No. 45/2013 of the Management Board of Narodowy Bank Polski of 12 December 2013 on performing tasks in the area of accounting at Narodowy Bank Polski, as amended.

#### 1.3. Period covered by the financial statements

The financial statements cover the calendar year from 1 January 2017 to 31 December 2017. Comparable data in the financial statements cover the calendar year from 1 January 2016 to 31 December 2016.

#### 1.4. Certified auditor and its selection

The annual financial statements of NBP prepared as at 31 December 2017 are subject to audit and evaluation by the certified auditor KPMG Audyt spółka z ograniczoną odpowiedzialnością 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 2017 in accordance with 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 2015, item 2164, as amended), for a period of two years (audit of the financial statements for the years 2017 and 2018).

# 1.5. Information on the adoption and approval of NBP financial statements for the year 2016

The annual financial statements of NBP prepared as at 31 December 2016 were adopted by the MPC by Resolution No. 1/2017 on 4 April 2017 (NBP Official Journal, item 8) and approved by the Council of Ministers by Resolution No. 83/2017 on 5 June 2017. The certified auditor in charge of auditing the financial statements – Ernst & Young Audyt Polska spółka z ograniczoną odpowiedzialnością sp.k. – issued an unmodified opinion on the audited financial statements.

In the financial statements prepared as at 31 December 2016, NBP recorded a financial result of PLN 9,200,986.7 thousand. Therefore in 2017, in accordance with Article 69 para. 4 of the Act on NBP, NBP paid a contribution from profit to the State budget in the amount of PLN 8,740,937.4 thousand. In accordance with Article 62 of the Act on NBP, 5% of NBP's profit, i.e. PLN 460,049.3 thousand, was allocated to reserve fund.

## 2. Description of significant accounting principles

#### 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 of the European Central Bank of 3 November 2016 on the legal framework for accounting and financial reporting in the European System of Central Banks (ECB/2016/34), hereinafter referred to as "the ECB Guideline".

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

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

#### 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

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 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.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Except for:

interest on nostro accounts balances, which is recognised as at the payment date,

interest payable on the required minimum reserve and interest on assets and liabilities related to own administrative activities, which is recognised at the month-end,

interest on initial margins related to futures, which is recognised in the financial result on the payment date.

Securities purchased or sold in a spot transaction are recognised in NBP accounting books on the settlement date.

#### 2.4. Valuation as at the balance sheet date

In financial statements, for gold, foreign currencies, securities purchased by NBP (except for securities held to maturity and non-marketable securities) and off-balance-sheet financial instruments the principle of valuation at market prices/exchange rates is applied.<sup>2</sup> The results of the assets and liabilities valuation at market prices/exchange rates effective as at the balance sheet date are recognised in accordance with the following rules:

- unrealised losses (revaluation losses) are recognised 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*.

The remaining assets and liabilities are valued on the basis of historical cost.

## 2.5. Principles for recognition and valuation of assets, liabilities and off-balance-sheet financial instruments and for recognition of income and expenses in the financial result

#### 2.5.1. Gold

Gold purchased is recognised in the NBP accounting books at purchase price, while gold receivables and liabilities – at the average market price of gold as at the date of recognition of the economic event in the accounting books. The prices of an ounce of gold in USD are translated into domestic currency according to the average NBP exchange rate of the USD effective as at the date of recognition of the economic event in the accounting books.

Assets and liabilities in gold, including spot transactions recognised on off-balance-sheet accounts and off-balance-sheet financial instruments in gold, constitute a holding of gold, for which the average cost is calculated. 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 foreign exchange gains or losses) and determine the results of balance sheet valuation. At the end of the operating day, the value in domestic currency of positions in gold is adjusted to the average cost of gold holding.

At the balance sheet date, gold is valued according to the average market price of an ounce of gold, translated into domestic currency according to the average NBP exchange rate of the USD effective

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<sup>&</sup>lt;sup>2</sup> Off-balance-sheet items in foreign currency arising from foreign exchange forwards and foreign exchange swaps are valued at the average NBP exchange rate.

as at the balance sheet date. No distinction is made between the results of currency and price valuation of gold – they are treated jointly as currency revaluation differences. Unrealised losses, recognised in the financial result on the balance sheet date, change the average cost of gold holding.

#### 2.5.2. Foreign currency

Foreign currency purchased or sold by NBP for:

- domestic currency is recognised in the accounting books at the exchange rate specified in an agreement or in a separate regulation,
- other foreign currency is recognised in the accounting books in the amount of quoted foreign currency, which was translated into domestic currency at the average exchange rate effective as at the date of recognition of the economic event in the accounting books.

In other cases, foreign currency is translated into domestic currency at the average NBP exchange rate effective as at the date of the economic event or at the average NBP exchange rate effective as at the date of recognition of the economic event in the accounting books.

Assets and liabilities in a foreign currency, including spot transactions recognised on off-balance-sheet accounts and off-balance-sheet financial instruments in that foreign currency, constitute a holding of foreign currency, for which the average cost is calculated. A holding of foreign currency is formed for each foreign currency separately. The average cost of foreign currency holding, which is the average cost of purchasing a unit of foreign currency by NBP, is used to calculate income and expenses arising from the sale of foreign currency (realised foreign exchange gains or losses) and determine the results of balance sheet valuation. At the end of the operating day, the value in domestic currency of positions in foreign currency is adjusted to the average cost of a foreign currency holding.

At the balance sheet date, foreign currencies are valued at the average NBP exchange rates effective as at the balance sheet date. Unrealised losses related to a given holding of foreign currency (gold) are not netted with unrealised gains on any other holding of foreign currency (gold). Unrealised losses recognised in the financial result on the balance sheet date change the average cost of a foreign currency holding.

Special Drawing Right, hereinafter referred to as "SDR", is treated as a separate foreign currency. Transactions that entail a change of the SDR position are either transactions denominated in SDR, or transactions in foreign currencies replicating the basket composition of SDR (according to the respective basket definition and weightings). When recognising unrealised gains and losses at the balance sheet date, it is assumed that a holding of SDR includes individual designated foreign currency holdings underlying the SDR basket.

#### 2.5.3. Securities purchased by NBP

Securities purchased in a spot transaction are recognised in the NBP accounting books at purchase price.

Discount and premium on securities purchased are recognised in the financial result (as discount income or premium expenses, respectively) at the end of each operating day in amounts calculated according to the internal rate of return. Interest on securities purchased is recognised in the financial result (as interest income) at the end of each operating day in amounts calculated pro-rata to the time elapsed between the purchase date and the end of each day.

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

For marketable securities not classified as securities held to maturity the average cost of holding is calculated. The average cost of a securities holding, which is the average cost of purchasing by NBP a security of a given code (adjusted for the amortised 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.

At the balance sheet date, marketable securities not classified as securities held to maturity are valued at the average market price effective as at the balance sheet date. Unrealised losses related to a given holding of securities 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.

Marketable securities held to maturity and non-marketable securities are valued as at the balance sheet date at purchase price, adjusted for the amortised discount/premium, less impairment.

#### 2.5.4. Shares and participating interests

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

#### 2.5.5. Repo / reverse 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 NBP balance sheet liabilities as a received deposit, collateralised with securities whose holding is not decreased on the trade date.

A reverse repo transaction is a contract under which an entity agrees to purchase securities and, simultaneously, agrees to re-sell these securities after a stated time, for an agreed price. This transaction is recognised in NBP balance sheet assets as a loan granted, collateralised with securities whose holding is not increased on the trade date. Securities purchased in reverse repo transactions are not subject to valuation and no income or expense on these securities is recognised in the financial result.

The difference between the agreed selling and re-purchasing (purchasing and re-selling) price of securities that constitute a collateral of the repo/reverse repo transactions is taken to the Profit and Loss Account at the end of each operating day in amounts calculated pro-rata to the time elapsed between the date of asset or liability recognition and the end of each day.

#### 2.5.6. Banknotes and coins in circulation

Banknotes and coins in circulation are recognised in NBP balance sheet liabilities at nominal value of banknotes and coins issued, decreased by nominal value of banknotes and coins:

- at NBP cash points and vaults,
- deposited in vaults of other banks,
- that have been withdrawn from circulation due to being worn out or damaged.

Expenses on the issue of banknotes and coins are recognised in the financial result on the date they are incurred, regardless of the date banknotes and coins are put into circulation.

#### 2.5.7. Securities issued by NBP

Securities issued by NBP are recognised in NBP balance sheet liabilities at nominal value.

Discount and premium on securities issued by NBP are recorded as accruals and recognised in the financial result (as discount expenses or premium income, respectively) at the end of each operating day in the amounts calculated for the period for which a given security was issued, prorata to the time elapsed between the date of liability recognition and the end of each day.

Interest on securities issued by NBP is recognised in the financial result (as interest expenses) at the end of each operating day in amounts calculated for the period for which a given security was issued, pro-rata to the time elapsed between the date of liability recognition and the end of each day.

#### 2.5.8. Tangible and intangible fixed assets

Tangible and intangible fixed assets are recognised in NBP balance sheet assets 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.

Tangible and intangible fixed 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 and intangible fixed assets prevailing as at 31 December 2017.

Tangible assets	Periods of use (in months)
Land, including	Unlimited
- right to perpetual usufruct of land	800
Buildings and premises	480-780
Land and water engineering objects	267-480
Machines, devices, appliances, tools, equipment, including	
- Boilers and energy machinery	86-3001
- General application machines, devices and appliances	48-2402
- Specialist machines, devices and appliances	86-240 <sup>3</sup>
- Technical devices	$36-300^4$
- Tools, technical instruments, movables and equipment	78-240 <sup>5</sup>
including Objects of art	Unlimited
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

<sup>&</sup>lt;sup>1</sup> A period of 300 months applies only to other 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 and intangible fixed assets.

<sup>&</sup>lt;sup>2</sup> A period of 240 months applies only to heat transfer devices, including membrane exchangers of various types, other heat transfer devices.

<sup>&</sup>lt;sup>3</sup> A period of 240 months applies only to printing machines, devices and appliances, including printing machines, bookbinding machinery, paper drills and auxiliary devices and equipment.

<sup>&</sup>lt;sup>4</sup> A period of 300 months applies only to electricity devices and apparatus, including: AC distribution devices, AC and DC setting devices, AC apparatus, fixed and mobile transformer stations, DC distribution devices and apparatus, DC apparatus and transformers.

<sup>&</sup>lt;sup>5</sup> A period of 240 months applies only to armoured cabinets and strongboxes, safes, metal shelvings and other utility equipment objects of rooms.

Periods of use of tangible and intangible fixed assets are verified each financial year.

In the case of tangible and intangible fixed assets with a low initial value, i.e. below PLN 3.5 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.

Tangible and intangible fixed assets are subject to periodical review (at least as at the balance sheet date) to verify if material indications of impairment have occurred, which would require recognising (increasing) impairment loss, or if indications of impairment have ceased, which would require reversing (decreasing) impairment loss.

As at the balance sheet date, tangible and intangible fixed assets are valued at initial value less depreciation/amortisation and impairment.

#### 2.5.9. Inventories

Inventories are recognised in NBP balance sheet assets at:

- purchase price materials and goods, gold not conforming to international standards of purity and other precious metals,
- production cost products,
- nominal value collector valuables (banknotes and coins) not in circulation.

As at the balance sheet date, inventories are valued at purchase price/production cost less impairment; in the case of collector valuables (banknotes and coins) not in circulation – at nominal value.

#### 2.5.10. Impairment of assets

Impairment of assets is determined on the balance sheet date by comparing the book value of assets with their value in use or market value, or if it is highly probable that a given asset will not generate expected economic benefits in the future.

#### 2.5.11. Provisions for future liabilities

Provisions for future liabilities are recognised in the accounting books of NBP when NBP is under an obligation arising from past events or from identified risk 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 and the amount adequate to cover the identified risk can be measured reliably. Provisions are created and recognised as expense in the amount that would have to be paid not later than on the balance sheet date to fulfil the above mentioned obligation or would be sufficient to cover the identified risk mentioned above.

As at the balance sheet date, provisions for future liabilities are adjusted. Provisions for future liabilities unused due to a full or partial cessation of obligation or risk justifying their creation are released as income.

#### 2.5.12. Provision against the foreign exchange rate risk of the zloty

The provision against the foreign exchange rate risk of the zloty is estimated on the basis of financial risk assessment methods which are generally accepted and consistently applied by NBP (see Chapter 9.1.4.).

The provision is created, used and released on the balance sheet date.

The provision is created and recognised as expense and must not lead to a negative financial result of the current year for NBP.

The provision is used – by recognising it as income – exclusively to cover unrealised losses arising from changes in the foreign exchange rate of the zloty in the amount that could result in a loss.

The surplus of the provision is released and recognised as income.

#### 2.5.13. Gold revaluation account

Gold revaluation account is released as income in the amount:

- of unrealised gold revaluation losses taken to the Profit and Loss Account on the balance sheet date,
- corresponding to the pro-rata decrease in gold holding as compared with its holding at the balance sheet date of the previous financial year.

#### 2.5.14. Foreign exchange forward

Currency purchased or sold in a foreign exchange forward transaction is recognised from the trade date to the settlement date on off-balance-sheet accounts at the agreed spot exchange rate. The difference between the agreed forward exchange rate and the spot rate is recognised in the financial result at the end of each operating day in the amounts calculated pro-rata to the time elapsed between the date commonly adopted for the settlement of a spot transaction and the settlement date of a foreign exchange forward transaction.

#### 2.5.15. Foreign exchange swap

Currency purchased or sold and, respectively, re-sold or re-purchased in a foreign exchange swap transaction is recognised from the trade date to the settlement date on off-balance-sheet accounts

at the agreed spot exchange rate. The difference between the agreed forward exchange rate and the spot rate is recognised in the financial result at the end of each operating day in the amounts calculated pro-rata to the time elapsed between the settlement date of the spot transaction and the settlement date of the foreign exchange forward transaction.

#### 2.5.16. Forward transactions in securities

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 holding of securities.

Securities purchased or sold in a forward transaction are valued at the balance sheet date at the market price of such transactions effective as at the valuation date. The rules for recognition of unrealised gains and losses are applied to income and expenses arising from this valuation.

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.

The result of transaction settlement 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 and the average cost of a securities holding, adjusted for revaluation losses recognised at the balance sheet date.

If more than one transaction for the forward purchase or sale of securities has been entered into, valuation and settlement of these transactions are carried out separately.

#### 2.5.17. Futures

Futures transactions 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.

The initial margin related to futures, deposited in cash, is recognised on balance sheet accounts as an asset. The initial margin deposited in securities does not change their holding.

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.

If, on the closing day of the open position in futures, the actual supply of the underlying instrument

takes place, its purchase or sale is recognised at a market price.

#### 2.6. Events after the balance sheet date

The Balance Sheet and the Profit and Loss Account take into account the events about which information was obtained after the balance sheet date and prior to the approval of the annual financial statements, if such events materially influence their content and are adjusting events as at the balance sheet date.

## 3. Changes in accounting principles

In 2017, at NBP there were no changes in the accounting principles and no material changes relating to presentation.

# 4. Values based on professional judgement and estimates

When preparing 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 the financial statements preparation. 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 estimates made by NBP are reviewed on a regular basis.

The key area where NBP makes estimates is the calculation of the amount of the provision against the foreign exchange rate risk of the zloty (see Chapter 9.1.4.). In accordance with Resolution No. 12/2010, the estimated provision against the foreign exchange rate risk of the zloty is equal to the amount that would cover the potential change in the value of foreign currency holdings due to identified foreign exchange rate risk of the zloty, decreased by estimated unrealised foreign currency revaluation gains. The estimated provision must not be lower than the amount of uncovered accumulated loss from previous years that has arisen from changes in the foreign exchange rate of the zloty.

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

- the amount of provisions for liabilities due to retirement and disability severance payments and
  jubilee awards (provisions are estimated on the basis of actuarial assessment carried out
  periodically by an independent actuary),
- the periods of use of tangible and intangible fixed assets,
- the amount of asset impairment.

## 5. Explanatory notes to Balance Sheet

## Note 1 Gold and gold receivables

PLN thousand	31.12.2016	31.12.2017	Change
Gold stored at NBP	761,593.6	709,598.7	-51,994.9
Gold on accounts with foreign banks, of which	15,274,177.3	14,232,548.4	-1,041,628.9
- current account in gold	3,673.5	802,775.4	799, 101.9
- term deposits in gold	15, 270, 503.8	13,429,773.0	-1,840,730.8
Total	16,035,770.9	14,942,147.1	-1,093,623.8
of which gold revaluation differences	11,692,060.2	10, 597, 180. 6	-1,094,879.6

Thousands of ounces	31.12.2016	31.12.2017	Change
Gold stored at NBP	157.2	157.2	0.0
Gold on accounts with foreign banks, of which	3,153.1	3,153.3	0.2
- current account in gold	0.8	177.8	177.0
- term deposits in gold	3, 152. 3	2,975.5	-176.8
Total	3,310.3	3 310.5*	0.2

<sup>\*</sup> Which corresponds to the weight of 103.0 tons.

Gold is held at NBP and at the Bank of England.

Gold held at the Bank of England is:

- held on the current account at the Bank of England,
- invested in term deposit transactions with foreign commercial banks and central banks; interest on term deposits in gold is accrued and paid in USD (see Note 3 and Note 28).

As compared with 31 December 2016, the increase in the balance by 0.2 thousand ounces resulted from the settlement of term deposit transactions in gold and concerned differences in the weight of gold bars received at the end of the term deposit against the weight of gold bars placed into term deposits (the differences are settled in USD).

The decrease in the domestic currency value of the item resulted mainly from the revaluation of gold (see Note 22).

## Note 2 Receivables from the IMF

PLN thousand	31.12.2016	31.12.2017	Change
Reserve tranche	1,302,060.8	1,140,102.2	-161,958.6
Current account with the IMF	1,775,124.3	1,492,794.7	-282,329.6
Term deposit with the IMF	40,119.7	35,123.4	-4,996.3
Loans extended to the IMF	1,277,403.0	706,367.8	-571,035.2
Total	4,394,707.8	3,374,388.1	-1,020,319.7
of which SDR currency revaluation differences	115, 136.4	-428, 858. 2	-543,994.6

SDR thousand	31.12.2016	31.12.2017	Change
Reserve tranche	229,575.6	229,614.0	38.4
Current account with the IMF	312,984.7	300,645.4	-12,339.3
Term deposit with the IMF	7,073.8	7,073.8	0.0
Loans extended to the IMF	225,228.0	142,260.8	-82,967.2
Total	774,862.1	679,594.0	-95,268.1

#### The item comprises SDR-denominated:

• reserve tranche corresponding to the Republic of Poland's member quota in the International Monetary Fund, hereinafter referred to as "IMF", reduced by liabilities due to the account in domestic currency operated by NBP for the IMF (so-called No. 1 Account).

PLN thousand	31.12.2016	31.12.2017	Change
Member quota in the IMF	22, 122, 554.9	20,663,090.9	-1,459,464.0
No. 1 Account of the IMF	-20, 820, 494.1	-19, 522, 988.7	1,297,505.4
Reserve tranche	1,302,060.8	1,140,102.2	-161,958.6

SDR thousand	31.12.2016	31.12.2017	Change
Member quota in the IMF	4,095,400.0	4,095,400.0	0.0
No. 1 Account of the IMF	-3, 865, 824.4	-3, 865, 786.0	38.4
Reserve tranche	229,575.6	229,614.0	38.4

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 the quarterly Financial Transaction Plans. 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.

Also, credits to No. 1 Account of the IMF due to payments made in PLN by IMF member countries connected with their member quota increase result in a decrease of reserve tranche.

- current account with the IMF on which funds received under SDR allocation are maintained (see Note 17) and settlements arising from interest and fees on balances and transactions related to the IMF are made,
- the non-interest bearing NBP term deposit in the PRG-HIPC Trust (Poverty Reduction and Growth – Heavily Indebted Poor Countries Initiative), administered by the IMF,
- loans in foreign currency extended to the IMF under the New Arrangements to Borrow, hereinafter referred to as "NAB" (see Note 27).

Reserve tranche (except for the non-interest-bearing part, which is fixed and amounts to SDR 56,236.0 thousand), the balance of the current account with the IMF and loans extended to the IMF are remunerated on the basis of the interest rate determined by the IMF.

The decrease in the item in the original currency was due to:

- a decrease in receivables due to loans extended to the IMF under NAB, which resulted from the
  partial repayment of the debt towards NBP by the IMF in the amount of SDR 83,076.2 thousand
  with a simultaneous increase in the interest accrued in the amount of SDR 109.0 thousand,
- settlements of interest and fees with the IMF in the amount of SDR 12,339.3 thousand, which resulted in a decrease in the current account with the IMF,
- crediting No. 2 Account of the IMF (see Note 14) with funds from No. 1 Account of the IMF in the amount of SDR 38.4 thousand, which resulted in an increase in reserve tranche.

The domestic currency value of the item was also affected by the currency revaluation of SDR (see Note 22 and Note 30).

Note 3 Balances with foreign institutions, securities, loans granted and other foreign assets

PLN thousand	31.12.2016	31.12.2017	Change
Current accounts in foreign currency, of which	15,599,875.3	12,470,822.1	-3,129,053.2
- current account with the ECB for settlements in TARGET2	3,660,897.8	4,713,430.8	1,052,533.0
Term deposits in foreign currency	32,324,537.1	26,289,397.0	-6,035,140.1
Reverse repo transactions in foreign currency	76,444,450.1	29,795,939.6	-46,648,510.5
Securities denominated in foreign currency	332,892,291.0	307,350,022.7	-25,542,268.3
Foreign banknotes and coins in stock	154,066.5	152,894.3	-1,172.2
Other claims in foreign currency, of which	1,436,977.0	1,440.1	-1,435,536.9
- initial margins related to bond futures denominated in foreign currency	266,055.0	0.0	-266, 055. 0
- interest on term deposits in gold	4,732.3	1,377.5	-3,354.8
- other	1, 166, 189. 7	62.6	-1, 166, 127. 1
Total	458,852,197.0	376,060,515.8	-82,791,681.2
of which			
- currency revaluation differences	37,033,262.2	-14, 553, 357. 5	-51, 586, 619.7
- price revaluation differences	473, 484. 1	-40, 925. 2	-514,409.3

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

- securities (discount securities and fixed-interest-rate securities) all securities purchased by NBP are marketable securities and are valued at the average market prices; neither on 31 December 2016 nor on 31 December 2017 did NBP hold securities classified as held-to-maturity,
- term deposits,
- reverse repo transactions under the NBP investment policy, these transactions are usually executed simultaneously with repo transactions (see Note 16).

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

31.12.2016							
thousand units of original currency	USD	EUR	GBP	AUD	NOK	NZD	
Term deposits	465,106.1	2,969,935.2	156,700.9	88,604.9	22,246,430.9	1,837,224.1	
Reverse repo transactions	12,207,194.0	935,399.4	4,138,150.9	0.0	0.0	0.0	
Securities	37,091,634.7	21,013,747.6	8,156,051.0	9,101,567.4	21,161,269.0	1,783,248.0	
Total	49,763,934.8	24,919,082.2	12,450,902.8	9,190,172.3	43,407,699.9	3,620,472.1	

31.12.2017						
thousand units of original currency	USD	EUR	GBP	AUD	NOK	NZD
Term deposits	719,859.4	1,968,339.9	495,511.2	0.0	22,607,616.0	1,477,872.3
Reverse repo transactions	6,326,989.9	1,584,211.1	0.0	427,296.5	0.0	0.0
Securities	41,658,941.9	20,799,623.5	7,645,660.5	9,266,998.6	21,535,176.8	2,139,403.7
Total	48,705,791.2	24,352,174.5	8,141,171.7	9,694,295.1	44,142,792.8	3,617,276.0

Change						
thousand units of original currency	USD	EUR	GBP	AUD	NOK	NZD
Term deposits	254,753.3	-1,001,595.3	338,810.3	-88,604.9	361,185.1	-359,351.8
Reverse repo transactions	-5,880,204.1	648,811.7	-4,138,150.9	427,296.5	0.0	0.0
Securities	4,567,307.2	-214,124.1	-510,390.5	165,431.2	373,907.8	356,155.7
Total	-1,058,143.6	-566,907.7	-4,309,731.1	504,122.8	735,092.9	-3,196.1

The decrease in the item resulted mainly from currency revaluation (see Note 22 and Note 30).

The decrease in the item in foreign currency was mainly a result of reduced exposure in reverse repo transactions in USD and GBP, a reduction in the level of funds held on term deposit accounts in EUR and a lower holding of securities denominated in GBP with a simultaneous increase in a holding of securities denominated in USD.

# Note 4 Other claims on other domestic monetary financial institutions denominated in domestic currency

As at 31 December 2017, the item comprised:

- claims on a credit union due to interest for non-compliance with the obligation to maintain the required minimum reserve, in the amount of PLN 420.9 thousand (the amount did not change compared with 31 December 2016),
- claims on domestic banks due to settlements related to the deliveries of domestic coins and notes, in the amount of PLN 108.1 thousand (PLN 3.1 thousand as at 31 December 2016).

## Note 5 Tangible and intangible fixed assets

		20	16			20	17	
Change in tangible fixed assets (due to rounding, individual figures in the table may not add up to totals)  PLN thousand	Land", buildings, premises, land and water engineering objects	Machines, devices, appliances, tools, equipment and vehicles	Tangible fixed assets under construction	Total	Land", buildings, premises, land and water engineering objects	Machines, devices, appliances, tools, equipment and vehicles	Tangible fixed assets under construction	Total
Gross value as at start of period	961,990.3	686,171.4	81,190.1	1,729,351.8	980,328.8	713,933.1	62,910.1	1,757,171.9
Increases	18,902.5	93,839.1	67,874.9	180,616.5	5,740.0	40,101.5	43,138.6	88,980.2
Decreases	-564.0	-66,077.5	-86,155.0	-152,796.4	-6,650.5	-92,427.9	-28,839.6	-127,918.0
Gross value as at end of period	980,328.8	713,933.1	62,910.1	1,757,171.9	979,418.3	661,606.7	77,209.1	1,718,234.1
of which fully depreciated	2,399.9	274,736.0	0.0	277,136.0	2, 166. 4	226,951.9	0.0	229, 118.3
Depreciation as at start of period	-388,037.1	-518,693.1	0.0	-906,730.0	-401,095.2	-504,522.9	0.0	-905,618.0
Increases	-13,058.1	-49,666.1	0.0	-62,724.2	-13,240.5	-47,578.1	0.0	-60,818.7
Decreases	0.0	63,836.2	0.0	63,836.2	2,161.7	90,169.3	0.0	92,331.0
Depreciation as at end of period	-401,095.2	-504,522.9	0.0	-905,618.0	-412,174.0	-461,931.7	0.0	-874,105.7
Impairment as at start of period	-657.5	-112.0	-25,903.9	-26,673.4	-422.4	-112.0	-25,903.9	-26,438.3
Increases	0.0	0.0	0.0	0.0	-2,974.6	-246.8	0.0	-3,221.5
Decreases	235.1	0.0	0.0	235.1	0.0	47.1	439.1	486.2
Impairment as at end of period	-422.4	-112.0	-25,903.9	-26,438.3	-3,397.0	-311.8	-25,464.8	-29,173.6
Net value as at end of period	578,811.2	209,298.2	37,006.2	825,115.6	563,847.3	199,363.2	51,744.3	814,954.8

<sup>\*</sup>Land includes right to perpetual usufruct of land, the net value of which as at 31 December 2017 amounted to PLN 58,375.4 thousand, with depreciation amounting to PLN 27,264.7 thousand (as at 31 December 2016 – PLN 63,804.6 thousand and PLN 28,105.8 thousand, respectively).

		20	16			20	17	
Change in intangible fixed assets (due to rounding, individual figures in the table may not add up to totals)  PLN thousand	Computer software	Copyrights, proprietary rights and similar rights and values	Intangible fixed assets under construction	Total	Computer software	Copyrights, proprietary rights and similar rights and values	Intangible fixed assets under construction	Total
Gross value as at start of period	392,507.3	11,599.5	2,098.3	406,205.1	406,868.5	12,647.2	10,646.3	430,161.9
Increases	14,640.6	1,412.9	17,999.2	34,052.7	22,918.0	1,408.2	21,586.4	45,912.6
Decreases	-279.4	-365.2	-9,451.2	-10,095.8	-2,350.7	-1.0	-15,876.1	-18,227.8
Gross value as at end of period	406,868.5	12,647.2	10,646.3	430,161.9	427,435.8	14,054.4	16,356.5	457,846.7
of which fully depreciated	107, 195. 5	1,602.2	0.0	108,797.7	116, 167.8	1,703.1	0.0	117,870.9
Amortisation as at start of period	-312,874.0	-4,380.5	0.0	-317,254.5	-333,840.0	-5,032.5	0.0	-338,872.5
Increases	-21,192.5	-959.4	0.0	-22,152.0	-20,184.7	-1,012.5	0.0	-21,197.2
Decreases	226.4	307.4	0.0	533.9	2,339.1	1.0	0.0	2,340.1
Amortisation as at end of period	-333,840.0	-5,032.5	0.0	-338,872.5	-351,685.6	-6,044.0	0.0	-357,729.6
Impairment as at start of period	-8.9	0.0	0.0	-8.9	-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
Decreases	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Impairment as at end of period	-8.9	0.0	0.0	-8.9	-8.9	0.0	0.0	-8.9
Net value as at end of period	73.019.6	7.614.7	10.646.3	91,280.5	75.741.3	8.010.4	16.356.5	100,108.2

# Note 6 Other financial assets

PLN thousand	31.12.2016	31.12.2017	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
- participating interests in housing cooperatives	8.3	8.3	0.0
Shares and participating interests in foreign entities, of which	149,419.4	137,052.8	-12,366.6
- shares in the Bank for International Settlements	56,716.0	49,653.0	-7,063.0
- participating interests in S.W.I.F.T.	701.1	661.0	-40.1
- participating interests in the European Central Bank	92,002.3	86, 738. 8	-5, 263. 5
Total	278,268.3	265,901.7	-12,366.6

A decrease in the value of the item in domestic currency 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 2016, and as at 31 December 2017 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 (%)
	31.12.2017	31.12.2017	31.12.2017	31.12.2017
Krajowy Depozyt Papierów Wartościowych S.A. (KDPW) Central Securities Depository of Poland	21,000.0	1.0	7,000	33.33%
Krajowa Izba Rozliczeniowa S.A. (KIR) National Clearing House	5,445.0	0.5	3,750	34.44%
Bazy i Systemy Bankowe Sp. z o.o. (BSB)	10,000.0	10.0	1,000	100.00%

The participation of NBP in foreign entities was as follows:

- shares of the Bank for International Settlements, hereinafter referred to as "BIS". As at 31 December 2016 and 31 December 2017, NBP held 8,000 shares that translated 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 1.43%.
- participating interests in S.W.I.F.T.
   As at 31 December 2016 and as at 31 December 2017, NBP had 53 shares (in the amount of EUR 158.5 thousand) of the total number of 110,137 shares as at 31 December 2016 and 110,034 shares as at 31 December 2017.
- participating interests in the European Central Bank, hereinafter referred to as "ECB". Since 1 May 2004, i.e. the day of Poland's accession to the European Union, NBP has had participating interest in the ECB's capital. As at 31 December 2017, the capital paid up by NBP to the ECB amounted to PLN 86,738.8 thousand (EUR 20,796.2 thousand).
  - In accordance with Article 28 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 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 new country joins the European Union. The last regular adjustment of the key took place on 1 January 2014.

The share of NBP in the ECB's subscribed capital currently amounts to 5.1230%, which corresponds to participating interest in the amount of EUR 554,565.1 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 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. The share of NBP in the paid-up capital of the ECB currently amounts to EUR 20,796.2 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 533,768.9 thousand.

The weightings in the capital subscription key, and the amounts of capital subscribed and capital paid up by individual central banks of the ESCB had not changed in comparison with 31 December 2016 and as at 31 December 2017 were as follows:

	Capital subscription key	Subscribed capital	Paid-up capital
EUR	31.12.2017	31.12.2017	31.12.2017
Oesterreichische Nationalbank	1.9631%	212,505,713.78	212,505,713.78
Nationale Bank van België/ Banque Nationale de Belgique	2.4778%	268,222,025.17	268,222,025.17
Central Bank of Cyprus	0.1513%	16,378,235.70	16,378,235.70
Eesti Pank	0.1928%	20,870,613.63	20,870,613.63
Suomen Pankki	1.2564%	136,005,388.82	136,005,388.82
Banque de France	14.1792%	1,534,899,402.41	1,534,899,402.41
Bank of Greece	2.0332%	220,094,043.74	220,094,043.74
Banco de España	8.8409%	957,028,050.02	957,028,050.02
De Nederlandsche Bank	4.0035%	433,379,158.03	433,379,158.03
Central Bank of Ireland	1.1607%	125,645,857.06	125,645,857.06
Lietuvos bankas	0.4132%	44,728,929.21	44,728,929.21
Banque centrale du Luxembourg	0.2030%	21,974,764.35	21,974,764.35
Latvijas Banka	0.2821%	30,537,344.94	30,537,344.94
Central Bank of Malta	0.0648%	7,014,604.58	7,014,604.58
Deutsche Bundesbank	17.9973%	1,948,208,997.34	1,948,208,997.34
Banco de Portugal	1.7434%	188,723,173.25	188,723,173.25
Národna banka Slovenska	0.7725%	83,623,179.61	83,623,179.61
Banka Slovenije	0.3455%	37,400,399.43	37,400,399.43
Banca d'Italia	12.3108%	1,332,644,970.33	1,332,644,970.33
National central banks in the euro area total	70.3915%	7,619,884,851.40	7,619,884,851.40
Българска народна банка (Bulgarian National Bank)	0.8590%	92,986,810.73	3,487,005.40
Croatian National Bank	0.6023%	65,199,017.58	2,444,963.16
Česka národni banka	1.6075%	174,011,988.64	6,525,449.57
Danmarks Nationalbank	1.4873%	161,000,330.15	6,037,512.38
Narodowy Bank Polski	5.1230%	554,565,112.18	20,796,191.71
Banca Natjonală a României	2.6024%	281,709,983.98	10,564,124.40
Sveriges Riksbank	2.2729%	246,041,585.69	9,226,559.46
Magyar Nemzeti Bank	1.3798%	149,363,447.55	5,601,129.28
Bank of England	13.6743%	1,480,243,941.72	55,509,147.81
National central banks outside the euro area total	29.6085%	3,205,122,218.22	120,192,083.17
Total*	100.0%	10,825,007,069.61	7,740,076,934.57

<sup>\*</sup>Due to rounding, individual figures may not add up to the amount shown in "Total".

## Note 7 Off-balance-sheet instruments revaluation differences

PLN thousand	31.12.2016	31.12.2017	Change
Currency revaluation differences	52,667.6	22,372.4	-30,295.2
Price revaluation differences	0.0	650.3	650.3
Total	52,667.6	23,022.7	-29,644.9

The item comprises currency revaluation gains on spot transactions in foreign currency recognised on off-balance-sheet accounts (see Note 25) and price revaluation gains on forward transactions in securities denominated in foreign currency (see Note 26 and Note 22).

Note 8 Accruals and prepaid expenses

PLN thousand	31.12.2016	31.12.2017	Change
Accruals related to discount on NBP monetary bills*	10,868.6	12,048.2	1,179.6
Prepaid expenses related to services	19,048.8	21,108.1	2,059.3
Total	29,917.4	33,156.3	3,238.9

<sup>\*</sup> See Note 11.

## Note 9 Sundry

PLN thousand	31.12.2016	31.12.2017	Change
Inventories, of which	17,056.6	18,186.0	1,129.4
- precious metals	12,850.0	14,428.5	1,578.5
- collector items not in circulation	3, 166.8	3,167.2	0.4
Credits and loans extended in domestic currency, of which	153,720.4	142,905.1	-10,815.3
- loans to employees, of which	20, 358.4	19,508.4	-850.0
*loans extended from the Employee Benefit Fund	8,908.6	9,151.3	242.7
- other loans	133, 362.0	123,396.7	-9, 965. 3
Other claims, of which	30,896.3	23,163.1	-7,733.2
- interest on the debt of a bank in liquidation	12,141.9	0.0	-12,141.9
- on public authorities	2, 350. 2	849.6	-1,500.6
- on customers and suppliers	8,798.9	12,791.9	3,993.0
Funds of the Employee Benefit Fund	9,594.2	8,835.9	-758.3
Adjustment of off-balance-sheet instruments to the average cost of foreign currency holding	116,887.9	13,633.8	-103,254.1
Total	328,155.4	206,723.9	-121,431.5

The decrease in the item *Other loans*, which includes a claim due to a refinancing loan for the restoration of the bank's liquidity granted by NBP in 2015, was the result of the received by NBP repayments of claims on loan agreements, which were assigned in favour of NBP as collateral to the loan granted (see Chapter 9.1.1.3.1.).

The decrease in the item *Other claims due to interest on the debt of a bank in liquidation,* which comprises interest accrued until the date on which the bank was put into liquidation, was the result of repayments received by NBP in 2017 (see Note 19 and Note 28).

Adjustment of off-balance-sheet instruments to the average cost of foreign currency holding relates to spot transactions in foreign currency recognised on off-balance-sheet accounts (see Note 25).

Note 10 Banknotes and coins in circulation

PLN thousand	31.12.2016	31.12.2017	Change
Domestic banknotes in circulation	182,999,892.6	193,976,229.3	10,976,336.7
Domestic coins in circulation	4,574,956.9	4,739,685.9	164,729.0
Total	187,574,849.5	198,715,915.2	11,141,065.7

The item comprises banknotes and coins in circulation issued by NBP, including collector banknotes and coins, whose value as at 31 December 2017 amounted to PLN 286,442.8 thousand as compared with PLN 279,868.8 thousand as at 31 December 2016.

The average level of banknotes and coins in circulation throughout 2017 amounted to PLN 190,582.9 million as compared with PLN 174,247.2 million in 2016.

Note 11 Liabilities to other domestic monetary financial institutions related to monetary policy operations denominated in domestic currency

PLN thousand	31.12.2016	31.12.2017	Change
Current accounts (incl. required minimum reserve accounts), of which	25,878,583.9	28,301,807.1	2,423,223.2
- current accounts of banks	25, 143, 102.8	27, 465, 346. 7	2,322,243.9
- required minimum reserve accounts of banks not having a current account with NBP and of KSKOK	686,618.8	785, 479.8	98,861.0
- interest on required minimum reserve funds	48,862.3	50, 980. 6	2,118.3
Deposit facilities, of which - accrued interest	7,366,064.8 201.8	5,278,903.9 216.9	-2,087,160.9 15.1
Other monetary policy operations, of which	81,308,470.0	94,423,120.0	13,114,650.0
- main operations	59,846,070.0	64,792,800.0	4,946,730.0
- fine-tuning operations	21, 462, 400.0	29,630,320.0	8,167,920.0
Total	114,553,118.7	128,003,831.0	13,450,712.3

The item comprises liabilities related to monetary policy operations conducted by NBP. They mainly include:

#### • balances on:

- current accounts of domestic banks, used to make interbank settlements in zloty and to hold funds that correspond to the required minimum reserve,
- required minimum reserve accounts of banks not having a current account with NBP,
- a required minimum reserve account of the National Association of Credit Unions [Krajowa Spółdzielcza Kasa Oszczędnościowo-Kredytowa], hereinafter referred to as "KSKOK", used for maintaining funds representing the required minimum reserve of credit unions and KSKOK;

The amount of funds held by banks, credit unions and KSKOK with NBP due to the required minimum reserve depends on the basis for calculating the required minimum reserve and the required minimum reserve rate in force. The required minimum reserve is an averaged value in the maintenance period.

- liabilities to domestic banks due to deposit facilities in 2017 domestic banks used the
  possibility to deposit their liquidity surplus on term deposit accounts with NBP in the form of
  interest-bearing overnight deposit. Typically, the largest amounts were deposited on the last
  days of the required minimum reserve maintenance periods;
- liabilities to domestic banks due to the issue of monetary bills by NBP under open market main<sup>3</sup>
   and fine-tuning<sup>4</sup> operations, which are aimed to absorb liquidity.

The funds of the required minimum reserve and deposit facilities bear interest, whereas monetary bills are issued at a discount (see Note 8). As at 31 December 2017, the interest rates which are the basis for remuneration of the required minimum reserve funds, deposit facilities and for determining discount on monetary bills issued by NBP under open market operations did not change as compared with 31 December 2016, and were as follows:

%	31.12.2017
Required minimum reserve*	1.35
Deposit facility**	0.50
Monetary bills***	1.50

<sup>\*0.9</sup> of NBP reference rate; \*\*NBP deposit rate; \*\*\*NBP reference rate

The rise in the total liabilities of NBP to other domestic monetary financial institutions in domestic currency due to monetary policy operations by PLN 13,450,712.3 thousand as at 31 December 2017, as compared with 31 December 2016, resulted mainly from an increase in the banking sector's liquidity during 2017. The increase in liquidity was mostly related to the purchase of foreign currency by NBP and the transfer of a contribution from NBP's profit for 2016 to the State budget. In turn, the increase in the volume of cash in circulation was a factor that reduced liquidity in 2017 (see Note 10).

<sup>&</sup>lt;sup>3</sup> In 2017, the maturity of main operations was mostly 7 days (there was also a main operation with the maturity of 8 days).

<sup>&</sup>lt;sup>4</sup> In 2017, the maturity of fine-tuning operations was 1 day, 2, 3 and 4 days.

Note 12 Other liabilities to other domestic monetary financial institutions denominated in domestic currency

PLN thousand	31.12.2016	31.12.2017	Change
Settlements in the domestic payment systems of KIR, of which	463,560.8	466,082.0	2,521.2
- in the Elixir system	387,857.8	300, 802. 9	-87,054.9
- in the Express Elixir system	75, 703.0	165, 279. 1	89, 576. 1
Liabilities due to substitution cash services	5,262.2	5,272.0	9.8
Total	468,823.0	471,354.0	2,531.0

The item comprises liabilities to banks due to operations unrelated to monetary policy which concern settlements in the payment systems operated by Krajowa Izba Rozliczeniowa S.A. (KIR S.A.) and substitution cash services.<sup>5</sup>

Note 13 Liabilities to other residents denominated in domestic currency

PLN thousand	31.12.2016	31.12.2017	Change
Liabilities to general government, of which	4,962,840.1	7,560,576.7	2,597,736.6
- State budget accounts	3,669,504.9	3, 245, 289. 2	-424, 215. 7
- accounts of social insurance funds	1, 238, 588. 1	4, 232, 157. 5	2,993,569.4
- accounts of other entities of general government sector	54,747.1	83, 118. 1	28,371.0
- other liabilities to general government	0.0	11.9	11.9
Other liabilities	17,729.2	20,671.4	2,942.2
Total	4,980,569.3	7,581,248.1	2,600,678.8

The item comprises mainly current accounts, auxiliary accounts and term deposit accounts in domestic currency operated by NBP for general government entities.

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<sup>&</sup>lt;sup>5</sup> It concerns cash disbursements carried out in domestic banks by State budget units and offices providing services to fiscal bodies which are located outside the cities in which NBP offers cash services.

Note 14 Liabilities to non-residents denominated in domestic currency

PLN thousand	31.12.2016	31.12.2017	Change
Accounts of international financial institutions and central banks, of which	8,858.3	12,126.3	3,268.0
- No. 2 Account of the IMF	102.5	41.9	-60.6
Accounts of international non-financial organisations	4,360,434.1	2,849,913.6	-1,510,520.5
Total	4,369,292.4	2,862,039.9	-1,507,252.5

The item comprises 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).

Note 15 Liabilities to residents denominated in foreign currency

PLN thousand	31.12.2016	31.12.2017	Change
State budget accounts	22,565,158.1	14,102,551.6	-8,462,606.5
Accounts of domestic banks for settlements in TARGET2	3,560,478.0	4,476,574.0	916,096.0
Other liabilities	1,143,772.6	725,204.4	-418,568.2
Total	27,269,408.7	19,304,330.0	-7,965,078.7
of which currency revaluation differences	1,116,251.0	-433,024.9	-1,549,275.9

The item comprises mainly funds held on accounts in foreign currency operated by NBP for:

- the State budget current, auxiliary and term deposit accounts,
- domestic banks current accounts in EUR used for settlements in TARGET2.

Moreover, the item comprises liabilities due to payment orders of NBP's customers with foreign counterparties, which are in the course of settlement as at the balance-sheet date.

Note 16 Liabilities to non-residents denominated in foreign currency

PLN thousand	31.12.2016	31.12.2017	Change
Repo transactions in foreign currency	76,439,867.9	29,005,514.5	-47,434,353.4
Accounts of international non-financial organisations	44,288.6	47,411.8	3,123.2
Other liabilities	1,264,209.4	125,618.4	-1,138,591.0
Total	77,748,365.9	29,178,544.7	-48,569,821.2
of which currency revaluation differences	7,352,661.4	-1,020,666.6	-8, 373, 328.0

The item comprises mainly repo transactions carried out with foreign financial institutions. Under the NBP investment policy, the above repo transactions are usually executed simultaneously with reverse repo transactions (see Note 3).

Repo transactions by foreign currency are presented below.

thousand units of original currency	USD	EUR	GBP	AUD
31.12.2016	12,206,598.5	935,321.4	4,137,811.0	0.0
31.12.2017	6,326,809.7	1,583,987.2	0.0	137,262.3
Change	-5,879,788.8	648,665.8	-4,137,811.0	137,262.3

Other liabilities include mainly NBP's own transactions denominated in foreign currency in the course of settlement as at the balance-sheet date.

Note 17 Liabilities to the IMF

PLN thousand	31.12.2016	31.12.2017	Change		
SDR allocation	7,401,999.6 6,485,		t allocation 7,401,999.6		-916,369.6
of which SDR currency revaluation differences	193, 924. 1	-824, 272.5	-1,018,196.6		

SDR allocation was conducted in the second half of 2009. Under the general and special allocation, the Republic of Poland received a total of SDR 1,304,639.7 thousand. Liabilities to the IMF due to the SDR allocation bear the interest calculated according to the rate determined by the IMF. The increase in the item in original currency resulted from the increase in accrued interest by SDR 1,091.9 thousand (as at 31 December 2017 the accrued interest amounted to SDR 1,551.3 thousand).

The change in the domestic currency value of the item was mainly affected by the currency revaluation of SDR (see Note 22 and Note 30).

Note 18 Off-balance-sheet instruments revaluation differences

PLN thousand	31.12.2016	31.12.2017	Change
Currency revaluation differences	112,265.6	13,667.8	-98,597.8
Price revaluation differences	1,805.8	13.6	-1,792.2
Total	114,071.4	13,681.4	-100,390.0

The item comprises currency revaluation losses on spot transactions in foreign currency recognised on off-balance-sheet accounts (see Note 25) and price revaluation losses on forward transactions in securities denominated in foreign currency (see Note 26 and Note 30).

Note 19 Accruals and deferred income

PLN thousand	31.12.2016	31.12.2017	Change
Accruals	56,289.7	51,828.2	-4,461.5
Deferred income, of which	75,338.5	62,112.0	-13,226.5
- interest on the debt of a bank in liquidation*	12,141.9	0.0	-12,141.9
Total	131,628.2	113,940.2	-17,688.0

<sup>\*</sup> See Note 9 and Note 28.

## Note 20 Sundry

PLN thousand	31.12.2016	31.12.2017	Change
Employee Benefit Fund	18,502.4	17,987.2	-515.2
Other liabilities, of which - to public authorities - to suppliers	43,173.0 25,469.2 16,811.4	57,824.3 24,907.2 27,907.7	14,651.3 -562.0 11,096.3
Adjustment of off-balance-sheet instruments to the average cost of foreign currency holding	60,195.5	23,363.0	-36,832.5
Total	121,870.9	99,174.5	-22,696.4

Adjustment of off-balance-sheet instruments to the average cost of foreign currency holding relates to spot transactions in foreign currency recognised on off-balance-sheet accounts (see Note 25).

Note 21 Provisions for future liabilities

PLN thousand	31.12.2016	31.12.2017	Change
Provisions for future liabilities to employees	124,596.4	125,481.2	884.8
Other provisions	8,717.6	8,302.8	-414.8
Total	133,314.0	133,784.0	470.0

The change in provisions in 2016 and 2017 by allocation into particular categories is presented in the tables below.

PLN thousand	01.01.2016	Increase	Use	Release	31.12.2016
Provisions for future liabilities to employees, of which	125,562.8	13,717.6	-13,590.5	-1,093.5	124,596.4
- due to retirement severance payments	51,115.8	13,235.7	-2, 115.7	0.0	62, 235. 8
- due to disability severance payments	1,791.8	26.9	-130.3	0.0	1,688.4
- due to jubilee awards	55,818.7	0.0	-5, 755. 6	-352.9	49,710.2
- due to untaken leaves	9, 276. 5	0.0	-455.9	-658.6	8,162.0
- due to statutory and additional severance payments and					
additional benefits for employees under employment contracts	7,560.0	455.0	-5, 133.0	-82.0	2,800.0
who are laid off for reasons unrelated to employees					
Other provisions, of which	7,704.6	1,117.7	-28.0	-76.7	8,717.6
- for future liabilities due to court proceedings	7,645.3	1,113.5	-28.0	-76.7	8,654.1
- for future liabilities resulting from financial operations in	59.3	4.2	0.0	0.0	63.5
domestic currency	59.3	4.2	0.0	0.0	03.0
Total	133,267.4	14,835.3	-13,618.5	-1,170.2	133,314.0

PLN thousand	01.01.2017	Increase	Use	Release	31.12.2017
Provisions for future liabilities to employees, of which	124,596.4	11,785.3	-10,156.0	-744.5	125,481.2
- due to retirement severance payments	62, 235.8	4,884.0	-1,577.8	0.0	65,542.0
- due to disability severance payments	1,688.4	211.6	-177.9	0.0	1,722.1
- due to jubilee awards	49,710.2	6,674.5	-7, 352.6	0.0	49,032.1
- due to untaken leaves	8, 162.0	0.0	-182.9	-674.1	7,305.0
- due to statutory and additional severance payments and					
additional benefits for employees under employment contracts	2,800.0	15.2	-864.8	-70.4	1,880.0
who are laid off for reasons unrelated to employees					
Other provisions, of which	8,717.6	442.7	-671.8	-185.7	8,302.8
- for future liabilities due to court proceedings	8,654.1	442.7	-671.8	-175.1	8,249.9
- for future liabilities resulting from financial operations in	63.5	0.0	0.0	-10.6	52.9
domestic currency	03.0	0.0	0.0	-10.0	52.9
Total	133,314.0	12,228.0	-10,827.8	-930.2	133,784.0

#### Note 22 Revaluation accounts

PLN thousand	31.12.2016	31.12.2017	Change
Currency revaluation gains, of which	41,291,274.5	10,986,318.2	-30,304,956.3
- on gold	11,692,060.2	10,597,180.6	-1,094,879.6
- on foreign currencies	29, 599, 214. 3	389, 137. 6	-29, 210, 076. 7
Price revaluation gains, of which	1,403,474.0	618,996.6	-784,477.4
- on securities	1,403,474.0	618, 346. 3	-785, 127. 7
- on off-balance-sheet financial instruments	0.0	650.3	650.3
Gold revaluation account	1,618,023.2	1,618,023.2	0.0
Total	44,312,771.7	13,223,338.0	-31,089,433.7

Currency revaluation gains are determined for:

- gold by comparing the average cost of gold holding with the average market price of gold expressed in PLN, which is higher than the average cost,
- foreign currencies by comparing the average cost of foreign currency holding with the average NBP exchange rate, which is higher than the average cost.<sup>6</sup>

Average cost of holding of foreign currency and gold, average NBP exchange rates and average market price of gold

	Average cost of holding	Average NBP exchange rate/Average price of gold	Average cost of holding	Average NBP exchange rate/Average price of gold
PLN	31.12		31.12.	
USD	3.5587564302	4.1793	3.6155244642	3.4813
EUR	4.2656978807	4.4240	4.2597284583	4.1709
GBP	5.2769729159	5.1445	4.9729585522	4.7001
AUD	2.8770933978	3.0180	2.8720955035	2.7199
NOK	0.4572716446	0.4868	0.4537717252	0.4239
NZD	2.7625797543	2.9058	2.6405620544	2.4774
SDR	5.5230104169	5.6716	5.5963505432	4.9653
Ounce of gold*	1,312.1863174561	4,844.2266	1,312.4640266468	4,513.5055

<sup>\*</sup>Price of an ounce of gold in USD was respectively: USD 1,159.10 as at 31.12.2016 and USD 1,296.50 as at 31.12.2017.

<sup>&</sup>lt;sup>6</sup> In the case of a negative holding of foreign currency, currency revaluation gains are determined by comparing the average cost of foreign currency holding with the average NBP exchange rate, which is lower than the average cost. As at the end of 2017 such a case materialised for SDR, the holding of which was negative.

Currency revaluation gains by foreign currency are presented below.

PLN thousand	31.12.2016	31.12.2017	Change
USD	23,088,509.4	0.0	-23,088,509.4
EUR	3,381,536.1	0.0	-3,381,536.1
AUD	1,311,176.8	0.0	-1,311,176.8
NOK	1,275,691.0	0.0	-1,275,691.0
NZD	541,345.3	0.0	-541,345.3
SDR	0.0	389,103.8	389,103.8
Other	955.7	33.8	-921.9
Total	29,599,214.3	389,137.6	-29,210,076.7

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. Price revaluation gains by securities denominated in individual foreign currencies are presented below.

PLN thousand	31.12.2016	31.12.2017	Change
Securities in USD	139,355.0	23,048.2	-116,306.8
Securities in EUR	287,746.9	30,992.7	-256,754.2
Securities in GBP	452,106.4	150,672.4	-301,434.0
Securities in AUD	75,885.1	8,261.0	-67,624.1
Securities in NOK	242,101.6	202,261.3	-39,840.3
Securities in NZD	206,279.0	203,110.7	-3,168.3
Total	1,403,474.0	618,346.3	-785,127.7

As at 31 December 2017, price revaluation gains on off-balance-sheet financial instruments mainly related to forward sale transactions in securities denominated in AUD (see Note 26 and Note 7).

Due to the fact that as at 31 December 2017:

- no unrealised gold revaluation losses occurred,
- no decrease in gold holding as compared with the holding at the balance-sheet date of the previous financial year was recorded,

NBP, similarly to 31 December 2016, did not release the gold revaluation account.

### Note 23 Capital and reserves

PLN thousand	31.12.2016	31.12.2017	Change
Statutory fund	1,500,000.0	1,500,000.0	0.0
Reserve fund	1,007,434.5	1,467,483.8	460,049.3
Reserves	10,807,911.6	0.0	-10,807,911.6
Total	13,315,346.1	2,967,483.8	-10,347,862.3

#### The item comprises:

- the statutory fund, whose amount is 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. Reserve fund 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.

#### The change in the item resulted from:

- allocation of 5% of NBP's profit for 2016 to the reserve fund in the amount of PLN 460,049.3 thousand (see Chapter 1.5).
- use of the provision against the foreign exchange rate risk of the zloty in the amount of PLN 10,807,911.6 thousand as a result of unrealised losses arising from changes in the foreign exchange rate of the zloty in the amount that caused a loss and exceeded the created provision (see Note 31 and Chapter 9.1.4.).

The change in the provision against the foreign exchange rate risk of the zloty in 2016 and 2017 is presented in the table below:

PLN thousand	Opening balance	Increase	Use	Release	Closing balance
2016	11,207,911.6	0.0	0.0	-400,000.0	10,807,911.6
2017	10,807,911.6	0.0	-10,807,911.6	0.0	0.0

#### Note 24 Financial result

As at 31 December 2017, the item comprised:

financial result of the current year – a loss in the amount of PLN 2,524,935.6 (see Note 41),

- uncovered loss of previous years in the amount of PLN 10,807,911.6 thousand, which is the result of NBP's loss for the year 2007 in the amount of PLN 12,427,261.7 thousand and its partial coverage from the reserve fund:
  - in 2008 in the amount of PLN 969,350.0 thousand;
  - in 2015 in the amount of PLN 250,000.0 thousand;
  - in 2016 in the amount of PLN 400,000.0 thousand.

# 6. Explanatory notes to off-balance-sheet items

Note 25 Spot transactions recognised on off-balance-sheet accounts

<b>31.12.2016</b> <i>PLN thousand</i>	USD	EUR	GBP	AUD	NOK	NZD	Total
Currency to be received in spot transactions	455,017.4	0.0	103,315.5	425,233.7	0.0	672,700.3	1,656,266.9
Currency to be delivered in spot transactions	1,084,534.4	352,149.7	102,867.6	0.0	116,715.2	0.0	1,656,266.9

<b>31.12.2017</b> <i>PLN thousand</i>	USD	EUR	GBP	AUD	NOK	NZD	Total
Currency to be received in spot transactions	490,890.0	208,860.5	188,649.1	136,364.0	0.0	0.0	1,024,763.6
Currency to be delivered in spot transactions	136,364.0	208,270.5	282,619.5	167,110.7	0.0	230,398.9	1,024,763.6

The decrease in the item resulted from a lower volume of spot foreign exchange purchase/sale transactions carried out by NBP towards the end of 2017.

#### Note 26 Off-balance-sheet financial instruments

PLN thousand	31.12.2016	31.12.2017	Change
Securities denominated in foreign currency sold in forward transactions, of which	1,899,643.2	1,722,742.3	-176,900.9
- securities in AUD	1,899,643.2	1,722,742.3	-176,900.9
Bond futures purchased denominated in foreign currency, of which	15,324,666.9	0.0	-15,324,666.9
- bond futures in USD	12, 244, 542.9	0.0	-12, 244, 542.9
- bond futures in EUR	1,531,488.8	0.0	-1,531,488.8
- bond futures in GBP	1, 548, 635. 2	0.0	-1,548,635.2
Bond futures sold denominated in foreign currency, of which	940,295.0	0.0	-940,295.0
- bond futures in EUR	940, 295. 0	0.0	-940,295.0

The item comprises off-balance-sheet financial instruments used by NBP under the foreign currency reserves management.

## Note 27 Limits on loans in foreign currency extended to the IMF

#### New Arrangements to Borrow - NAB

As of 15 November 2011, NBP became a participant in the New Arrangements to Borrow, which can be joined in by member countries of the IMF or their central banks. As a participant in the NAB, NBP has made a commitment to extend to the IMF an interest-bearing loan of up to the arranged limit. The funds are transferred by NBP at the request of the IMF.

The currently in force New Arrangements to Borrow of 17 November 2017, which is a renewal of the New Arrangements to Borrow of 2011<sup>7</sup>, expire after five years (that is on 16 November 2022).

As at 31 December 2017, the NBP's commitment to the IMF under the NAB amounted to SDR 1,143,327.5 thousand (PLN 5,676,964.0 thousand according to the average NBP exchange rate as at the balance sheet date).

<sup>&</sup>lt;sup>7</sup> On 9 February 2017, the Management Board of NBP gave its consent to continue NBP's participation in the NAB.

	Opening helenes	Incre	ease	Decr	ease	Closing balance
SDR thousand	Opening balance	limit set	loan repayment	loan extension	limit decreased	Closing balance
2011	0.0	2,528,590.0	0.0	-174,000.0	0.0	2,354,590.0
2012	2,354,590.0	0.0	2,500.0	-127,000.0	0.0	2,230,090.0
2013	2,230,090.0	0.0	27,200.0	-51,600.0	0.0	2,205,690.0
2014	2,205,690.0	0.0	72,827.5	-54,400.0	0.0	2,224,117.5
2015	2,224,117.5	0.0	102,200.0	-44,200.0	0.0	2,282,117.5
2016	2,282,117.5	0.0	21,323.8	0.0	-1,243,190.0*	1,060,251.3
2017	1,060,251.3	0.0	83,076.2	0.0	0.0	1,143,327.5
	Total	2,528,590.0	309,127.5	-451,200.0	-1,243,190.0	

<sup>\*</sup>As a result of an increase in the Republic of Poland's member quota in the IMF in 2016, the limit was reduced by SDR 1,243,190.0 thousand (from the initial amount of SDR 2,528,590.0 thousand to SDR 1,285,400.0 thousand).

#### Bilateral loan agreement

On 15 March 2013, NBP and the IMF concluded a bilateral loan agreement, in accordance with which NBP committed to extend interest-bearing loans to the IMF amounting up to the SDR equivalent of EUR 6,270,000.0 thousand. The funds will 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.

The current bilateral loan agreement of 23 January 2017, which supersedes the agreement of March 2013, is in force until the end of 2019, with the option to extend it for one-year period (subject to NBP's consent) to the end of 2020. The limit of the loan was set at the previous level.

Until 31 December 2017, the IMF did not use the funds made available under the bilateral loan agreement with NBP. Therefore, as at 31 December 2017, the NBP's commitment under the bilateral loan agreement with the IMF amounted to EUR 6,270,000.0 thousand (PLN 26,151,543.0 thousand according to the average NBP exchange rate as at the balance sheet date).

# 7. Explanatory notes to Profit and Loss Account

# Note 28 Net result on interest, discount and premium

	Income		Ехрє	enses		Net result	
PLN thousand	2016	2017	2016	2017	2016	2017	Change
Investment instruments of foreign currency reserves, of which	6,193,669.1	6,193,285.9	3,696,634.8	3,703,095.9	2,497,034.3	2,490,190.0	-6,844.3
- securities*	5, 729, 280.4	5,713,662.5	3,418,130.5	3, 282, 646. 5	2,311,149.9	2,431,016.0	119,866.1
- term deposits**	201,075.4	163,329.7	69,774.3	109, 558. 6	131,301.1	53,771.1	-77,530.0
- reverse repo transactions**	228, 179. 7	291,112.1	19,987.0	35, 678. 9	208, 192. 7	255, 433.2	47,240.5
- repo transactions***	14,785.9	24,831.2	187,471.4	258, 246. 0	-172, 685.5	-233,414.8	-60,729.3
- other**	20,347.7	350.4	1,271.6	16, 965. 9	19,076.1	-16, 615.5	-35,691.6
Gold	29,756.4	13,960.6	0.0	0.0	29,756.4	13,960.6	-15,795.8
International Monetary Fund	3,451.1	18,003.5	5,959.9	35,409.2	-2,508.8	-17,405.7	-14,896.9
Monetary policy instruments, of which	94.0	6.4	1,637,561.8	1,673,796.0	-1,637,467.8	-1,673,789.6	-36,321.8
- NBP monetary bills	0.0	0.0	1, 105, 379.0	1, 107, 616.4	-1,105,379.0	-1, 107, 616.4	-2,237.4
- required minimum reserve****	1.6	5.5	528, 398. 0	561,920.5	-528, 396. 4	-561,915.0	-33,518.6
- deposit facility	0.0	0.0	3, 784. 8	4, 259. 1	-3, 784.8	-4, 259. 1	-474.3
- Lombard credit	92.4	0.9	0.0	0.0	92.4	0.9	-91.5
Other interest income/ex penses	13,110.1	28,058.6	32,836.6	30,090.1	-19,726.5	-2,031.5	17,695.0
Total	6,240,080.7	6,253,315.0	5,372,993.1	5,442,391.2	867,087.6	810,923.8	-56,163.8

<sup>\*</sup>Income includes discount and interest income, whereas expenses include premium expenses.

# Net result on interest, discount and premium on investment instruments of foreign currency reserves (see Note 3 and Note 16).

2016										
PLN thousand	USD	EUR	GBP	AUD	NOK	NZD	Other*	Total		
Securities	1,372,910.5	-305,707.6	289,668.0	549,688.8	161,265.7	183,332.0	59,992.5	2,311,149.9		
Term deposits	19,512.2	-69,760.4	3,589.4	8,671.6	64,517.3	103,982.4	788.6	131,301.1		
Reverse repo transactions	160,808.8	-19,987.0	66,865.3	505.6	0.0	0.0	0.0	208,192.7		
Repo transactions	-125,935.5	12,085.9	-58,356.5	-479.4	0.0	0.0	0.0	-172,685.5		
Other	907.7	-507.7	6,572.5	12,269.0	6.1	10.0	-181.5	19,076.1		
Total	1,428,203.7	-383,876.8	308,338.7	570,655.6	225,789.1	287,324.4	60,599.6	2,497,034.3		

<sup>\*</sup>It concerns mainly BRL and MXN. In 2016, NBP ceased investing in instruments denominated in these currencies.

<sup>\*\*</sup>Expenses include interest expenses due to a negative interest rate.

<sup>\*\*\*</sup>Income includes interest income due to a negative interest rate.

<sup>\*\*\*\*</sup>Income includes interest income for non-compliance with the obligation to maintain the required minimum reserve.

2017									
PLN thousand	USD	EUR	GBP	AUD	NOK	NZD	Other	Total	
Securities	1,846,816.2	-486,132.1	196,001.9	515,723.5	153,935.3	204,671.2	0.0	2,431,016.0	
Term deposits	28,221.3	-109,558.4	2,350.2	5,330.0	55,913.2	71,514.8	0.0	53,771.1	
Reverse repo transactions	261,212.7	-35,678.9	25,237.3	4,662.1	0.0	0.0	0.0	255,433.2	
Repo transactions	-234,549.5	24,203.2	-19,550.7	-3,517.8	0.0	0.0	0.0	-233,414.8	
Other	233.1	-16,447.8	51.7	7.2	34.7	-0.3	-494.1	-16,615.5	
Total	1,901,933.8	-623,614.0	204,090.4	522,205.0	209,883.2	276,185.7	-494.1	2,490,190.0	

Change										
PLN thousand	USD	EUR	GBP	AUD	NOK	NZD	Other	Total		
Securities	473,905.7	-180,424.5	-93,666.1	-33,965.3	-7,330.4	21,339.2	-59,992.5	119,866.1		
Term deposits	8,709.1	-39,798.0	-1,239.2	-3,341.6	-8,604.1	-32,467.6	-788.6	-77,530.0		
Reverse repo transactions	100,403.9	-15,691.9	-41,628.0	4,156.5	0.0	0.0	0.0	47,240.5		
Repo transactions	-108,614.0	12,117.3	38,805.8	-3,038.4	0.0	0.0	0.0	-60,729.3		
Other	-674.6	-15,940.1	-6,520.8	-12,261.8	28.6	-10.3	-312.6	-35,691.6		
Total	473,730.1	-239,737.2	-104,248.3	-48,450.6	-15,905.9	-11,138.7	-61,093.7	-6,844.3		

The volume and change in interest, discount and premium income and expenses on investment instruments of foreign currency reserves were mostly driven by the following factors:

- the average interest rate on basic investment instruments of foreign currency reserves, in particular a decrease in the average annual interest rate on term deposits in AUD, NZD and NOK and a decrease in the average rate of return on securities in EUR in an environment of a negative interest rate of this currency, with a simultaneous increase in the average rate of return on securities in USD,
- the level of the average annual foreign exchange rates of the zloty an appreciation of the zloty against all the currencies in which currency reserves are invested,

Average annual foreign exchange rates

PLN	2016	2017	Change
USD	3.9431	3.7777	-0.1654
EUR	4.3625	4.2576	-0.1049
GBP	5.3431	4.8601	-0.4830
AUD	2.9330	2.8934	-0.0396
NOK	0.4695	0.4567	-0.0128
NZD	2.7500	2.6837	-0.0663

• the level of foreign currency reserves<sup>8</sup> in average annual terms (their average amount stood at PLN 347,490.9 million in 2017 as compared with PLN 338,664.8 million in 2016),

Average annual level of foreign currency reserves by foreign currency

million units of original currency	2016	2017	Change
USD	37,231.1	38,940.6	1,709.5
EUR	23,682.7	26,592.7	2,910.0
GBP	6,726.4	7,363.7	637.3
AUD	8,179.7	8,317.1	137.4
NOK	40,182.1	40,719.6	537.5
N <i>Z</i> D	3,211.4	3,247.0	35.6
BRL	91.1	0.0	-91.1
MXN	3,841.1	0.0	-3,841.1

the share of individual investment instruments in the structure of foreign currency reserves –
 the decrease in the share of securities, with a simultaneous increase in the share of other investment instruments,

Investment structure of NBP foreign currency reserves in average annual terms

%	2016	2017	Change
Term deposits	11.0	12.8	1.8 p.p.
Reverse repo transactions in foreign currency (stand alone)	0.8	1.0	0.2 p.p.
Securities	88.2	86.2	-2.0 p.p.

the average daily amounts invested in simultaneous reverse repo and repo transactions,

Average daily amounts invested in simultaneous reverse repo and repo transactions

million units of original currency	2016	2017	Change
USD	8,015.9	7,197.5	-818.4
EUR	302.1	650.9	348.8
GBP	2,802.9	2,174.0	-628.9
AUD	9.1	76.4	67.3

<sup>&</sup>lt;sup>8</sup> Foreign currency reserves include term deposits, reverse repo transactions in securities (stand alone) and securities.

#### *Interest income on gold* (see Note 1 and Note 3)

The item includes interest income on term deposits in gold, which is accrued and paid in USD. The decrease in the item in 2017 was mainly a result of the decrease in the average annual interest rate on deposits and an appreciation of the zloty against USD, in average annual terms.

Net result on interest on receivables/liabilities related to the International Monetary Fund (see Note 2 and Note 17)

	Inco	ome	Expenses			Net result	
PLN thousand	2016	2017	2016	2017	2016	2017	Change
Interest on reserve tranche	842.3	4,690.6	0.0	0.0	842.3	4,690.6	3,848.3
Interest on current account with the IMF	1,562.0	7,993.8	0.0	0.0	1,562.0	7,993.8	6,431.8
Interest on loans extended to the IMF	1,046.8	5,319.1	0.0	0.0	1,046.8	5,319.1	4,272.3
Interest on SDR allocation	0.0	0.0	5,959.9	35,409.2	-5,959.9	-35,409.2	-29,449.3
Total	3,451.1	18,003.5	5,959.9	35,409.2	-2,508.8	-17,405.7	-14,896.9

The change in the interest income/expenses on items related to the IMF was a result of the following factors:

- the increase in the average weighted interest on SDR from 0.084% in 2016 to 0.525% in 2017,
- an appreciation of the zloty against SDR, in average annual terms, from PLN 5.4805 in 2016 to PLN 5.2367 in 2017,
- a lower average annual balance of the current account with the IMF, receivables on loans extended to the IMF and the reserve tranche.

#### Net result on interest and discount on monetary policy instruments (see Note 11)

The increase, by PLN 36,321.8 thousand, in the negative net result on interest and discount on the instruments used in monetary policy operations was mostly driven by:

higher, by PLN 33,522.5 thousand, interest expenses on the required minimum reserve, which
resulted from the rise in the average level of the required minimum reserve during the year,

<sup>&</sup>lt;sup>9</sup> Following the decision of the Executive Board of the IMF, starting from 1 October 2016 the Chinese renminbi was added to the foreign currency basket used for determining the SDR exchange rate (before the decision the currency basket had comprised: USD, EUR, JPY and GBP), which had an impact on the increase in the IMF interest rate.

Average size of required minimum reserve\* and average annual interest rate of required minimum reserve

PLN million/ %	2016	2017	Change
Required minimum reserve	38,821.5	41,697.3	2,875.8
Interest rate on required minimum reserve	1.35	1.35	0,0 p.p.

<sup>\*</sup>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 2,237.4 thousand, discount expenses on issued NBP monetary bills, which was
a result of the higher cost of fine-tuning monetary policy operations and lower costs of main
monetary policy operations.

PLN thousand	2016	2017	Change
Discount expenses on NBP monetary bills issued under main monetary policy operations	1,086,893.0	1,082,121.0	-4,772.0
Discount expenses on NBP monetary bills issued under fine-tuning monetary policy operations	18,486.0	25,495.4	7,009.4
Total	1,105,379.0	1,107,616.4	2,237.4

The above change resulted from the increase in the average annual issue of NBP monetary bills under fine-tuning monetary policy operations, with a simultaneous decline in the average annual issue under main monetary policy operations.

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

PLN million / %	2016	2017	Change
Main operations	71,198.1	71,076.0	-122.1
Fine-tuning operations	1,210.7	1,674.1	463.4
NBP reference rate	1.50	1.50	0,0 p.p.

<sup>\*</sup>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.

## Other interest income/expenses

	Inco	Income Expenses		nses		Net result	
PLN thousand	2016	2017	2016	2017	2016	2017	Change
Interest income on a refinancing loan for the restoration of the bank's liquidity*	1,813.0	0.0	0.0	0.0	1,813.0	0.0	-1,813.0
Interest income on the debt of a bank in liquidation**	202.6	18,216.1	0.0	0.0	202.6	18,216.1	18,013.5
Interest expenses on current and auxiliary accounts and on term deposit accounts operated by NBP***, of which	0.0	0.0	29,171.6	20,007.4	-29,171.6	-20,007.4	9,164.2
- in foreign currency	0.0	0.0	10,093.8	925.6	-10,093.8	-925.6	9, 168. 2
- in domestic currency	0.0	0.0	19,077.8	19,081.8	-19,077.8	-19,081.8	-4.0
Interest income/expenses related to settlements in TARGET2	2,889.7	9,344.3	3,500.9	10,080.6	-611.2	-736.3	-125.1
Other interest income/expenses	8,204.8	498.2	164.1	2.1	8,040.7	496.1	-7,544.6
Total	13,110.1	28,058.6	32,836.6	30,090.1	-19,726.5	-2,031.5	17,695.0

<sup>\*</sup>As of 22 February 2016, NBP ceased to charge interest on a refinancing loan for the restoration of the bank's liquidity (see Note 9).

# Note 29 Income/expenses on financial operations

	Income Expense		enses	Net result			
PLN thousand	2016	2017	2016	2017	2016	2017	Change
Realised foreign ex change gains/losses	10,845,941.7	3,496,116.5	1,527,150.5	3,513,779.0	9,318,791.2	-17,662.5	-9,336,453.7
Realised price gains/losses of which	4,329,748.3	2,605,108.3	2,662,923.6	2,031,383.0	1,666,824.7	573,725.3	-1,093,099.4
- on spot transactions in securities	1, 768, 344. 1	836, 112.2	254, 507. 6	467,514.1	1,513,836.5	368, 598. 1	-1, 145, 238.4
- on off-balance-sheet financial instruments, of which	2,561,404.2	1,768,996.1	2,408,416.0	1,563,868.9	152,988.2	205, 127.2	52, 139.0
• on forward transactions in securities	571,245.2	29,933.5	107,631.5	30,104.8	463,613.7	-171.3	-463,785.0
• on bond futures	1,990,159.0	1,739,062.6	2,300,784.5	1,533,764.1	-310,625.5	205, 298.5	515,924.0
Other income/expenses on financial operations	2.6	4.6	1.9	2.0	0.7	2.6	1.9
Total	15,175,692.6	6,101,229.4	4,190,076.0	5,545,164.0	10,985,616.6	556,065.4	-10,429,551.2

<sup>\*\*</sup>It concerns repayments of interest accrued until the date on which the bank was put into liquidation (see Note 9 and Note 19) and repayments of interest accrued following that date.

<sup>\*\*\*</sup>It concerns mainly the State budget accounts and social insurance funds.

## Net result on realised foreign exchange gains/losses

PLN thousand	USD	EUR	GBP	AUD	NOK	NZD	SDR	Gold	Other*	Total
2016	5,956,842.5	1,314,513.0	-35,982.9	862,855.8	607,269.4	572,700.9	112,458.3	0.2	-71,866.0	9,318,791.2
2017	1,835,260.1	-231,317.6	-1,396,766.2	177,160.9	-65,892.0	-338,903.7	1,190.3	12.5	1,593.2	-17,662.5
Change	-4,121,582.4	-1,545,830.6	-1,360,783.3	-685,694.9	-673,161.4	-911,604.6	-111,268.0	12.3	73,459.2	-9,336,453.7

<sup>\*</sup>It concerns mainly BRL and MXN. In 2016, NBP ceased investing in instruments denominated in these currencies.

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

PLN thousand	USD	EUR	GBP	AUD	NOK	Other*	Total
2016	476,819.9	169,755.0	540,465.3	278,105.1	4,914.5	43,776.7	1,513,836.5
2017	11,989.9	68,613.8	139,814.6	138,733.6	9,446.2	0.0	368,598.1
Change	-464,830.0	-101,141.2	-400,650.7	-139,371.5	4,531.7	-43,776.7	-1,145,238.4

<sup>\*</sup>It concerns MXN. In 2016, NBP ceased investing in instruments denominated in this currency.

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

PLN thousand	USD	EUR	GBP	AUD	NZD	Other*	Total
2016	-842.4	322,064.3	63,831.7	66,359.6	8,056.8	4,143.7	463,613.7
2017	-1,850.0	-3,921.1	1,817.9	3,850.2	-68.3	0.0	-171.3
Change	-1,007.6	-325,985.4	-62,013.8	-62,509.4	-8,125.1	-4,143.7	-463,785.0

<sup>\*</sup>It concerns BRL and MXN. In 2016, NBP ceased investing in instruments denominated in these currencies.

## Net result on realised price gains/losses on daily revaluation of bond futures

PLN thousand	USD	EUR	GBP	Total
2016	-344,967.4	43,967.5	-9,625.6	-310,625.5
2017	206,022.0	-11,418.3	10,694.8	205,298.5
Change	550,989.4	-55,385.8	20,320.4	515,924.0

## Note 30 Unrealised losses

PLN thousand	2016	2017	Change
Currency revaluation losses	1,168,798.6	13,092,709.6	11,923,911.0
Price revaluation losses, of which	931,795.8	659,285.1	-272,510.7
- revaluation losses on securities	929, 990.0	659,271.5	-270,718.5
- revaluation losses on off-balance-sheet financial instruments	1,805.8	13.6	-1,792.2
Total	2,100,594.4	13,751,994.7	11,651,400.3

Foreign 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<sup>10</sup> (see Note 22). Currency revaluation losses by foreign currency are presented below.

PLN thousand	2016	2017	Change
USD	0.0	5,672,532.6	5,672,532.6
EUR	0.0	1,892,538.3	1,892,538.3
GBP	1,091,492.6	2,207,578.4	1,116,085.8
AUD	0.0	1,452,458.8	1,452,458.8
NOK	0.0	1,304,581.0	1,304,581.0
NZD	0.0	561,710.0	561,710.0
SDR	77,301.8	0.0	-77,301.8
Other	4.2	1,310.5	1,306.3
Total	1,168,798.6	13,092,709.6	11,923,911.0

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 by securities denominated in individual foreign currencies are presented below.

PLN thousand	2016	2017	Change
Securities in USD	762,962.2	461,925.7	-301,036.5
Securities in EUR	56,043.8	102,460.3	46,416.5
Securities in GBP	26,444.4	59,536.3	33,091.9
Securities in AUD	66,117.5	35,349.2	-30,768.3
Securities in NOK	18,422.1	0.0	-18,422.1
Total	929,990.0	659,271.5	-270,718.5

As at 31 December 2016 and 31 December 2017, price revaluation losses on off-balance-sheet financial instruments concerned securities denominated in AUD sold in forward transactions (see Note 18 and Note 26).

<sup>&</sup>lt;sup>10</sup> In the case of a negative holding of foreign currency, currency revaluation losses are determined by comparing the average cost of foreign currency holding with the average NBP exchange rate, which is higher than the average cost. As at the end of 2016, such a case materialised for SDR, the holding of which was negative.

# Note 31 Income on transfers from risk provisions and on reversal of write-downs on financial assets

In 2017, income in the amount of PLN 10,807,911.6 thousand resulted from the use of the provision against the foreign exchange rate risk of the zloty (see Note 23).

In 2016, income in the amount of PLN 400,000.0 thousand resulted from the release of the provision against the foreign exchange rate risk of the zloty to the minimum level commensurate to the uncovered cumulative loss of previous years, which arose from the changes in the exchange rate of the zloty against foreign currencies.

Note 32 Fees and commissions income

PLN thousand	2016	2017	Change
On the operation by NBP of bank accounts	537.8	534.9	-2.9
On the execution of payment orders	29,204.6	31,259.8	2,055.2
Other fees and commissions income	29,925.2	15,205.9	-14,719.3
Total	59,667.6	47,000.6	-12,667.0

The decrease in other income in 2017 was related mainly to fees income due to non-delivery of securities by NBP's counterparties in time (so-called fails charges<sup>11</sup>), which amounted to PLN 4,673.8 thousand in 2017 as compared with PLN 19,600.2 thousand in 2016.

Note 33 Fees and commissions expenses

PLN thousand	2016	2017	Change
On the opening and operation of NBP accounts	7,164.8	6,691.8	-473.0
On the execution of own payment orders	3,476.1	3,537.5	61.4
Due to substitution cash services	7,033.2	6,767.9	-265.3
Other fees and commissions expenses	36,287.3	18,229.6	-18,057.7
Total	53,961.4	35,226.8	-18,734.6

<sup>&</sup>lt;sup>11</sup> Fails charges relate to securities purchase/sale transactions and repo/reverse repo transactions in USD. The charges are calculated when one party delivers securities to the other party at a date later than agreed.

In 2017, the decrease in other expenses was mainly related to fees expenses due to non-delivery of securities in time (so-called fails charges), which in 2017 amounted to PLN 3,195.6 thousand as compared with PLN 20,138.8 thousand in 2016 (see Note 32).

## Note 34 Income on shares and participating interests

The item comprises income on dividends from shares and participating interests held by NBP in domestic and foreign entities (see Note 6).

PLN thousand	2016	2017	Change
Dividends received, of which	15,016.7	17,289.4	2,272.7
- Krajowa Izba Rozliczeniowa S.A.	5, 463.7	4,965.0	-498.7
- Bank for International Settlements	9, 553.0	12,324.4	2,771.4

## Note 35 Other income

In 2017, the item amounted to PLN 112,997.1 thousand and comprised mostly income on the sale of collector coins and banknotes, income on the sale of tangible fixed assets and income on rental of office premises. The increase in the income by PLN 28,073.5 thousand as compared with 2016 was mainly driven by higher income on the sale of properties.

### Note 36 Salaries and social contributions

PLN thousand	2016	2017	Change
Expenses on salaries	380,075.6	388,700.0	8,624.4
Expenses on provisions for future liabilities to employees	13,262.6	11,770.1	-1,492.5
Expenses on social contributions, of which	84,042.4	86,484.9	2,442.5
- Occupational Pension Scheme	24,237.2	24,713.5	476.3
Total	477,380.6	486,955.0	9,574.4

In 2017, the average headcount at NBP amounted to 3,281 employees and was lower by 15 employees as compared with 2016, which was predominantly the effect of the centralisation of cash services provided to account holders and of the streamlining of the banknotes counting and sorting process.

In 2017, higher salary expenses resulted mainly from the adopted Human Resources and payroll policy.

In 2016 and 2017, expenses on the creation of provisions for future liabilities to employees by allocation into particular categories were as follows.

	20	16	20	2017	
PLN thousand	Expenses on provisions	Actuarial incomes/losses*	Expenses on provisions	Actuarial income/losses*	
Expenses on provisions for future liabilities to employees, of which	13,262.6	3,644.6	11,770.1	2,103.7	
- due to retirement severance payments	13,235.7	9, 259. 8	4,884.0	38.8	
- due to disability severance payments	26.9	-157.3	211.6	23.8	
- due to jubilee awards	0.0**	-5,457.9	6,674.5	2,041.1	
- due to untaken leaves	0.0**	-	0,0**	-	

<sup>\*</sup> Actuarial gains are presented with a (-) sign

## Note 37 Administrative expenses

PLN thousand	2016 data from the approved financial statements	2016 comparable data*	2017	Change
Materials and energy used	22,763.9	24,396.7	23,048.5	-1,348.2
Benefits for employees and other eligible persons	13,606.4	12,666.2	10,855.3	-1,810.9
Business travels	4,388.1	4,357.8	4,270.1	-87.7
Services from third parties	137,549.8	144,953.5	153,039.1	8,085.6
Tax es and fees	26,321.4	26,321.4	22,042.1	-4,279.3
Transfers to Employee Benefit Fund	4,321.7	4,321.7	4,632.6	310.9
Other administrative expenses	23,651.4	15,585.4	10,372.9	-5,212.5
Total	232,602.7	232,602.7	228,260.6	-4,342.1

<sup>\*</sup> In 2017 reclassification of selected expenses categories was performed in order to better reflect the resources used.

The change in the item resulted mainly from lower:

- other administrative expenses, mainly due to lower costs of subsidising educational projects,
- expenses on taxes and fees, mostly due to lower expenses on the output VAT.

<sup>\*\*</sup> As regards provisions for jubilee awards and untaken leaves in 2016, and in the case of provision for untaken leaves in 2017, income was recored due to a partial release of the provisions and classified as Other income.

At the same time expenses on services from third parties increased, mostly as regards services and technical assistance of IT software and repairs, maintenance and overhauls of tangible fixed assets in the premises of NBP Head Office and regional branches.

Note 38 Depreciation and amortisation expenses

PLN thousand	2016	2017	Change
Tangible fixed assets depreciation expenses	62,688.3	60,795.9	-1,892.4
Intangible fixed assets amortisation expenses	22,152.0	21,195.9	-956.1
Total	84,840.3	81,991.8	-2,848.5

## Note 39 Expenses on issue of banknotes and coins

The item comprises expenses on the issue of banknotes and coins, including collector banknotes and coins.

In 2017, the item amounted to PLN 280,088.9 thousand and was by PLN 29,156.8 thousand higher as compared with 2016. The increase in the item resulted mainly from:

- increase in expenses on the issue of general circulation coins resulting from a rise in the number of ordered coins and higher production prices of coins of the face value from 1 grosz to 10 grosz.
- decrease in expenses on the issue of general circulation banknotes resulting from a decline in the purchase prices of banknotes of the face value of 10 zloty, 100 zloty, 200 zloty and 500 zloty, with a simultaneous increase in the number of ordered banknotes.

# Note 40 Other expenses

In 2017, the item amounted to PLN 12,605.7 thousand and comprised mainly expenses corresponding to the nominal value of collector coins and banknotes sold and expenses due to write-downs on tangible fixed assets. The increase in the expenses by PLN 1,591.8 thousand as compared with 2016 was mainly driven by higher expenses on write-downs on properties.

# Note 41 Financial result for the current year and its allocation

The NBP financial result for 2017 was negative and amounted to PLN 2,524,935.6 thousand, therefore in 2018 NBP will not make a contribution from its profit to the State budget. In accordance

with Article 62 of the Act on NBP, the reserve fund may be allocated to cover the balance sheet losses of NBP (see Note 23).

## 8. Other explanatory notes

#### Note 42 Flexible Credit Line

The Flexible Credit Line is a precautionary facility of the IMF intended for countries with sound fundamentals and positive macroeconomic outlook.

In 2017, the following were in force:

- until 12 January 2017 the Flexible Credit Line of SDR 13.0 billion granted to Poland in January 2015 for two years,<sup>12</sup>
- from 13 January to 2 November 2017 the Flexible Credit Line of SDR 6.5 billion granted to Poland for two years, that is until January 2019. On 3 November 2017 – in response to the joint application by Poland's Minister of Development and Finance and the President of Narodowy Bank Polski – the IMF cancelled Poland's access to the Flexible Credit Line of 13 January 2017.

In both cases, the Government of the Republic of Poland was the authorising entity of the Flexible Credit Line, while NBP acted as the fiscal agency of the Government.

#### Note 43 Events after the balance sheet date

Until the day of approval of the Financial Statements of Narodowy Bank Polski as at 31 December 2017, no events occurred of which information was received after the balance sheet date, i.e. 31 December 2017, and which would have a significant impact on the contents of these financial statements.

# 9. Financial and operational risk

NBP 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 Financial Risk Management Department responsible for financial risk management;

 $<sup>^{12}</sup>$  Initially granted in the amount of SDR 15.5 billion, it was subsequently reduced at Poland's request to SDR 13.0 billion in January 2016.

- as relates to operational risk:
  - decentralised operational risk management by directors of Head Office departments and NBP regional branches who on an ongoing basis monitor operational risk, perform the assessment of its level and take measures mitigating risk occurrence in their units,
  - the activity of Operational Risk and Compliance Department, which on an ongoing basis monitors and analyses operational risk identified 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 for the Management Board of NBP,
  - Commission for Operational Risk Management, which assesses the effectiveness of operational risk management in NBP, monitors the current level of operational risk and analyses the causes underlying materialisation of risk assessed as high or unacceptable. The Commission also submits and recommends to the Management Board of NBP proposed solutions and changes in the area of operational risk management.
- strategic decision-making by the Management Board of NBP, based on information concerning financial and operational risk.

The tasks carried out as part of risk management comprise:

- 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 applied risk mitigation mechanisms,
- provision of periodical information about the results of risk management.

#### 9.1. Financial risk

The main types of financial risk underlying the activities of NBP are: credit risk, liquidity risk and market risk (interest rate risk and foreign exchange rate risk). 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. Exposure to various types of risk, under the adopted constraints, is monitored on an on-going basis by the Financial Risk Management Department. The analysis of exposure to financial risk is presented to the Management Board of NBP on a regular basis.

#### 9.1.1. 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.

#### 9.1.1.1. Maximum exposure to credit risk

Maximum exposure to credit risk related to NBP assets, with no consideration of collateral held (exposures shown in the table are based on amounts recognised in the balance sheet) is presented below.

NBP's exposure to credit risk arises mainly from financial assets related to foreign currency reserves management (item A.2.2 of the Balance Sheet).

PLN thousand	31.12.2016	31.12.2017	Balance sheet item
Current accounts in gold	3,673.5	802,775.4	A.1
Term deposits in gold	15,270,503.8	13,429,773.0	A.1
Receivables from the IMF	4,394,707.8	3,374,388.1	A.2.1
Current accounts in foreign currency	15,599,875.3	12,470,822.1	A.2.2
Term deposits in foreign currency	32,324,537.1	26,289,397.0	A.2.2
Reverse repo transactions in foreign currency	76,444,450.1	29,795,939.6	A.2.2
Securities in foreign currency	332,892,291.0	307,350,022.7	A.2.2
Foreign banknotes and coins in stock	154,066.5	152,894.3	A.2.2
Other claims in foreign currency	1,436,977.0	1,440.1	A.2.2
Other	190,866.2	173,133.5	A.6, A.10.3, A.10.5
Total	478,711,948.3	393,840,585.8	

Moreover, when joining the IMF borrowing programmes (see Note 27), NBP committed to extend foreign currency-denominated loans to the IMF under, respectively:

- the NAB agreement up to the amount of SDR 1,285,400.0 thousand, of which the outstanding amount as at 31 December 2017 was SDR 1,143,327.5 thousand,
- bilateral loan agreements up to the amount of EUR 6,270,000.0 thousand, of which the outstanding amount as at 31 December 2017 was EUR 6,270,000.0 thousand.

The concentration of NBP's maximum exposure to credit risk, by counterparty sector, is presented below.

PLN thousand	31.12.2016	31.12.2017
General government institutions	318,947,384.5	301,010,723.9
- Foreign central government institutions	304,784,414.3	292, 726, 332.0
- Other	14, 162, 970. 2	8, 284, 391.9
Monetary financial institutions	110,353,695.3	69,130,267.3
- Foreign credit institutions	79,892,557.6	46, 289, 878. 8
- Central banks, BIS and IMF	30,449,700.0	22,827,009.9
- Domestic credit institutions	11,437.7	13,378.6
International financial organisations	3,307,896.2	740,242.6
Non-monetary financial institutions	43,880,176.5	21,353,864.3
Non-financial sector	2,068,703.6	1,452,589.1
Other	154,092.2	152,898.6
Total	478,711,948.3	393,840,585.8

NBP's maximum exposure to credit risk, by counterparty geographical location, is presented below.

PLN thousand	31.12.2016	31.12.2017
United States	181,208,435.6	155,831,299.5
Euro area	132,961,428.1	118,284,203.1
United Kingdom	96,479,756.9	66,720,024.4
Australia	27,539,364.0	26,034,926.8
Norway	14,636,831.2	11,849,103.5
New Zealand	5,182,599.8	5,300,959.4
Sweden	1,452,127.6	1,788,320.0
Denmark	2,269,197.5	304,809.5
Poland	188,623.7	170,244.9
Switzerland	2,585,043.2	158,033.2
Other	14,208,540.7	7,398,661.5
Total	478,711,948.3	393,840,585.8

## 9.1.1.2. Credit risk in foreign currency reserve management

In the process of foreign currency reserve management, NBP uses the following credit risk mitigation 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 reverse repo transactions.

Credit risk analyses are 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.

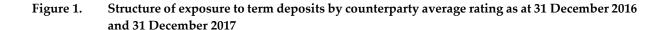
The dominant portion of foreign currency reserves is invested in government securities of high rating countries characterised by the highest level of safety and liquidity. Non-government securities held in the investment portfolios are issued primarily by international institutions and government agencies. The scale of investment in the corporate bond market is small. The share of term deposits in foreign currency reserves is also low – transactions are concluded for short periods with banks of high creditworthiness.

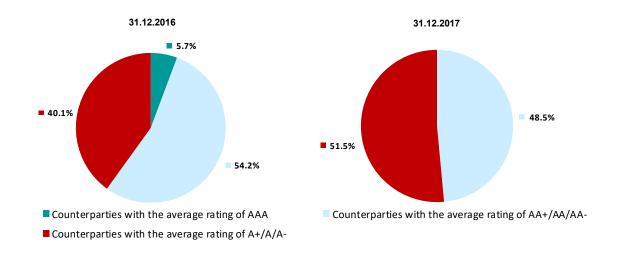
#### 9.1.1.2.1. Credit quality of term deposits

The financial standing of NBP's counterparties with whom term deposits are concluded under the management of foreign currency reserves and gold is subject to on-going monitoring based on daily information from rating agencies about changes in creditworthiness ratings and rating forecasts, as well as implied ratings derived from CDS market quotations.

The figure presented below shows the structure of exposure to term deposits related to foreign currency reserves management, by counterparty average credit rating as at 31 December 2016 and 31 December 2017.<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> The structure of exposures to term deposits was presented based on values used in the monitoring of investment limits towards the term deposit counterparties.





NBP also concludes term deposits with central banks of the countries which meet the set rating requirements. Both as at 31 December 2016 and 31 December 2017, NBP held term deposits at two central banks for the total nominal amount of PLN 10,651,413.9 thousand as at 31 December 2016 and PLN 6,130,219.7 thousand as at 31 December 2017.

#### 9.1.1.2.2. Credit quality of securities

The table below presents the exposure of NBP to securities issued by governments, central banks and other entities.

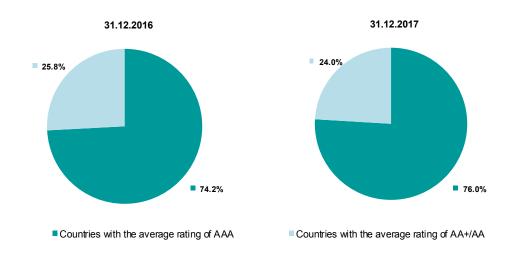
PLN thousand	31.12.2016	31.12.2017	Change
Gov emment securities in foreign currency	304,784,414.3	292,725,681.7	-12,058,732.6
Securities in foreign currency issued by central banks	417,737.1	174,558.7	-243,178.4
Other securities in foreign currency, of which:	27,690,139.6	14,449,782.3	-13,240,357.3
- corporate securities in USD	1,752,622.3	1,420,513.6	-332, 108. 7
Total	332,892,291.0	307,350,022.7	-25,542,268.3

#### Government securities and securities issued by central banks

When estimating the credit quality of securities issued by governments and central banks, the creditworthiness ratings of the country of the securities issuer are taken into account among others. The structure of exposures to government securities and securities issued by central banks by the

average rating of the issuer's country is shown below.<sup>14</sup> In 2017, NBP made investments in securities of the countries rated at least as AA/Aa3.

Figure 2. The structure of exposure to government securities and securities issued by central banks by the average rating of the issuer's country as at 31 December 2016 and 31 December 2017



#### Other securities

The credit quality of the issuers of other securities is assessed based on the scoring model that takes into account:

- issuer status,
- ratings assigned by rating agencies,
- issuer's financial data.

The figure below presents the structure of exposure to other securities by issuer's average rating as at 31 December 2016 and 31 December 2017.15

<sup>&</sup>lt;sup>14</sup> The structure of exposure to securities was presented based on values used for the monitoring of credit risk.

<sup>&</sup>lt;sup>15</sup> The structure of exposure to securities was presented based on values used for the monitoring of the investment limits for issuers of other securities.

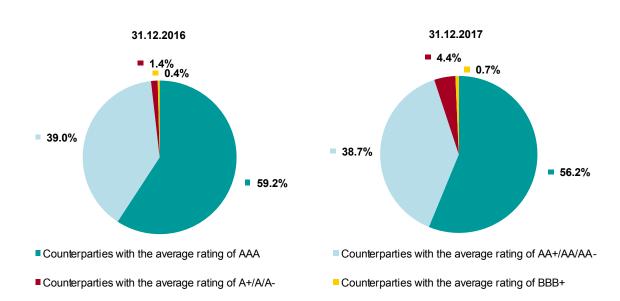


Figure 3. Structure of exposures to other securities by issuer's average rating as at 31 December 2016 and 31 December 2017

## 9.1.1.3. Credit risk underlying domestic credit operations

To support the liquidity of the financial system, NBP may grant a refinancing loan in zloty to banks in order to supplement their financial resources. Banks use intraday credit and marginal lending facility (Lombard credit), in particular. Banks also use intraday credit in euro.

I he tota	al drawing on the credit in a	innual terms	
PLN million / EUR	2016	2017	Change
Lombard credit*	1,349.5	12.6	-1,336.9
Intraday credit	11,421,966.2	11,544,493.1	122,526.9
Intraday credit in EUR	11,304.2	12,663.0	1,358.8

<sup>\*</sup> Calculated for days of drawing.

The risk underlying these operations is mitigated through the use of eligible collateral meeting the criteria set by NBP. Treasury and NBP securities denominated in PLN are the primary collateral presented by banks, though the list of assets accepted as collateral comprises also other securities deposited with the Central Securities Depository of Poland, including covered bonds, municipal bonds, corporate bonds, bonds issued by the European Investment Bank denominated in PLN, as well – in the case of Lombard credit – as EUR-denominated Treasury bonds. In the case of a refinancing loan for the restoration of the bank's liquidity, a wider range of collateral may apply.

When setting the required level of collateral, the haircut rate is applied, with the purpose to reduce the probability of a drop in the market value of the collateral below the value of extended credit, among others, as a result of unfavourable changes in the market price of securities and/or exchange rates.

Intraday credit in euro is extended in accordance with the principles laid down by the ECB, and it may be collateralised by Treasury bonds participating in BondSpot S.A. fixing (in addition, haircut related to the exchange rate risk is taken into account).

#### 9.1.1.3.1. Overdue claims on domestic credit operations

As at 31 December 2017, NBP had an overdue claim in the amount of PLN 123,396.7 thousand from a domestic bank under winding-up proceedings, which was related to a refinancing loan granted in 2015 for the restoration of the bank's liquidity (see Note 9). As at the balance-sheet date, the outstanding portion of the loan was collateralised with the claims of the domestic bank under loan agreements which were assigned in favour of NBP. Under the assessment carried out, it was established that as at 31 December 2017 the discounted value of expected cash flows from collateral fully covers the carrying amount of the claim. Claims of the domestic bank arising from the loan agreements which were assigned in favour of NBP as collateral to the refinancing loan for the restoration of the bank's liquidity are not included in the bankruptcy estate of the domestic bank, in accordance with the provisions of Article 67 para 2 and 3 of the Act of 28 February 2003 on the Bankruptcy and Restructuring Law<sup>16</sup> (Journal of Laws of 2015, item 233, as amended).

#### 9.1.2. 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 ensures adequate liquidity of funds by matching current and expected cash flows. Investments are made in the markets that ensure

<sup>&</sup>lt;sup>16</sup> As at 1 January 2016, pursuant to Article 428 subparagraph 1 of the Act of 15 May 2015 - Restructuring Law (Journal of Laws, item 978), the act received the title "Bankruptcy Law". Nonetheless, pursuant to Article 449 of the Act (i.e. the Restructuring Law), in matters for which a motion for bankruptcy was filed before the act entered into force, i.e. before 1 January 2016, the regulations binding theretofore shall apply, that is regulations of the Bankruptcy and Restructuring Law in the wording in force prior to 1 January 2016.

immediate availability of funds – reserve currencies and investment instruments are principally characterised by high liquidity.

#### 9.1.2.1. 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 2016 and 31 December 2017.<sup>17</sup>

Moreover, when joining the IMF borrowing programmes (see Note 27), NBP pledged to grant foreign-currency-denominated loans to the IMF under, respectively:

- NAB agreement up to the amount of SDR 1,285,400.0 thousand, of which the outstanding amount as at 31 December 2017 was SDR 1,143,327.5 thousand,
- bilateral loan agreements up to the amount of EUR 6,270,000.0 thousand, of which the outstanding amount as at 31 December 2017 was EUR 6,270,000.0 thousand.

<sup>&</sup>lt;sup>17</sup> Liabilities related to NBP's own administrative activities were not included, as bearing no material impact.

31.12.2016 PLN thousand	Total	A vista	From 1 day to 1 month	Over 1 month to 3 months	Over 3 months	Balance sheet value	L.6 Liabilities to residents denominated in foreign currency	L.7 Liabilities to non- residents denominated in foreign currency	L.8 Liabilities to the IMF	L.10 Other liabilities
Curent/auxiliary accounts in foreign currency operated by NBP	26,163,901.6	26,163,901.6	0.0	0:0	0.0	26,163,901.6	26,119,613.0	44,288.6	0.0	0.0
Term deposit accounts in foreign currency operated by NBP	16,153.2	0.0	16,153.2	0.0	0.0	16, 153.1	16,153.1	0.0	0.0	0.0
Repo transactions in foreign currency	76,447,569.1	0.0	70,480,900.3	5,725,141.1	241,527.7	76,439,867.9	0.0	76,439,867.9	0.0	0.0
Other financial liabilities denominated in foreign currency	2,404,271.2	0.0	2,404,105.8	165.4	0:0	2,404,271.2	1,133,642.6	1,264,209.4	0.0	6,419.2
SDR allocation	7,403,907.5	0.0	4,513.0	0:0	7,399,394.5	7,401,999.6	0.0	0.0	7,401,999.6	0.0
Foreign currency to be delivered due to spot transactions	1,648,593.3	0.0	1,648,593.3	0.0	0.0	,				
Total	114,084,395.9	26,163,901.6	74,554,265.6	5,725,306.5	7,640,922.2	112,426,193.4	27,269,408.7	77,748,365.9	7,401,999.6	6,419.2

31.12 <u>.</u> 2017 PLN thousand	Total	A vista	From 1 day to 1 month	Over 1 month to 3 months	Over 3 months	Balance sheet value	L.6 Liabilities to residents denominated in foreign currency	L.7 Liabilities to non- residents denominated in foreign currency	L.8 Liabilities to the IMF	L.10 Other liabilities
Current/auxiliary accounts in foreign currency operated by NBP	18,627,430.3	18,627,430.3	0.0	0:0	0.0	18,627,430.3	18,580,018.5	47,411.8	0.0	0.0
Term deposit accounts in foreign currency operated by NBP	17,239.9	0.0	17,239.9	0.0	0.0	17,233.6	17,233.6	0.0	0.0	0.0
Repo transactions in foreign currency	29,008,145.7	0.0	29,008,145.7	0.0	0.0	29,005,514.5	0.0	29,005,514.5	0.0	0.0
Other financial liabilities denominated in foreign currency	842,218.0	0.0	842,119.1	98.9	0.0	842,218.0	707,077.9	125,618.4	0.0	9,521.7
SDR allocation	6,489,942.6	0.0	12,015.2	0:0	6,477,927.4	6,485,630.0	0.0	0.0	6,485,630.0	0.0
Foreign currency to be delivered due to spot transactions	1,023,518.0	0.0	1,023,518.0	0.0	0.0		•	•	•	•
Total	56,008,494.5	18,627,430.3	30,903,037.9	6.86	6,477,927.4	54,978,026.4	19,304,330.0	29,178,544.7	6,485,630.0	9,521.7

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#### 9.1.3. 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 market yield.

The primary measure of interest rate risk applied by NBP is modified duration, hereinafter referred to as "MD", which specifies the sensitivity of investment portfolios 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 2017, the MD of the reserves was kept at a level similar to the one binding in the preceding year.

The sensitivity analysis, conducted based on MD<sup>18</sup>, showed 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 6,574.4 million as at 31 December 2017 (as at 31 December 2016 – by PLN 6,825.0 million). The change in value of securities portfolios in individual currencies in response to a change in interest rates by 100 basis points, as estimated based on MD analysis, is presented below.

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

PLN million	31.12.2016	31.12.2017	Change
USD	2,706.47	2,494.07	-212.40
EUR	1,597.06	1,731.26	134.20
GBP	1,299.95	1,114.05	-185.90
AUD	788.23	753.93	-34.30
NOK	272.01	326.85	54.84
NZD	161.25	154.26	-6.99
Total	6,824.97	6,574.42	-250.55

In accordance with the accounting principles of NBP, price revaluation gains on securities at the end of the year are recorded as revaluation accounts on the liabilities side of the balance sheet, while losses are debited to NBP's financial result.

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<sup>&</sup>lt;sup>18</sup> In the sensitivity analysis NBP applied the MD ratio for individual foreign-currency securities portfolios as at 31 December 2016 and 31 December 2017 as a linear measure of the relationship between price and yield, as well as the holding of securities portfolios as at 31 December 2016 and 31 December 2017 based on values used in the monitoring of MD.

#### 9.1.4. Foreign exchange rate risk

Foreign exchange rate risk arises out of a potential decline in the value of foreign currency holdings as a result of unfavourable exchange rates fluctuations 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 provision against the foreign exchange rate risk of the zloty (see Chapter 4).

In the process of foreign currency reserves management, NBP defines the currency structure of the strategic benchmark, along with admissible fluctuation bands. In 2017, the composition of the strategic currency benchmark of the previous year was maintained - the benchmark was as follows:

- 44% USD,
- 27% EUR,
- 12% GBP,
- 8% AUD,
- 6% NOK,
- 3% NZD.

#### 9.1.4.1. Exposure to foreign exchange rate risk

Below, the foreign currency holdings of NBP as at 31 December 2016 and 31 December 2017 by currency are presented, wherein items in foreign currency related to own administrative activities are presented as part of PLN holdings since they are immaterial.

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31.12.2016											
PLN thousand	PLN	nsp	EUR	GBP	AUD	NOK	NZD	SDR	Gold	Other currencies	Total
ASSETS											
1. Gold and gold receiv ables	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16,035,770.9	0.0	16,035,770.9
2. Claims on non-residents denominated in foreign currency	0.0	209,681,425.7	125,175,919.4	64,126,925.8	27,738,618.6	21,389,669.4	10,521,317.3	4,394,707.8	0.0	218,320.8	463,246,904.8
3. Claims on residents denominated in foreign currency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0
4. Claims on non-residents denominated in domestic currency	0:0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5. Claims on other domestic monetary financial institutions related to monetary policy operations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
denominated in domestic currency 6 Other chains on other denoests manches, financial inetations denominated in demostic											
	424.0	0:0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	424.0
7. Securities of residents denominated in domestic currency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8. Claims on general gov emment denominated in domestic currency	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9. Items in course of settlement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0
10. Other assets	1,283,391.5	98,914.3	106,635.7	0.0	19,726.9	7,079.7	32,940.7	56,716.0	0.0	0.0	1,605,404.8
of which, adjustment and currency revaluation differences on off-balance-sheet items	0.0	98,914.3	10,893.9	0:0	19,726.9	7,079.7	32,940.7	0.0	0.0	0.0	169,555.5
TOTAL ASSETS	1,283,815.5	209,780,340.0	125,282,555.1	64,126,925.8	27,758,345.5	21,396,749.1	10,554,258.0	4,451,423.8	16,035,770.9	218,320.8	480,888,504.5
LIABILTIES											
1. Banknotes and coins in circulation	187,574,849.5	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	187,574,849.5
<ol> <li>Liabilities to other domestic monetary financial institutions related to monetary policy operations denominated in domestic currency.</li> </ol>	114,553,118.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	114,553,118.7
or in instance in control to control to 3. Other list littles to other demonstrates to other sections of the control of the co											
<ol> <li>Office liabilities to office doffices of indiceraly interface institutors deforminated in doffices to currency</li> </ol>	468,823.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	468,823.0
4. Liabilifies to other residents denominated in domestic currency	4,980,569.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4,980,569.3
<ol><li>Liabilifies to non-residents denominated in domestic currency</li></ol>	4,369,292.4	0:0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	4,369,292.4
<ol> <li>Liabilifies to residents denominated in foreign currency</li> </ol>	0.0	1,239,446.3	25,840,936.4	137.5	60.4	2.3	0.0	0:0	0:0	188,825.8	27,269,408.7
7. Liabilites to non-residents denominated in foreign currency	0.0	52,179,341.0	4,281,794.8	21,287,230.1	0.0	0.0	0.0	0.0	0.0	0:0	77,748,365.9
8. Liabilities to the IMF	0.0	0:0	0.0	0.0	0.0	0.0	0.0	7,401,999.6	0.0	0.0	7,401,999.6
9. Items in course of settlement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0
10. Other liabilities	186,884.4	93,837.5	17,618.3	491.5	24,268.9	7,081.2	37,307.4	0.0	0.0	81.3	367,570.5
of which, adjustment and currency revaluation differences on off-balance-sheet items	0.0	92,521.7	12,664.2	447.9	22,440.7	7,079.7	37,306.9	0.0	0.0	0.0	172,461.1
11. Provisions for future liabilities	133,314.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	133,314.0
12. Revaluation accounts	42,909,297.6	139,355.0	287,746.9	452,106.4	75,885.1	242,101.6	206,279.1	0.0	0.0	0.0	44,312,771.7
13. Capital and reserves	13,315,346.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13,315,346.1
14. Financial result	-1,606,924.9	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1,606,924.9
TOTAL LIABILITIES	366,884,570.1	53,651,979.8	30,428,096.4	21,739,965.5	100,214.4	249,185.1	243,586.5	7,401,999.6	0.0	188,907.1	480,888,504.5
OFF-BALANCE-SHEET ITEMS											
Currency to be received in spot transactions	0.0	455,017.4	0.0	103,315.5	425,233.7	0.0	672,700.3	0:0	0.0	0.0	1,656,266.9
Currency to be delivered in spot transactions	0:0	1,084,534.4	352,149.7	102,867.6	0.0	116,715.2	0.0	0.0	0.0	0.0	1,656,266.9
NET HOLDING	-365,600,754.6	155,498,843.2	94,502,309.0	42,387,408.2	28,083,364.8	21,030,848.8	10,983,371.8	-2,950,575.8	16,035,770.9	29,413.7	
of which; Balance cheat holdinn*	0 722 000 200	450 404 067 0	0 000 330 70	40 302 400 3	0 77 000 000 20	04 447 564 0	40 945 007 7	0 020 6	46 005 770 0	20 440	
Detailed and holding	-363,000,734.0	130, 121, 307.8	94,030,223.0	42, 301, 400.2	400,044.9	446.745.0	10,313,037.7	-2, 950, 57.0	10,000,770.9	73,413.7	
כון־טממוניטטוסט ויאיניייּטּ	o o	-023, 124.4	-353,920.0	0.0	422,019.9	-110,113.2	000,334.7	0.0	0.0	O.O.	

\* The effects of the adjustments to the average cost of holding and currency revaluation of the official currency (presented in items A.10 and L.10) are accounted for in the official cost of holding. Values presented in the lables may not add up to blotals due to nounding.

31.12.2017	PLN	OSD	E	GBP	AUD	NOK	NZD	SDR	Sold Sold	Other currencies	Total
PLN thousand											
ASSETS											
1. Gold and gold receivables	0:0	0.0	0.0	0:0	0.0	0.0	0:0	0.0	14,942,147.1	0:0	14,942,147.1
2. Claims on non-residents denominated in foreign currency	0.0	169,602,794.7	113,827,122.0	38,274,186.7	26,369,789.1	18,840,711.0	8,962,333.2	3,374,388.1	0.0	183,579.1	379,434,903.9
<ol> <li>Claims on residents denominated in foreign currency</li> </ol>	0:0	0.0	0:0	0.0	0.0	0:0	0.0	0.0	0.0	0:0	0.0
4. Claims on non-residents denominated in domestic currency	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0
<ol> <li>Claims on other domestic monetary financial institutions related to monetary policy operations denominated in domestic currency.</li> </ol>	0:0	0.0	0:0	0:0	0.0	0.0	0:0	0:0	0.0	0.0	0:0
Other claims on other domestic monetary financial institutions denominated in domestic	529.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0:0	0.0	529.0
Countries of residents denominated in domestic currency 7. Securities of residents denominated in domestic currency	0.0	0:0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0
8. Claims on general gov emment denominated in domestic currency	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9. Items in course of settlement	0:0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0
10. Other assets	1,266,639.9	13,633.8	90,918.2	5,457.2	2,391.4	0.0	15,174.1	49,653.0	0.0	0.0	1,443,867.6
of which, adjustment and currency revaluation differences on off-balance-sheet items	0.0	13,633.8	0.0	5,457.2	1,741.1	0.0	15,174.1	0.0	0.0	0.0	36,006.2
TOTAL ASSETS	1,267,168.9	169,616,428.5	113,918,040.2	38,279,643.9	26,372,180.5	18,840,711.0	8,977,507.3	3,424,041.1	14,942,147.1	183,579.1	395,821,447.6
LABILITIES 1. Banknobs and coins in circulation	198 715 915 2	00	00	00	0	0	00	00	0	00	198 715 915 2
<ol><li>Liabilities to other domestic monetary financial institutions related to monetary policy operations</li></ol>	0 000 007		3 6								00000
	128,003,831.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	128,003,831.0
<ol><li>Other liabilities to other domestic monetary financial institutions denominated in domestic currency</li></ol>	471,354.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	471,354.0
4. Liabilities to other residents denominated in domestic currency	7,581,248.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7,581,248.1
5. Liabilities to non-residents denominated in domestic currency	2,862,039.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	2,862,039.9
6. Liabilities to residents denominated in foreign currency	0:0	783,352.9	18,360,761.3	2,806.2	0.0	0.0	0.0	0.0	0.0	157,409.6	19,304,330.0
7. Liabilities to non-residents denominated in foreign currency	0:0	22,025,580.2	6,654,064.1	0.0	373,339.7	125,560.7	0.0	0.0	0.0	0:0	29,178,544.7
8. Liabilities to the IMF	0:0	0.0	0:0	0.0	0.0	0.0	0.0	6,485,630.0	0.0	0:0	6,485,630.0
9. Items in course of settlement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10. Other liabilities	180,230.0	13,874.2	9,531.7	5,754.9	2,156.8	1.6	15,174.5	0.0	0.0	72.4	226,796.1
of which, adjustment and currency revaluation differences on off-balance-sheet items	0.0	13,667.8	290.0	5,488.8	2,110.1	0.0	15,174.1	0.0	0.0	0.0	37,030.8
11. Provisions for future liabilities	133,784.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	133,784.0
12. Revaluation accounts	12,604,341.4	23,048.2	30,992.7	150,672.4	8,911.3	202,261.3	203,110.7	0.0	0.0	0.0	13,223,338.0
13. Capital and reserves	2,967,483.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,967,483.8
14. Financial result	-13,332,847.2	0.0	0.0	0:0	0.0	0.0	0:0	0.0	0.0	0:0	-13,332,847.2
TOTAL LIABILITIES	340,187,380.2	22,845,855.5	25,055,349.8	159,233.5	384,407.8	327,823.6	218,285.2	6,485,630.0	0.0	157,482.0	395,821,447.6
OFF-BALANCE-SHEET IT EMS											
Currency to be received in spot transactions	0.0	490,890.0	208,860.5	188,649.1	136,364.0	0.0	0:0	0.0	0.0	0:0	1,024,763.6
Currency to be delivered in spot transactions	0.0	136,364.0	208,270.5	282,619.5	167,110.7	0.0	230,398.9	0.0	0.0	0.0	1,024,763.6
NET HOLDING	-338,920,211.3	147, 125, 099.0	88,863,280.4	38,026,440.0	25,957,026.0	18,512,887.4	8,528,823.2	-3,061,588.9	14,942,147.1	26,097.1	
of which: Balanca sheet holdinn*	220 000 244 2	446 770 607 0	F 000 000	20 420 442 0	25 000 444 7	10 510 007 4	0 750 000 4	0.004.500.0	4 4 0 40 4 47 4	26 007 4	
Off-balance-cheef holding*	-330, 320, 211. 3	140,770,007.0	00,000,200.7	36, 120, 442.0	23, 300, 141.7	4.700,212,007.4	0,1 03,222.1	6.000,100,5-	14,942,147.1	7.091.1	
חון-תקומיוסבסוובבר ויאיתיול	0.0	354,492.0	0.0	-94,002.0	-31, 115. /	0.0	-230,398.9	0:0	0.0	0.0	

\* The effects of the adjustments to the average cost of hoding and currency revaluation of the off-balance sheet hoding in breign currency (presented in the lates and in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented in the lates may not add up to balas presented

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#### 9.1.4.2. Value at Risk and provision against the foreign exchange rate risk of the zloty

At NBP, the Value at Risk (VaR) methodology is used to perform the 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.

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 in the structure of foreign currency reserves as at the balance sheet date along with 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 provision against the foreign exchange rate risk of the zloty.

As at 31 December 2016 the provision amounted to PLN 10,807,911.6 thousand and was equal to the amount of the uncovered accumulated loss of previous years arising from changes in the exchange rate of the zloty against foreign currencies (in accordance with Resolution No 12/2010). The amount of the estimated provision as at 31 December 2017 did not change, yet due to unrealised losses resulting from changes of foreign exchange rate of the zloty against foreign currencies in the amount that caused for NBP a loss and exceeded the created provision, the provision was in total released as income.

## 9.1.4.3. Gold price risk

The risk of the change in the price of gold (see Note 1) arises out of a potential decline in the value of gold as a result of unfavourable 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 Chapter 2.5.13 and Note 22).

#### 9.1.5. Capital of NBP

As the central bank of the State, NBP is not subject to regulations on capital adequacy of banks.

According to practice adopted by central banks, NBP classifies the following as its capital components:

- statutory fund,
- reserve fund,
- provision against the foreign exchange rate risk of the zloty,
- gold revaluation account,
- currency and price revaluation gains,

- NBP's balance sheet loss (of previous years and of the current year),
- a part of profit of current year at the disposal of NBP (i.e. 5%), which will be allocated to the reserve fund of NBP.

The table below presents values of the components of NBP's capital.

PLN thousand	31.12.2016	31.12.2017
Statutory fund	1,500,000.0	1,500,000.0
Reserve fund	1,007,434.5	1,467,483.8
Provision against the foreign exchange rate risk of the zloty	10,807,911.6	0.0
Gold revaluation account	1,618,023.2	1,618,023.2
Currency and price revaluation gains	42,694,748.5	11,605,314.8
NBP balance sheet loss of previous years	-10,807,911.6	-10,807,911.6
Financial result for the current year retained at NBP*	460,049.3	-2,524,935.6
Total	47,280,255.5	2,857,974.6
% of the balance sheet total of NBP	9.8%	0.7%

<sup>\* 5%</sup> of NBP's profit for 2016, which amounted to PLN 9,200,986.7 thousand and the entire loss of NBP for 2017.

# 9.1.6. Market value of financial assets and liabilities and off-balance-sheet financial instruments

In line with the applicable accounting principles, NBP measures the value of 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,
- other financial assets,
- banknotes and coins in circulation,
- securities issued by NBP.

Bearing in mind the nature of the above mentioned financial instruments (e.g. short-term character, uniqueness of the instrument), it was assumed that their balance sheet value approximately equals their market/current value.

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Financial assets and liabilities as well as off-balance-sheet financial instruments are classified into one of the following three categories based on the methods of determining the market value for price valuation used by NBP:

Level 1	Level 2	Level 3
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. NBP has classified securities purchased by NBP into this category. 19	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).  NBP has classified into this category forward transactions in securities for the revaluation of which it uses the model with input parameters coming directly from the market. The value of such transactions as at the balance sheet date is determined by comparing the market price of securities on the valuation date with their contract price, discounted as at the spot date applicable for market prices from the valuation date.	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.  As at 31 December 2016 and 31 December 2017, NBP did not classify any financial assets and liabilities and off-balance-sheet financial instruments into this category.

Financial assets and liabilities and off-balance-sheet financial instruments that are presented in the balance sheet as at 31 December 2016 and 31 December 2017 according to market value, assigned to individual levels, are presented below.

31.12.2016 PLN thousand	Level 1	Level 2	Level 3	Balance sheet value	Balance sheet item
ASSETS					
Securities purchased by NBP	332,892,291.0	0.0	0.0	332,892,291.0	A.2.2
Forward transactions in securities (revaluation gains)	0.0	0.0	0.0	0.0	A.10.3
LIABILITIES					
Forward transactions in securities (rev aluation losses)	0.0	1,805.8	0.0	1,805.8	P.10.1

<sup>&</sup>lt;sup>19</sup> 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 according to the average NBP exchange rate of the US dollar as at the balance sheet date. In line with the applicable accounting principles, NBP does not differentiate between the effects of the currency revaluation and price revaluation of gold, treating them jointly as currency revaluation differences.

31.12.2017 PLN thousand	Level 1	Level 2	Level 3	Balance sheet value	Balance sheet item
ASSETS					
Securities purchased by NBP	307,350,022.7	0.0	0.0	307,350,022.7	A.2.2
Forward transactions in securities (revaluation gains) LIABILITIES	0.0	650.3	0.0	650.3	A.10.3
Forward transactions in securities (revaluation losses)	0.0	13.6	0.0	13.6	P.10.1

In 2016 and 2017, there were no transfers between Level 1 and Level 2.

NBP also carries out transactions in bond futures. These transactions are marked to market (Level 1) and settled on a daily basis (see Note 29).

## 9.2. Operational risk

In NBP the operational risk is defined as the potential possibility of incurring financial or nonfinancial damages, including failure to carry out tasks or a negative impact on NBP reputation, resulting from inadequate or failed internal processes, personnel or systems, or from external events.

The operational risk in NBP is 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).

The 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,
- functioning of access control system as well as IT and telecommunications, physical and electronic safeguards,
- backup copies, contingency and evacuation plans,
- insurance,
- control and internal audit.

In 2017 the Commission for Operational Risk Management held 12 sessions. The topics discussed included, inter alia, current issues that may affect the level of operational risk in NBP, cybersecurity at NBP and business continuity plans.

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In 2017, the knowledge was promoted of recommended professional attitude of employees, which is in line with the standards delineated in the Code of Ethics for Narodowy Bank Polski Employees.

Director of the Accounting and Finance Department of Narodowy Bank Polski:

/-/ Krzysztof Kruszewski

Warsaw, 21 March 2018

Management Board of Narodowy Bank Polski:

/-/ Adam Glapiński

/-/ Piotr Wiesiołek

/-/ Anna Trzecińska

/-/ Jacek Bartkiewicz

/-/ Andrzej Kaźmierczak

/-/ Ryszard Kokoszczyński

/-/ Paweł Samecki

/-/ Paweł Szałamacha

/-/ Katarzyna Zajdel-Kurowska



KPMG Audyt Spółka z ograniczoną odpowiedzialnością sp.k. ul. Inflancka 4A 00-189 Warszawa, Polska Tel. +48 (22) 528 11 00 Faks +48 (22) 528 10 09 kpmg@kpmg.pl

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# INDEPENDENT AUDITOR'S REPORT ON THE AUDIT OF THE ANNUAL FINANCIAL STATEMENTS

To the Monetary Policy Council of Narodowy Bank Polski

#### Report on the Audit of the Annual Financial Statements

We have audited the accompanying annual financial statements of Narodowy Bank Polski, with its registered office in Warsaw, ul. Świętokrzyska 11/21 ("NBP"), which comprise the balance sheet as at 31 December 2017, the profit and loss account for the year ended 31 December 2017 and the notes ("the financial statements").

#### Responsibilities of the Management Board of NBP for the Financial Statements

The Management Board of NBP is responsible for the preparation, on the basis of properly maintained accounting records, of the annual financial statements that give a true and fair view of the financial position of NBP and its financial result in accordance with the Act of 29 August 1997 on Narodowy Bank Polski (Journal of Laws of 2017 item 1373) (the "Act on NBP"), Resolution No. 16/2003 of the Monetary Policy Council of 16 December 2003 on the accounting principles, format of the balance sheet and the profit and loss account of Narodowy Bank Polski (NBP Official Journal item 38, with subsequent amendments), Resolution No. 12/2010 of the Monetary Policy Council of 14 December 2010 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 19) and Resolution No. 45/2013 of the Management Board of Narodowy Bank Polski of 12 December 2013 on performing tasks in the area of accounting at Narodowy Bank Polski (with subsequent amendments) (all together "the legal basis for preparation of the NBP financial statements"). The Management Board of NBP is also responsible for such internal control as the Management Board determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

According to the Act on NBP, the Management Board of NBP is required to ensure that the financial statements are in compliance with the requirements set forth in the legal basis for preparation of the NBP financial statements.



TRANSLATION

#### Auditor's Responsibilities for the Audit of the Financial Statements

Our responsibility is to express an opinion on the financial statements based on our audit. We conducted our audit in accordance with:

- the act of 11 May 2017 on certified auditors, audit firms and public oversight (Official Journal of 2017, item 1089); and
- International Standards on Auditing as adopted by the Resolution No. 2783/52/2015 dated 10 February 2015 with subsequent amendments of the National Council of Certified Auditors as National Standards on Assurance.

Those regulations require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the regulations mentioned above will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements. The risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting a material misstatement resulting from error because risk of fraud may involve collusion, forgery, deliberate omission, intentional misrepresentations or override of internal controls.

The scope of audit does not include assurance on the future viability of the NBP or on the efficiency or effectiveness with which the Management Board has conducted or will conduct the affairs of the NBP.

Our audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the NBP's preparation of the financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the NBP's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the Management Board of NBP, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

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#### Opinion

In our opinion, the accompanying financial statements of Narodowy Bank Polski:

- give a true and fair view of the financial position of the NBP as at 31 December 2017 and
  of its financial result for the year ended 31 December 2017, in accordance with the legal
  basis for preparation of the NBP financial statements;
- have been prepared in all material respects, on the basis of properly maintained accounting records; and
- comply, in all material respects, with regard to form and content, with binding laws applicable to NBP.

#### Other Information

The financial statements of Narodowy Bank Polski as at 31 December 2016 were audited by another audit firm who expressed an unmodified opinion on those financial statements dated 24 March 2017.

On behalf of audit firm KPMG Audyt Spółka z ograniczoną odpowiedzialnością sp.k. Registration No. 3546 ul. Inflancka 4A 00-189 Warsaw

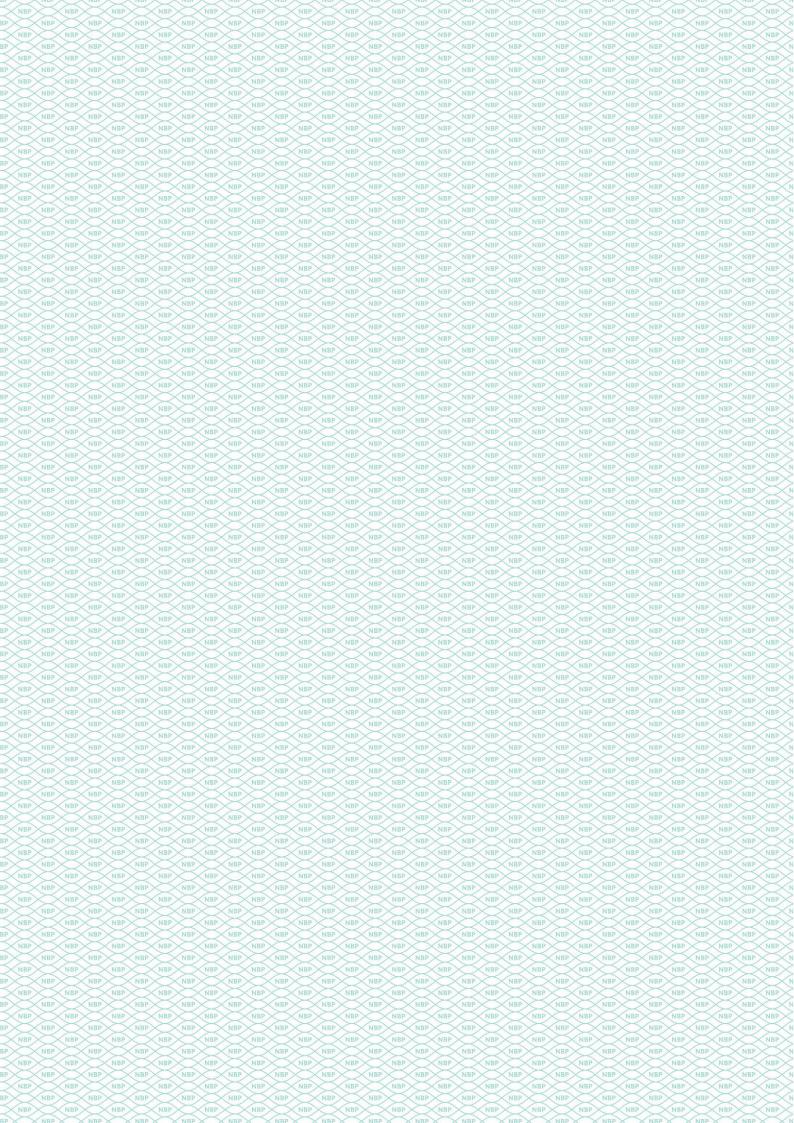
Signed on the Polish original

Katarzyna Łącka Key Certified Auditor Registration No. 13131 Signed on the Polish original

Stacy Ligas
Member of the Management Board of KPMG
Audyt Sp. z o.o., entity which is the General
Partner of KPMG Audyt Spółka z ograniczoną
odpowiedzialnością sp.k

21 March 2018

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# Statistical annex



Table I. Basic statistical data

		1. Industrial outp	ut	2	. Construction ou	tput	3. (	Consumer Price In	dex	4. Producer Price Index		
		constar	nt prices		constar	nt prices				the same		
Period	current prices	the same month previous year = 100	previous month = 100	current prices	the same month previous year = 100	previous month = 100	the same month previous year = 100	previous month = 100	December previous year = 100	month previous year = 100	previous month = 100	
	million zloty	%	%	million zloty	%	%	%	%	%	%	%	
	1	2	3	4	5	6	7	8	9	10	11	
December 2016	106 304.1	102.1	95.5	9 409.8	92.0	134.8	100.8	100.7	100.8	103.2	101.2	
January 2017	104 932.5	109.1	98.2	3 326.2	102.1	35.4	101.7	100.4	100.4	104.0	100.3	
February	103 828.9	101.1	99.0	3 523.3	94.7	106.0	102.2	100.3	100.7	104.5	100.1	
March	121 794.5	111.1	117.6	5 264.4	117.2	149.3	102.0	99.9	100.7	104.8	99.9	
April	105 397.8	99.4	86.7	5 160.5	104.3	97.9	102.0	100.3	100.9	104.2	99.8	
May	110 602.1	109.2	105.5	5 776.2	108.4	112.1	101.9	100.0	101.0	102.4	99.4	
June	113 075.3	104.4	102.7	6 738.2	111.6	116.6	101.5	99.8	100.8	101.8	99.6	
July	103 884.7	106.2	91.5	6 978.0	119.8	103.6	101.7	99.8	100.6	102.2	100.3	
August	110 322.6	108.7	105.8	7 026.2	123.5	100.2	101.8	99.9	100.5	103.0	100.4	
September	117 104.7	104.2	105.9	7 810.8	115.3	110.8	102.2	100.4	100.9	103.2	100.5	
October	123 320.7	112.3	105.1	8 031.0	120.3	102.6	102.1	100.5	101.4	103.0	100.3	
November	121 876.2	109.1	98.9	8 454.4	119.8	105.0	102.5	100.5	101.9	101.8	100.0	
December	109 389.5	102.8	90.0	10 762.9	112.8	127.0	102.1	100.2	102.1	100.3	99.7	

	5. Construction	n Price Index						11. Nationa	l budget revenue 8	& expenditure
Period	the same month previous year = 100	previous month = 100	6. Number of employed, corporate sector total	7. Average employment, corporate sector total	8. Number of unemployed	9. Unemploy- ment rate	10. Average monthly employee earnings, gross, corporate sector	revenue	expenditure	financial surplus/ deficit and net foreign lending/ borrowing
	%	%	thousands	thousands	thousands	%	zloty	million zloty	million zloty	million zloty
	12	13	14	15	16	17	18	19	20	21
December 2016	100.2	100.1	6 065	5 799	1 335.2	8.2	4 635.8	314 683.6	360 843.1	-43 432.0
January 2017	100.3	100.0	6 225	5 960	1 397.1	8.5	4 277.3	36 957.4	30 207.5	9 113.6
February	100.3	99.9	6 244	5 976	1 383.4	8.4	4 305.0	60 942.5	60 086.4	1 165.7
March	100.4	100.0	6 261	5 982	1 324.2	8.0	4 577.9	85 246.5	87 530.8	-5 324.7
April	100.4	100.1	6 270	5 991	1 252.7	7.6	4 489.1	116 896.9	117 879.6	-4 927.7
May	100.4	100.0	6 277	5 990	1 202.1	7.3	4 391.0	143 331.4	143 492.0	-6 502.0
June	100.3	100.0	6 293	6 002	1 151.6	7.0	4 508.1	176 701.7	170 841.4	-2 821.7
July	100.3	100.1	6 310	6 022	1 140.0	7.0	4 501.5	206 105.8	203 754.2	-7 917.4
August	100.4	100.2	6 313	6 026	1 136.1	7.0	4 492.6	235 026.4	230 138.4	-8 063.6
September	100.7	100.3	6 322	6 031	1 117.1	6.8	4 473.1	262 262.6	258 487.5	-2 191.7
October	101.0	100.3	6 331	6 036	1 069.5	6.6	4 574.4	295 020.9	292 351.6	-4 220.4
November	101.2	100.3	6 356	6 053	1 067.7	6.5	4 610.8	323 263.2	325 675.6	-15 863.4
December	101.4	100.2	6 350	6 065	1 081.7	6.6	4 973.7	350 499.1	375 868.1	-24 736.5

Table I. Basic statistical data, cont'd

						12. Corpo	orate financia	performance					
	revei	nues	operatin	ig costs								accounts receivable	
Period	total	of which: sales of goods & services	total	of which: cost of sales	pre-tax profit/loss	statutory deductions	net profit/ loss	cost to sales ratio	net margin	quick liquidity ratio	total current assets	and associated claims	accounts payable
	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	%	%	%	million zloty	million zloty	million zloty
	22	23	24	25	26	27	28	29	30	31	32	33	34
December 2016	2 620 280.8	1 548 918.4	2 488 863.1	1 590 579.8	131 417.7	20 354.6	111 063.1	95.0	4.2	102.0	872 218.5	309 344.1	307 990.6
January 2017													
February													
March	675 317.0	399 995.3	638 686.9	408 094.9	36 630.1	6 729.5	29 900.6	94.6	4.4	103.7	878 173.7	319 773.2	297 935.5
April													
May													
June	1 376 772.8	811 795.0	1 298 019.9	833 258.9	78 752.9	11 800.9	66 952.1	94.3	4.9	101.0	902 909.2	328 123.1	308 049.5
July													
August													
September	2 084 519.2	1 234 835.3	1 970 688.5	1 266 756.2	113 830.7	17 910.1	95 920.6	94.5	4.6	101.9	927 023.2	340 487.9	319 894.0
October													
November													
December	2 865 057.6	1 686 012.1	2 714 983.6	1 743 154.0	150 074.0	23 678.2	126 395.9	94.8	4.4	102.2	956 153.1	341 733.1	340 529.8

**Table II.** Financial market – basic information

		1. NE	3P interest rates	;					2. Reserve re	equirement		
	Reference	Lombard rate	Deposit rate	Rediscount	Discount	requirer	serve nent ratio deposits	on foreign cur	uirement ratio rency deposits juivalent)	Reserve requirement ratio on repo	Interest on reserve	Total required
Period	rate	Lonibard rate	Deposit rate	rate	rate	demand	time	demand	time	operations	requirement <sup>1</sup>	reserves held
	%	%	%	%	%	%	%	%	%	%		million zloty
	1	2	3	4	5	6	7	8	9	10	11	12
December 2016	1.50	2.50	0.50	1.75		3.5	3.5	3.5	3.5	0.0	0.9	40 033.1
January 2017	1.50	2.50	0.50	1.75		3.5	3.5	3.5	3.5	0.0	0.9	41 225.6
February	1.50	2.50	0.50	1.75		3.5	3.5	3.5	3.5	0.0	0.9	41 099.7
March	1.50	2.50	0.50	1.75		3.5	3.5	3.5	3.5	0.0	0.9	41 290.6
April	1.50	2.50	0.50	1.75		3.5	3.5	3.5	3.5	0.0	0.9	41 290.6
May	1.50	2.50	0.50	1.75		3.5	3.5	3.5	3.5	0.0	0.9	41 655.7
June	1.50	2.50	0.50	1.75		3.5	3.5	3.5	3.5	0.0	0.9	41 781.1
July	1.50	2.50	0.50	1.75		3.5	3.5	3.5	3.5	0.0	0.9	42 077.3
August	1.50	2.50	0.50	1.75		3.5	3.5	3.5	3.5	0.0	0.9	42 143.4
September	1.50	2.50	0.50	1.75		3.5	3.5	3.5	3.5	0.0	0.9	42 143.4
October	1.50	2.50	0.50	1.75		3.5	3.5	3.5	3.5	0.0	0.9	42 125.8
November	1.50	2.50	0.50	1.75		3.5	3.5	3.5	3.5	0.0	0.9	42 581.1
December	1.50	2.50	0.50	1.75		3.5	3.5	3.5	3.5	0.0	0.9	42 581.1

 $<sup>^{\</sup>rm 1}$  Rediscount rate – as from 9 October 2014 NBP reference rate.

			3. Treasury	bill tenders		
Period	Number of tenders during month	Face value of bills offered for sale	Demand declared by bidders (at face value)	Face value of bills sold	Yield on bills purchased, weighted average	Bills outstanding from tender sales at month end (purchase prices)
		million zloty	million zloty	million zloty	%	million zloty
	13	14	15	16	17	18
December 2016	0	0.00	0.00	0.00	0.00	0.00
January 2017	2	4 000.00	7 450.00	4 025.00	1.55	3 986.08
February	2	3 500.00	5 538.60	1 950.60	1.52	5 920.53
March	0	0.00	0.00	0.00	0.00	5 920.53
April	0	0.00	0.00	0.00	0.00	5 920.53
May	0	0.00	0.00	0.00	0.00	5 920.53
June	0	0.00	0.00	0.00	0.00	5 920.53
July	0	0.00	0.00	0.00	0.00	5 920.53
August	0	0.00	0.00	0.00	0.00	0.00
September	0	0.00	0.00	0.00	0.00	0.00
October	0	0.00	0.00	0.00	0.00	0.00
November	0	0.00	0.00	0.00	0.00	0.00
December	0	0.00	0.00	0.00	0.00	0.00

**Table II.** Financial market – basic information, cont'd.

			4. Tenders for NBP	money-market bills		
Period	Number of tenders during month	Face value of bills offered for sale	Demand declared by bidders (at face value)	Face value of bills sold	Yield on bills purchased, weighted average	Bills outstanding from tender sales at month end (purchase prices)
		million zloty	million zloty	million zloty	%	million zloty
	19	20	21	22	23	24
December 2016	6	432 000.00	374 859.67	374 859.67	1.50	81 290.83
January 2017	6	377 000.00	342 061.93	341 448.88	1.50	76 019.44
February	5	323 500.00	328 671.41	318 293.80	1.50	79 642.74
March	7	397 500.00	383 822.68	381 944.36	1.50	72 523.72
April	5	298 000.00	285 682.43	277 406.08	1.50	78 830.30
May	5	296 500.00	281 933.96	281 374.50	1.50	72 674.22
June	7	417 500.00	374 066.30	374 066.30	1.50	71 199.50
July	5	326 500.00	288 374.41	288 374.41	1.50	59 999.38
August	5	321 000.00	293 238.68	293 238.68	1.50	72 520.82
September	6	374 500.00	347 161.58	345 215.37	1.50	74 058.13
October	6	370 000.00	333 159.94	332 729.00	1.50	80 648.44
November	7	387 000.00	344 913.17	344 913.17	1.50	74 415.26
December	8	517 000.00	428 368.40	428 368.40	1.50	94 399.25

	5. Data on trading sessions of Warsaw Stock Exchange												
Period	Number of companies at month end	Capitalisation at month end	P/E ratio at month end	Warsaw Stock Exchange Index (WIG) at month end	WIG monthly average	mWIG40 at month end	mWIG40 monthly average	sWIG80 at month end	sWIG80 monthly average	Monthly turnover	Turnover ratio		
		million zloty								million zloty	%		
	25	26	27	28	29	30	31	32	33	34	35		
December 2016	487	557 123.6	34.7	1 947.9	1 904.8	4 215.5	4 191.4	14 259.5	14 074.8	21 539.4	48.8		
January 2017	487	592 489.5	33.1	2 056.8	2 022.5	4 643.2	4 421.4	15 284.5	14 668.7	20 805.0	44.6		
February	486	625 683.1	37.8	2 191.3	2 163.5	4 840.2	4 767.7	15 870.0	15 507.2	21 325.3	45.3		
March	486	621 262.0	20.1	2 176.0	2 230.8	4 743.7	4 825.8	16 382.2	16 285.8	24 577.8	44.2		
April	487	660 599.7	20.2	2 376.9	2 276.9	4 858.1	4 757.3	16 300.7	16 347.7	18 423.2	41.9		
May	485	639 489.5	17.8	2 281.2	2 345.6	4 798.7	4 844.1	16 220.6	16 186.5	21 675.6	41.4		
June	483	645 030.3	18.0	2 299.8	2 311.8	4 907.4	4 869.7	16 069.0	16 071.9	18 170.8	35.2		
July	485	662 984.8	18.5	2 374.2	2 337.8	4 930.8	4 888.4	15 613.6	15 808.6	16 752.8	30.0		
August	484	683 005.5	17.6	2 516.3	2 413.6	4 907.8	4 875.5	15 568.6	15 471.5	18 263.4	31.1		
September	479	672 068.0	17.5	2 453.5	2 487.7	4 988.0	4 913.2	15 123.5	15 218.0	18 261.4	33.1		
October	477	677 767.1	17.2	2 524.9	2 491.0	4 875.4	4 880.5	14 343.9	14 604.8	20 394.1	35.2		
November	477	654 421.1	15.5	2 408.7	2 473.7	4 750.3	4 816.2	14 171.5	14 025.9	21 366.6	37.6		
December	482	670 975.5	15.8	2 461.2	2 430.2	4 847.3	4 764.8	14 595.8	14 357.4	16 420.8	33.5		

Table III. PLN/USD and PLN/EUR daily exchange rates

		December 2016			January 2017			February 2017	
	NBP average	exchange rates	LIOD/EUD	NBP average	exchange rates	HOD/EHD	NBP average	exchange rates	HOD/EHD
Days	PLN/USD	PLN/EUR	USD/EUR	PLN/USD	PLN/EUR	- USD/EUR	PLN/USD	PLN/EUR	USD/EUR
	1	2	3	4	5	6	7	8	9
1	4.1987	4.4620	1.0627	4.1793	4.4240	1.0586	4.0071	4.3221	1.0786
2	4.2150	4.4885	1.0649	4.2106	4.4157	1.0487	3.9835	4.3084	1.0816
3	4.2150	4.4885	1.0649	4.2271	4.4002	1.0410	4.0014	4.2985	1.0742
4	4.2150	4.4885	1.0649	4.2037	4.3877	1.0438	4.0014	4.2985	1.0742
5	4.2213	4.4897	1.0636	4.1667	4.3766	1.0504	4.0014	4.2985	1.0742
6	4.1825	4.5035	1.0767	4.1667	4.3766	1.0504	3.9892	4.2864	1.0745
7	4.1268	4.4232	1.0718	4.1667	4.3766	1.0504	4.0280	4.2943	1.0661
8	4.1107	4.4401	1.0801	4.1667	4.3766	1.0504	4.0521	4.3128	1.0643
9	4.1772	4.4385	1.0626	4.1592	4.3783	1.0527	4.0332	4.3162	1.0702
10	4.1772	4.4385	1.0626	4.1270	4.3735	1.0597	4.0435	4.3030	1.0642
11	4.1772	4.4385	1.0626	4.1465	4.3684	1.0535	4.0435	4.3030	1.0642
12	4.2090	4.4583	1.0592	4.1103	4.3728	1.0639	4.0435	4.3030	1.0642
13	4.1905	4.4505	1.0620	4.1084	4.3730	1.0644	4.0496	4.3077	1.0637
14	4.1768	4.4389	1.0628	4.1084	4.3730	1.0644	4.0525	4.3025	1.0617
15	4.2329	4.4453	1.0502	4.1084	4.3730	1.0644	4.0752	4.3025	1.0558
16	4.2296	4.4253	1.0463	4.1354	4.3792	1.0590	4.0567	4.3160	1.0639
17	4.2296	4.4253	1.0463	4.0989	4.3771	1.0679	4.0693	4.3314	1.0644
18	4.2296	4.4253	1.0463	4.0870	4.3705	1.0694	4.0693	4.3314	1.0644
19	4.2255	4.4157	1.0450	4.1014	4.3741	1.0665	4.0693	4.3314	1.0644
20	4.2493	4.4128	1.0385	4.1005	4.3658	1.0647	4.0692	4.3227	1.0623
21	4.2484	4.4180	1.0399	4.1005	4.3658	1.0647	4.0942	4.3163	1.0542
22	4.2222	4.4089	1.0442	4.1005	4.3658	1.0647	4.0899	4.2977	1.0508
23	4.2199	4.4126	1.0457	4.0760	4.3725	1.0727	4.0840	4.3076	1.0548
24	4.2199	4.4126	1.0457	4.0708	4.3720	1.0740	4.0681	4.3102	1.0595
25	4.2199	4.4126	1.0457	4.0585	4.3636	1.0752	4.0681	4.3102	1.0595
26	4.2199	4.4126	1.0457	4.0590	4.3520	1.0722	4.0681	4.3102	1.0595
27	4.2120	4.4022	1.0452	4.0595	4.3413	1.0694	4.0745	4.3135	1.0587
28	4.2260	4.4127	1.0442	4.0595	4.3413	1.0694	4.0770	4.3166	1.0588
29	4.2161	4.4131	1.0467	4.0595	4.3413	1.0694			
30	4.1793	4.4240	1.0586	4.0472	4.3291	1.0697			
31	4.1793	4.4240	1.0586	4.0446	4.3308	1.0708			
Average nonthly rate	4.2049	4.4371	Х	4.1166	4.3706	Х	4.0487	4.3097	Х

Table III. PLN/USD and PLN/EUR daily exchange rates, cont'd.

		March 2017			April 2017			May 2017	
_ [	NBP average 6	exchange rates		NBP average	exchange rates	T	NBP average	exchange rates	
Days	PLN/USD	PLN/EUR	USD/EUR	PLN/USD	PLN/EUR	- USD/EUR	PLN/USD	PLN/EUR	USD/EUR
	10	11	12	13	14	15	16	17	18
1	4.0756	4.2970	1.0543	3.9455	4.2198	1.0695	3.8696	4.2170	1.0898
2	4.0765	4.2912	1.0527	3.9455	4.2198	1.0695	3.8675	4.2226	1.0918
3	4.0955	4.3078	1.0518	3.9664	4.2327	1.0671	3.8675	4.2226	1.0918
4	4.0955	4.3078	1.0518	3.9890	4.2525	1.0661	3.8630	4.2177	1.0918
5	4.0955	4.3078	1.0518	3.9783	4.2464	1.0674	3.8490	4.2176	1.0958
6	4.0663	4.3100	1.0599	3.9792	4.2412	1.0658	3.8490	4.2176	1.0958
7	4.0803	4.3115	1.0567	3.9755	4.2273	1.0633	3.8490	4.2176	1.0958
8	4.0818	4.3087	1.0556	3.9755	4.2273	1.0633	3.8391	4.2059	1.0955
9	4.0864	4.3146	1.0558	3.9755	4.2273	1.0633	3.8741	4.2253	1.0907
10	4.0761	4.3260	1.0613	3.9956	4.2301	1.0587	3.8777	4.2155	1.0871
11	4.0761	4.3260	1.0613	4.0009	4.2415	1.0601	3.8744	4.2150	1.0879
12	4.0761	4.3260	1.0613	4.0026	4.2505	1.0619	3.8837	4.2200	1.0866
13	4.0747	4.3460	1.0666	3.9886	4.2450	1.0643	3.8837	4.2200	1.0866
14	4.0697	4.3295	1.0638	3.9911	4.2395	1.0622	3.8837	4.2200	1.0866
15	4.0646	4.3208	1.0630	3.9911	4.2395	1.0622	3.8463	4.2096	1.0945
16	4.0300	4.3165	1.0711	3.9911	4.2395	1.0622	3.7932	4.1902	1.1047
17	3.9917	4.3013	1.0776	3.9911	4.2395	1.0622	3.7808	4.1912	1.1085
18	3.9917	4.3013	1.0776	3.9800	4.2401	1.0654	3.7926	4.2200	1.1127
19	3.9917	4.3013	1.0776	3.9571	4.2404	1.0716	3.7735	4.2069	1.1149
20	3.9821	4.2821	1.0753	3.9588	4.2631	1.0769	3.7735	4.2069	1.1149
21	3.9502	4.2635	1.0793	3.9841	4.2705	1.0719	3.7735	4.2069	1.1149
22	3.9731	4.2855	1.0786	3.9841	4.2705	1.0719	3.7526	4.1907	1.1167
23	3.9687	4.2750	1.0772	3.9841	4.2705	1.0719	3.7354	4.2018	1.1249
24	3.9481	4.2658	1.0805	3.9060	4.2410	1.0858	3.7535	4.1985	1.1186
25	3.9481	4.2658	1.0805	3.8873	4.2346	1.0893	3.7177	4.1796	1.1242
26	3.9481	4.2658	1.0805	3.8757	4.2255	1.0903	3.7248	4.1803	1.1223
27	3.9259	4.2630	1.0859	3.8776	4.2296	1.0908	3.7248	4.1803	1.1223
28	3.9169	4.2529	1.0858	3.8696	4.2170	1.0898	3.7248	4.1803	1.1223
29	3.9265	4.2360	1.0788	3.8696	4.2170	1.0898	3.7371	4.1794	1.1184
30	3.9402	4.2292	1.0733	3.8696	4.2170	1.0898	3.7471	4.1739	1.1139
31	3.9455	4.2198	1.0695				3.7354	4.1737	1.1173
Average monthly rate	4.0184	4.2921	Х	3.9562	4.2385	Х	3.8070	4.2040	Х

Table III. PLN/USD and PLN/EUR daily exchange rates, cont'd.

		June 2017			July 2017			August 2017	
	NBP average	exchange rates		NBP average	exchange rates		NBP average	exchange rates	
Days	PLN/USD	PLN/EUR	USD/EUR	PLN/USD	PLN/EUR	USD/EUR	PLN/USD	PLN/EUR	USD/EUR
	19	20	21	22	23	24	25	26	27
1	3.7262	4.1834	1.1227	3.7062	4.2265	1.1404	3.5991	4.2548	1.1822
2	3.7323	4.1882	1.1221	3.7062	4.2265	1.1404	3.5863	4.2515	1.1855
3	3.7323	4.1882	1.1221	3.7196	4.2331	1.1381	3.5918	4.2538	1.1843
4	3.7323	4.1882	1.1221	3.7372	4.2428	1.1353	3.5702	4.2423	1.1883
5	3.7066	4.1781	1.1272	3.7471	4.2501	1.1342	3.5702	4.2423	1.1883
6	3.7250	4.1916	1.1253	3.7351	4.2388	1.1349	3.5702	4.2423	1.1883
7	3.7241	4.1943	1.1263	3.7068	4.2337	1.1421	3.5995	4.2469	1.1799
8	3.7400	4.2071	1.1249	3.7068	4.2337	1.1421	3.6027	4.2541	1.1808
9	3.7465	4.1877	1.1178	3.7068	4.2337	1.1421	3.6342	4.2638	1.1732
10	3.7465	4.1877	1.1178	3.7160	4.2348	1.1396	3.6432	4.2709	1.1723
11	3.7465	4.1877	1.1178	3.7235	4.2435	1.1397	3.6449	4.2851	1.1756
12	3.7350	4.1927	1.1225	3.7034	4.2432	1.1458	3.6449	4.2851	1.1756
13	3.7379	4.1921	1.1215	3.7133	4.2345	1.1404	3.6449	4.2851	1.1756
14	3.7497	4.2025	1.1208	3.6986	4.2194	1.1408	3.6278	4.2823	1.1804
15	3.7497	4.2025	1.1208	3.6986	4.2194	1.1408	3.6278	4.2823	1.1804
16	3.7749	4.2181	1.1174	3.6986	4.2194	1.1408	3.6435	4.2724	1.1726
17	3.7749	4.2181	1.1174	3.6767	4.2091	1.1448	3.6258	4.2541	1.1733
18	3.7749	4.2181	1.1174	3.6469	4.2032	1.1525	3.6459	4.2826	1.1746
19	3.7615	4.2112	1.1196	3.6486	4.2057	1.1527	3.6459	4.2826	1.1746
20	3.7862	4.2248	1.1158	3.6604	4.2117	1.1506	3.6459	4.2826	1.1746
21	3.8090	4.2442	1.1143	3.6320	4.2311	1.1650	3.6408	4.2747	1.1741
22	3.8002	4.2442	1.1168	3.6320	4.2311	1.1650	3.6334	4.2772	1.1772
23	3.7824	4.2255	1.1171	3.6320	4.2311	1.1650	3.6274	4.2767	1.1790
24	3.7824	4.2255	1.1171	3.6395	4.2413	1.1654	3.6329	4.2827	1.1789
25	3.7824	4.2255	1.1171	3.6519	4.2559	1.1654	3.6112	4.2600	1.1797
26	3.7653	4.2117	1.1186	3.6661	4.2611	1.1623	3.6112	4.2600	1.1797
27	3.7442	4.2120	1.1249	3.6366	4.2650	1.1728	3.6112	4.2600	1.1797
28	3.7249	4.2317	1.1361	3.6406	4.2617	1.1706	3.5736	4.2640	1.1932
29	3.7122	4.2412	1.1425	3.6406	4.2617	1.1706	3.5372	4.2661	1.2061
30	3.7062	4.2265	1.1404	3.6406	4.2617	1.1706	3.5678	4.2610	1.1943
31				3.6264	4.2545	1.1732	3.5822	4.2618	1.1897
Average monthly rate	3.7504	4.2083	Х	3.6805	4.2361	Х	3.6127	4.2665	Х

Table III. PLN/USD and PLN/EUR daily exchange rates, cont'd.

		September 2017			October 2017			November 2017			December 2017	
	NBP average	exchange rates		NBP average	exchange rates		NBP average	exchange rates		NBP average	exchange rates	
Days	PLN/USD	PLN/EUR	USD/EUR									
	28	29	30	31	32	33	34	35	36	37	38	39
1	3.5693	4.2457	1.1895	3.6519	4.3091	1.1800	3.6529	4.2498	1.1634	3.5352	4.2078	1.1903
2	3.5693	4.2457	1.1895	3.6726	4.3137	1.1746	3.6366	4.2336	1.1642	3.5352	4.2078	1.1903
3	3.5693	4.2457	1.1895	3.6737	4.3105	1.1733	3.6408	4.2406	1.1647	3.5352	4.2078	1.1903
4	3.5718	4.2570	1.1918	3.6597	4.3025	1.1756	3.6408	4.2406	1.1647	3.5499	4.2082	1.1854
5	3.5642	4.2361	1.1885	3.6502	4.2985	1.1776	3.6408	4.2406	1.1647	3.5454	4.2024	1.1853
6	3.5538	4.2446	1.1944	3.6799	4.3042	1.1697	3.6585	4.2449	1.1603	3.5653	4.2154	1.1823
7	3.5511	4.2466	1.1959	3.6799	4.3042	1.1697	3.6652	4.2397	1.1567	3.5722	4.2115	1.1790
8	3.5239	4.2511	1.2064	3.6799	4.3042	1.1697	3.6595	4.2423	1.1593	3.5808	4.2026	1.1736
9	3.5239	4.2511	1.2064	3.6743	4.3121	1.1736	3.6466	4.2308	1.1602	3.5808	4.2026	1.1736
10	3.5239	4.2511	1.2064	3.6468	4.2952	1.1778	3.6274	4.2299	1.1661	3.5808	4.2026	1.1736
11	3.5293	4.2426	1.2021	3.6219	4.2836	1.1827	3.6274	4.2299	1.1661	3.5633	4.2038	1.1797
12	3.5552	4.2511	1.1957	3.6000	4.2705	1.1863	3.6274	4.2299	1.1661	3.5708	4.2077	1.1784
13	3.5627	4.2677	1.1979	3.6010	4.2603	1.1831	3.6382	4.2352	1.1641	3.5880	4.2155	1.1749
14	3.5984	4.2837	1.1904	3.6010	4.2603	1.1831	3.6126	4.2332	1.1718	3.5716	4.2216	1.1820
15	3.5863	4.2781	1.1929	3.6010	4.2603	1.1831	3.5886	4.2487	1.1839	3.5786	4.2217	1.1797
16	3.5863	4.2781	1.1929	3.6004	4.2449	1.1790	3.5958	4.2346	1.1777	3.5786	4.2217	1.1797
17	3.5863	4.2781	1.1929	3.5964	4.2313	1.1765	3.5965	4.2419	1.1795	3.5786	4.2217	1.1797
18	3.5881	4.2835	1.1938	3.6006	4.2293	1.1746	3.5965	4.2419	1.1795	3.5740	4.2134	1.1789
19	3.5821	4.2930	1.1985	3.5896	4.2381	1.1807	3.5965	4.2419	1.1795	3.5583	4.2011	1.1806
20	3.5619	4.2769	1.2007	3.5966	4.2452	1.1803	3.5909	4.2351	1.1794	3.5459	4.1975	1.1838
21	3.5975	4.2863	1.1915	3.5966	4.2452	1.1803	3.6060	4.2296	1.1729	3.5369	4.2018	1.1880
22	3.5651	4.2746	1.1990	3.5966	4.2452	1.1803	3.5881	4.2183	1.1756	3.5393	4.1935	1.1848
23	3.5651	4.2746	1.1990	3.6061	4.2359	1.1746	3.5557	4.2108	1.1842	3.5393	4.1935	1.1848
24	3.5651	4.2746	1.1990	3.6031	4.2382	1.1763	3.5486	4.2116	1.1868	3.5393	4.1935	1.1848
25	3.5866	4.2698	1.1905	3.6006	4.2370	1.1767	3.5486	4.2116	1.1868	3.5393	4.1935	1.1848
26	3.6234	4.2820	1.1818	3.5939	4.2458	1.1814	3.5486	4.2116	1.1868	3.5393	4.1935	1.1848
27	3.6650	4.3012	1.1736	3.6568	4.2520	1.1628	3.5276	4.2086	1.1930	3.5253	4.1909	1.1888
28	3.6682	4.3166	1.1768	3.6568	4.2520	1.1628	3.5382	4.2074	1.1891	3.5046	4.1815	1.1931
29	3.6519	4.3091	1.1800	3.6568	4.2520	1.1628	3.5385	4.1991	1.1867	3.4813	4.1709	1.1981
30	3.6519	4.3091	1.1800	3.6430	4.2403	1.1640	3.5543	4.2055	1.1832	3.4813	4.1709	1.1981
31				3.6529	4.2498	1.1634				3.4813	4.1709	1.1981
Average monthly rate	3.5799	4.2702	Х	3.6303	4.2668	Х	3.6031	4.2293	Х	3.5482	4.2016	Х

Table IV. Average MFI interest rates on outstanding amounts, PLN denominated (in %)

	0	0.1	Odalad materia	N.	December	January	February	March
	Sector	Category	Original maturity	No.	2016		2017	
			overnight	1	0.5	0.5	0.5	0.5
	households and non-profit		up to 2 years	2	1.6	1.6	1.5	1.5
	institutions serving	with agreed maturity	over 2 years	3	2.2	2.2	2.2	2.2
	households		total	4	1.6	1.6	1.6	1.5
		tc	otal, overnight included	5	1.0	1.0	1.0	0.9
Deposits in			overnight	6	0.6	0.6	0.6	0.6
PLN			up to 2 years	7	1.5	1.5	1.5	1.5
	non-financial corporations	with agreed maturity	over 2 years	8	1.6	1.6	1.6	1.6
			total	9	1.5	1.5	1.5	1.5
		tc	otal, overnight included	10	0.9	1.0	1.0	1.0
		total, overnight ex	kcluded	11	1.6	1.6	1.5	1.5
		total, overnight ir	ncluded	12	1.0	1.0	1.0	0.9
		revo	lving loans and overdrafts	13	7.7	7.6	7.6	7.6
			credit cards	14	7.8	7.8	7.5	7.5
		for consumption	up to 1 year	15	4.6	4.5	4.6	4.7
			over 1 and up to 5 years	16	7.7	7.6	7.8	7.7
		ioi concumption	over 5 years	17	8.1	8.1	8.3	8.2
			total	18	7.9	7.9	8.1	8.0
	households and non-profit		up to 1 year	19	np.	np.	np.	np.
	institutions serving households	for house	over 1 and up to 5 years	20	5.3	5.2	5.3	5.4
	Households	purchases	over 5 years	21	3.6	3.7	3.8	3.7
			total	22	3.6	3.7	3.8	3.7
			up to 1 year	23	4.3	5.3	5.5	5.3
Loans in PLN		for other purposes	over 1 and up to 5 years	24	5.0	5.3	5.4	5.2
		.э. сэ. ррэсээ	over 5 years	25	4.5	5.0	5.1	5.1
			total	26	4.6	5.1	5.2	5.1
		to	tal, overdrafts included	27	5.2	5.3	5.4	5.3
		revo	lving loans and overdrafts	28	3.4	3.4	3.4	3.4
			credit cards	29	6.8	7.2	6.7	6.6
	non-financial		up to 1 year	30	3.3	3.3	3.3	3.3
	non-financial corporations	0'	ver 1 and up to 5 years	31	3.8	3.8	3.8	3.8
			over 5 years	32	4.0	4.0	4.0	4.0
			total	33	3.9	3.9	3.9	3.9
		to	tal, overdrafts included	34	3.7	3.8	3.8	3.7
		total, overdrafts in	ncluded	35	4.7	4.8	4.9	4.8

 $n/a-category\ not\ available\ due\ to\ confidentiality\ issues.$  Note: since December 2014 a new methodology of calculating average interest rates has been employed.

Table IV. Average MFI interest rates on outstanding amounts, PLN denominated (in %)

April	May	June	July	August	September	October	November	December
				2017				
0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
1.5	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5
2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.1
1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
np.	np.	np.	np.	np.	np.	np.	1.6	1.5
1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9
1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
7.5	7.4	7.5	7.4	7.4	7.4	7.4	7.4	7.4
7.1	7.4	7.3	7.4	7.4	7.3	7.3	7.2	7.5
4.7	4.7	4.8	4.9	5.0	5.1	5.1	5.0	4.8
7.6	7.5	7.6	7.5	7.5	7.5	7.4	7.4	7.3
8.1	8.0	8.1	8.0	8.0	8.1	8.0	8.0	8.0
7.9	7.8	7.9	7.8	7.7	7.8	7.8	7.8	7.7
np.	np.	np.	np.	np.	np.	np.	np.	np.
5.4	5.3	5.3	5.5	5.5	5.5	5.5	5.6	5.6
3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
5.4	5.4	5.3	5.3	5.3	5.3	5.3	5.3	5.2
5.2	5.2	5.2	5.1	5.2	5.2	5.3	5.3	5.2
5.0	4.9	5.3	5.3	5.0	5.0	5.1	5.1	5.0
5.1	5.0	5.3	5.2	5.1	5.1	5.1	5.1	5.1
5.3	5.2	5.3	5.2	5.2	5.3	5.2	5.3	5.2
3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.3	3.3
7.0	6.8	6.6	6.8	6.8	6.9	6.6	6.7	6.7
3.3	3.3	3.3	3.3	3.3	3.4	3.3	3.3	3.2
3.8	3.8	3.9	3.8	3.8	3.8	3.8	3.8	3.8
4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
3.9	3.9	4.0	3.9	3.9	3.9	3.9	3.9	3.9
3.7	3.8	3.8	3.7	3.7	3.7	3.7	3.7	3.7
4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.7

Table V. Average MFI interest rates on new and renegotiated business, PLN denominated (in %)

	Sector	Category	Original maturity, initial rate fixation	No.	December 2016	January	February 2017	March
			up to 1 month	1	1.1	1.2	1.2	1.2
	households		over 1 and up to 3 months	2	1.7	1.7	1.7	1.6
	and non-profit institutions	with agreed	over 3 and up to 6 months	3	1.6	1.7	1.7	1.6
	serving	maturity	over 6 months and up to 1 year	4	1.7	1.7	1.6	1.6
	households		over 1 year	5	1.7	1.3	1.7	1.6
			total	6	1.5	1.5	1.5	1.5
osits			up to 1 month	7	1.1	1.1	1.1	1.1
PLN			over 1 and up to 3 months	8	1.5	1.5	1.5	
	non-financial	with agreed	over 3 and up to 6 months	9	1.7	1.7	1.7	
	corporations	maturity	over 6 months and up to 1 year	10	1.8	1.8	1.7	
			over 1 year	11	1.6	1.6	1.6	
			total	12	1.2	1.2	1.2	
		·	total	13	1.3	1.3	1.3	
			floating rate and up to 3 months initial rate	14	8.3	8.5	8.4	
			fixation over 3 months and up to 1 year initial rate	15	2.5	2.9	3.2	
		for consumption	fixation over 1 year and up to 5 years initial rate fixation	16	6.3	6.4	6.6	
		or condumption			8.4	8.3	8.3	
			over 5 years initial rate fixation	17				1.6 1.6 1.6 1.6
		total	18	7.5	7.8	7.8		
		annual percentage rate of charge (APRC)	19	14.9	14.8	14.5	1.6 1.6 1.6 1.6 1.6 1.6 1.5 1.1 1.5 1.7 1.8 np. 1.2 1.3 8.3 3.2 6.3 8.2 7.7 14.3 4.5 np. np. 4.4 4.6 5.9 np. np. 5.5 6.1 np. np. 6.1 6.2 3.4 3.7 3.7 3.4 3.8 3.5 3.5 np. 3.5 3.9 4.1 3.1 np.	
		floating rate and up to 3 months initial rate fixation	20	4.5	4.5	4.6	4.5	
	for house	over 3 months and up to 1 year initial rate fixation	21	np.	np.	np.	np.	
	households	purchases	over 1 year initial rate fixation	22	np.	np.	-	np.
	and non-profit		total	23	4.4	4.4	4.5	4.4
institutions serving households		annual percentage rate of charge (APRC)	24	4.6	4.6	4.7	4.6	
	households	for sole	floating rate and up to 3 months initial rate fixation	25	5.7	6.0	6.2	5.9
		proprietors and	over 3 months and up to 1 year initial rate fixation	26	np.	np.	np.	np.
		unincorporated partnerships	over 1 year initial rate fixation	27	np.	np.	np.	nn
		partiteratilpa	total	28	5.4	5.5	5.8	
			floating rate and up to 3 months initial rate	29	6.1	5.7	6.3	
		for other	fixation over 3 months and up to 1 year initial rate	30	np.	np.	np.	nn
		purposes	fixation over 1 year initial rate fixation	31		·	·	
			over i year initial rate fixation		np.	np.	np.	
ans PLN				32	6.1	5.7	6.2	
		<del>                                     </del>	total	33	6.2	6.3	6.3	0.2
			floating rate and up to 3 months initial rate fixation	34	3.3	3.4	3.3	3.4
		up to PLN 1 million,	over 3 months and up to 1 year initial rate fixation	35	3.4	3.7	3.4	3.7
		overdrafts	over 1 year initial rate fixation	36	2.5	np.	2.9	3.7
		excluded	total	37	3.3	3.4	3.3	3.4
			floating rate and up to 1 year initial rate fixation, with original maturity over 1 year	38	3.9	4.0	3.7	3.8
			floating rate and up to 3 months initial rate fixation	39	3.9	3.4	3.5	3.5
		over PLN 1 million	over 3 months and up to 1 year initial rate fixation	40	3.6	np.	3.5	1.6 1.6 1.6 1.5 1.1 1.5 1.7 1.8 np. 1.2 1.3 8.3 3.2 6.3 8.2 7.7 14.3 4.5 np. np. 4.4 4.6 5.9 np. np. 5.5 6.1 np. np. 6.1 6.2 3.4 3.7 3.7 3.4 3.8 3.5 3.5 np. 3.5 3.9 4.1 3.1 np. 4.0 4.1 3.7
	non-financial	up to	over 1 year initial rate fixation	41	nn	nn	nn	nn
	corporations	PLN 4 million, overdrafts	over 1 year initial rate fixation total	42	np. 3.8	np. 3.4	np.	
		excluded	floating rate and up to 1 year initial rate fixation,	43	4.2	3.8	3.5 3.9	
			with original maturity over 1 year floating rate and up to 3 months initial rate					
		over DLN	fixation over 3 months and up to 1 year initial rate	44	3.7	3.9	4.1	
		over PLN 4 million,	fixation	45	np.	4.0	np.	
		overdrafts	over 1 year initial rate fixation	46	np.	np.	4.3	
		excluded	total	47	3.7	4.0	4.1	4.0
			floating rate and up to 1 year initial rate fixation, with original maturity over 1 year	48	3.9	4.2	4.3	
			total	49	3.6	3.6	3.7	3.7
			total	50	4.9	5.1	5.2	F 0

 $n/a-category\ not\ available\ due\ to\ confidentiality\ issues.$  Note: since December 2014 a new methodology of calculating average interest rates has been employed.

Table V. Average MFI interest rates on new and renegotiated business, PLN denominated (in %)

April	May	June	July	August	September	October	November	December
	,			2017				
1.1	1.0	1.0	1.1	1.0	1.0	1.1	1.1	1.2
1.6	1.6	1.5	1.6	1.6	1.6	1.7	1.8	1.7
1.6	1.5	1.6	1.7	1.8	1.7	1.6	1.6	1.7
1.6	1.6	1.6	1.6	1.7	1.6	1.7	1.7	1.7
1.5	1.4	1.3	1.2	1.3	1.4	1.2	1.2	1.5
1.4	1.4	1.4	1.4 1.2	1.5	1.5	1.5 1.1	1.5	1.5
1.1 1.5	1.1 1.5	1.1 1.5	1.5	1.1 1.6	1.1 1.5	1.1	1.1 1.6	1.0 1.5
1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6
1.7	1.7	1.7	1.5	1.8	1.7	1.6	1.7	1.7
np.	1.5	1.5						
1.2	1.3	1.2	1.3	1.2	1.3	1.2	1.2	1.2
1.3	1.3	1.3	1.4	1.3	1.3	1.3	1.4	1.3
8.4	8.5	8.4	8.6	8.6	8.5	8.5	8.5	8.4
2.9	3.2	3.4	3.6	3.8	3.7	3.4	3.1	2.8
6.0	6.5	6.5	6.3	6.3	5.7	6.0	5.7	4.9
8.1	8.3	8.3	8.3	8.2	8.2	8.4	8.4	8.7
7.7	7.9	7.8	7.8	7.9	7.7	7.8	7.6	7.2
14.3	14.7	14.6	14.8	14.8	14.5	14.1	13.8	13.4
4.5	4.5	4.4	4.4	4.4	4.5	4.5	4.5	4.5
np.								
np.								
4.4	4.4	4.3	4.4	4.4	4.4	4.4	4.4	4.4
4.6	4.6	4.5	4.6	4.6	4.6	4.6	4.6	4.6
5.9	6.2	5.5	5.8	5.8	6.3	5.4	5.6	5.2
np.								
np.								
5.6	5.9	5.2	5.6	5.7	6.2	5.4	5.5	5.2
5.4	5.5	5.0	5.4	5.5	5.4	5.1	5.2	5.0
np.								
np. 5.3	np. 5.4	np. 5.0	np. 5.3	np. 5.4	np. 5.3	np. 5.1	np. 5.2	np. 5.0
6.2	6.3	6.1	6.2	6.3	6.4	6.2	6.2	6.0
3.4	3.3	3.4	3.4	3.3	3.3	3.3	3.3	3.2
4.1	3.5	3.5	3.3	3.4	3.5	3.5	3.7	3.5
3.2	2.7	3.1	3.1	np.	3.9	4.3	3.6	4.3
3.4	3.3	3.4	3.4	3.3	3.3	3.4	3.3	3.2
3.8	3.7	3.8	3.9	3.7	3.6	3.9	3.8	3.5
3.6	3.6	3.9	4.2	3.9	4.0	4.0	3.7	3.8
np.	3.4	3.3	3.5	3.4	3.8	np.	np.	np.
np.	3.3	np.						
3.6	3.6	3.9	4.2	3.9	4.0	4.0	3.7	3.8
4.4	3.9	4.6	4.9	4.4	4.3	4.3	3.8	4.2
4.1	3.8	3.9	3.6	4.1	4.2	4.0	4.0	3.8
np.	np.	4.1	4.1	np.	4.8	np.	np.	np.
np.	np.	np.	3.3	np.	np.	np.	np.	np.
4.1	3.8	3.9	3.7	3.9	4.2	4.0	4.0	3.8
4.3	3.8	4.0	3.8	4.0	4.2	4.2	4.1	3.9
3.8	3.6	3.8	3.6	3.7	3.8	3.7	3.7	3.7
5.0	5.2	4.8	5.0	5.1	5.2	5.1	5.1	4.6

Table VI. Average MFI interest rates on new and renegotiated business, EUR denominated (in %)

	Sector	Category	Original maturity, initial rate fixation	No.	December	January	February	March	
	Sector	Category	Original maturity, milial rate fixation	NO.	2016		2017		
			overnight <sup>1</sup>	1	0.0	0.0	0.0	0.0	
			up to 1 month	2	np.	np.	np.	np.	
	households		over 1 and up to 3 months	3	0.3	0.3	0.3	0.2	
	and non-profit institutions serving	with agreed	over 3 and up to 6 months	4	0.3	0.3	0.3	0.3	
	households	maturity	over 6 months and up to 1 year	5	0.4	0.4	0.4	0.3	
			over 1 year	6	0.6	0.9	0.5	0.8	
			total	7	0.3	0.3	0.3	0.3	
Deposits in EUR			overnight <sup>1</sup>	8	0.0	0.0	0.0	0.0	
			up to 1 month	9	0.0	0.0	0.0	0.0	
			over 1 and up to 3 months	10	np.	0.0	np.	np.	
	non-financial corporations	with agreed	over 3 and up to 6 months	11	0.1	0.1	np.	np.	
		maturity	over 6 months and up to 1 year	12	np.	np.	0.1	0.5	
			over 1 year	13	np.	0.0	np.	np. 0.2 0.3 0.3 0.8 0.3 0.0 0.0 np. np.	
			total	14	0.0	0.0	0.0	0.1	
		total, overnig	ht excluded	15	0.1	0.1	0.1	0.1	
		revol	ving loans and overdrafts <sup>1</sup>	16	1.7	1.7	1.7	1.7	
		for consumption	total	17	2.9	5.4	np.	np.	
	households and non-profit	for consumption	annual percentage rate of charge (APRC)	18	3.2	5.6	np.	np.	
	institutions serving households	for house	total	19	3.6	3.5	3.4	3.4	
Loans	Householus	purchases	annual percentage rate of charge (APRC)	20	4.1	3.8	3.7	3.7	
in EUR			for other purposes	21	2.1	1.9	1.9	1.8	
		to	tal, overdrafts excluded	22	2.7	3.1	2.8	2.9	
		revol	ving loans and overdrafts <sup>1</sup>	23	1.4	1.4	1.4	1.4	
	non-financial		up to EUR 1 million	24	1.3	1.5	1.3	1.4	
	corporations		over EUR 1 million	25	1.8	1.8	1.4	0.3 0.0 0.0 np. np. 0.5 np. 0.1 1.7 np. np. 3.4 3.7 1.8 2.9 1.4 1.6	
		to	tal, overdrafts excluded	26	1.8	1.8	1.4	1.6	
		total, overdra	fts excluded	27	1.8	1.8	1.4	1.6	

 $<sup>^1</sup>$  Category calculated on a basis of an outstanding amounts. Excluded from "total" average. n/a – category not available due to confidentiality issues. Note: since December 2014 a new methodology of calculating average interest rates has been employed.

**Table VI.** Average MFI interest rates on new and renegotiated business, EUR denominated (in %)

April	May	June	July	August	September	October	November	December
				2017				
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
np.	np.	np.	np.	np.	np.	np.	np.	np.
0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2
0.2	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.2
0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.4
0.3	0.6	0.5	0.4	0.3	0.2	0.3	0.2	0.2
0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.3	0.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
np.	np.	np.	np.	np.	np.	np.	np.	np.
0.0	0.0	np.	0.0	np.	0.0	0.0	0.0	0.0
np.	0.1	0.1	0.1	0.1	np.	0.1	0.1	0.1
0.0	0.1	0.2	0.1	0.2	0.1	0.1	np.	0.0
np.	np.	0.1	np.	0.0	np.	np.	0.0	0.0
0.0	0.0	0.0	0.0	0.0	np.	0.0	np.	0.0
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
1.9	1.9	1.8	1.8	1.7	1.8	1.8	1.8	1.7
np.	3.7	np.	np.	np.	np.	np.	np.	np.
np.	3.9	np.	np.	np.	np.	np.	np.	np.
4.1	4.0	4.0	4.3	4.0	4.2	4.4	4.1	4.3
4.6	4.3	4.3	4.5	4.2	4.3	4.5	4.3	4.6
1.9	1.7	1.5	1.8	1.6	1.7	2.0	1.9	1.7
3.2	2.9	1.9	2.2	2.9	2.8	3.3	3.1	3.3
1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6
1.4	1.3	1.3	1.4	1.3	1.4	1.4	1.2	1.4
1.9	1.5	2.3	2.3	2.1	2.3	2.3	2.4	2.3
1.8	1.5	2.2	2.1	1.9	2.0	2.1	2.1	2.1
1.8	1.5	2.2	2.1	1.9	2.1	2.2	2.1	2.2

Table VII. Aggregated balance sheet of other monetary financial institutions (million zloty) Assets

Period	Cash in other monetary financial institutions' vaults	Loans and other claims on domestic residents	monetary financial institutions	general government	other domestic residents <sup>1</sup>	Debt securities	monetary financial institutions	general government	other domestic residents <sup>1</sup>
	1	2	3	4	5	6	7	8	9
December 2016	12 893.8	1 213 399.1	85 539.4	83 387.5	1 044 472.2	397 951.6	90 345.5	278 224.0	29 382.1
January 2017	11 787.9	1 226 541.4	99 070.2	82 255.9	1 045 215.3	397 213.4	84 823.2	283 550.6	28 839.6
February	11 588.7	1 225 814.4	92 789.2	81 839.9	1 051 228.7	412 163.7	89 145.2	294 256.8	28 761.7
March	11 824.3	1 234 399.0	97 783.8	81 620.7	1 054 994.5	399 854.5	81 372.3	289 851.7	28 630.6
April	12 478.2	1 235 179.9	90 451.9	81 140.1	1 063 587.9	404 365.3	87 038.0	288 604.3	28 723.0
May	12 183.4	1 238 418.9	92 655.2	80 902.0	1 064 861.7	399 636.2	80 183.6	291 205.7	28 247.0
June	12 872.5	1 252 586.6	99 661.4	81 601.1	1 071 324.2	401 956.8	78 697.8	295 660.2	27 598.8
July	12 780.1	1 259 290.9	106 178.3	80 809.7	1 072 302.9	382 390.4	68 020.9	286 390.0	27 979.5
August	13 288.1	1 252 279.3	95 707.7	80 926.9	1 075 644.7	396 322.7	81 019.7	286 594.6	28 708.5
September	12 498.7	1 262 483.5	96 540.2	81 197.0	1 084 746.3	395 928.8	81 965.1	285 782.1	28 181.6
October	13 150.8	1 261 249.2	94 859.0	82 232.9	1 084 157.2	403 360.0	88 223.5	286 706.4	28 430.1
November	12 571.0	1 269 785.2	102 064.1	82 564.4	1 085 156.7	402 701.9	81 996.4	291 937.4	28 768.1
December	13 951.1	1 260 209.4	92 151.6	85 723.6	1 082 334.2	416 019.1	101 286.0	286 291.1	28 442.0

								1
Period	Money market fund shares/units	Equity and non-MMF investment fund shares or units	monetary financial institutions other domestic residents <sup>1</sup>		External assets	Fixed assets <sup>2</sup>	Remaining assets	Total assets
	10	11	12	13	14	15	16	17
December 2016	0.0	18 547.4	5 892.9	12 654.5	72 472.4	50 428.9	24 298.1	1 789 991.3
January 2017	0.0	18 764.2	6 013.7	12 750.5	69 952.1	50 371.6	22 836.4	1 797 467.0
February	0.0	19 137.5	6 209.7	12 927.8	69 193.8	50 190.9	23 544.2	1 811 633.2
March	0.0	19 056.4	6 185.1	12 871.3	73 976.7	50 029.7	23 532.9	1 812 673.6
April	0.0	19 237.0	6 409.5	12 827.5	72 568.3	50 151.2	24 504.9	1 818 484.8
May	0.0	19 325.9	6 473.6	12 852.3	77 770.6	50 222.2	24 191.6	1 821 748.9
June	0.0	20 046.0	6 400.8	13 645.2	63 756.1	49 676.0	22 076.1	1 822 970.1
July	0.0	20 106.3	6 478.2	13 628.1	64 894.6	49 792.7	24 669.7	1 813 924.7
August	0.0	20 112.4	6 505.2	13 607.2	64 524.9	49 965.9	23 325.7	1 819 818.9
September	0.0	20 187.0	6 623.8	13 563.2	64 687.5	50 107.3	24 194.3	1 830 087.0
October	0.0	20 252.7	6 716.0	13 536.7	72 694.7	50 293.3	23 549.2	1 844 549.9
November	0.0	20 538.4	6 900.7	13 637.8	68 087.4	50 370.2	23 624.9	1 847 679.1
December	0.0	21 130.6	6 979.9	14 150.7	69 713.4	50 973.2	26 171.3	1 858 167.9

 $<sup>^1\,</sup>$  Non-monetary financial institutions and non-financial sector.  $^2\,$  Excluding financial fixed assets, included in column 10.

**Table VII.** Aggregated balance sheet of other monetary financial institutions (million zloty) Liabilities

Period	Deposits and other liabilities to domestic residents	Monetary financial institutions	Central government	ment Other domestic residents <sup>1</sup> ov		with agreed maturity	repurchase agreements
	1	2	3	4	5	6	7
December 2016	1 190 837.4	49 373.8	29 486.2	1 111 977.4	639 642.3	466 096.4	6 238.6
January 2017	1 204 989.5	52 388.2	53 638.1	1 098 963.2	625 147.0	467 105.0	6 711.1
February	1 217 686.6	52 620.3	62 512.6	1 102 553.7	636 316.2	460 801.8	5 435.8
March	1 214 656.0	51 976.0	61 282.2	1 101 397.8	637 024.3	458 383.1	5 990.4
April	1 220 545.4	54 777.2	64 077.2	1 101 691.0	634 920.7	460 159.2	6 611.0
May	1 225 794.2	51 248.9	64 792.1	1 109 753.2	649 867.1	450 811.1	9 074.9
June	1 231 277.3	54 086.7	72 158.1	1 105 032.5	653 223.2	444 067.7	7 741.6
July	1 219 547.3	51 220.2	62 091.4	1 106 235.6	658 623.2	440 186.8	7 425.6
August	1 223 020.4	54 435.0	58 208.8	1 110 376.6	663 602.8	441 481.6	5 292.2
September	1 231 581.2	52 742.0	64 299.5	1 114 539.7	662 852.1	447 269.3	4 418.3
October	1 239 034.0	54 750.9	57 929.5	1 126 353.7	675 085.3	445 980.0	5 288.3
November	1 242 038.1	56 087.8	51 181.5	1 134 768.8	692 717.5	436 113.8	5 937.5
December	1 243 075.0	55 711.4	31 015.4	1 156 348.2	717 612.7	432 257.2	6 478.3

 $<sup>^{\,1}\,</sup>$  Non-monetary financial institutions, local government, social security funds and non-financial sector.

						1
Period	Money market fund shares /units	Debt securities issued	Capital and reserves	External liabilities	Remaining liabilities	Total liabilities
	8	9	10	11	12	13
December 2016	0.0	68 040.4	259 449.8	228 176.3	43 487.6	1 789 991.5
January 2017	0.0	68 028.1	261 070.1	220 939.5	42 440.1	1 797 467.3
February	0.0	69 133.0	262 644.2	219 633.6	42 535.9	1 811 633.3
March	0.0	68 816.2	264 657.7	219 861.4	44 682.4	1 812 673.7
April	0.0	69 536.5	264 012.1	213 435.3	50 955.7	1 818 485.0
May	0.0	69 901.1	265 554.4	212 421.3	48 077.9	1 821 748.9
June	0.0	70 142.4	265 647.8	210 234.0	45 668.5	1 822 970.1
July	0.0	73 175.9	267 200.3	207 873.3	46 127.9	1 813 924.7
August	0.0	76 290.6	271 364.6	206 029.2	43 114.1	1 819 818.9
September	0.0	77 864.9	273 258.6	203 946.9	43 435.4	1 830 087.0
October	0.0	84 042.6	274 823.8	199 776.1	46 873.4	1 844 549.9
November	0.0	84 825.7	280 811.8	193 945.6	46 057.9	1 847 679.1
December	0.0	85 069.7	281 976.5	193 174.0	54 872.8	1 858 167.9

Table VIII. Balance sheet of Narodowy Bank Polski (million zloty) Assets

Period	Loans and other claims on domestic residents	other monetary finan- cial institutions	z         3         4           0.0         0.0         153.7           0.0         0.0         152.5           0.0         0.0         151.2           0.0         0.0         150.6           0.0         0.0         149.9		Debt securities	other monetary finan- cial institutions	general government	other domestic residents
	1	2	3	4	5	6	7	8
December 2016	153.7	0.0	0.0	153.7	0.0	0.0	0.0	0.0
January 2017	152.5	0.0	0.0	152.5	0.0	0.0	0.0	0.0
February	151.2	0.0	0.0	151.2	0.0	0.0	0.0	0.0
March	150.6	0.0	0.0	150.6	0.0	0.0	0.0	0.0
April	149.9	0.0	0.0	149.9	0.0	0.0	0.0	0.0
May	149.4	0.0	0.0	149.4	0.0	0.0	0.0	0.0
June	148.0	0.0	0.0	148.0	0.0	0.0	0.0	0.0
July	146.2	0.1	0.0	146.2	0.0	0.0	0.0	0.0
August	145.5	0.0	0.0	145.5	0.0	0.0	0.0	0.0
September	144.7	0.0	0.0	144.7	0.0	0.0	0.0	0.0
October	144.2	0.0	0.0	144.2	0.0	0.0	0.0	0.0
November	143.5	0.0	0.0	143.5	0.0	0.0	0.0	0.0
December	143.1	0.1	0.0	143.0	0.0	0.0	0.0	0.0

Period	Money market fund shares/units	Equity and non-MMF investment fund shares or units <sup>2</sup>	other monetary financial institutions	other domestic residents <sup>1</sup>	External assets	Fixed assets <sup>2</sup>	Remaining assets	Total assets
	9	10	11	12	13	14	15	16
December 2016	0.0	128.8	0.0	128.8	500 254.8	2 181.0	292.7	503 011.0
January 2017	0.0	128.8	0.0	128.8	481 321.2	2 181.2	1 367.3	485 151.0
February	0.0	128.8	0.0	128.8	472 758.0	2 181.0	788.3	476 007.3
March	0.0	128.8	0.0	128.8	463 203.0	2 141.9	3 228.3	468 852.6
April	0.0	128.8	0.0	128.8	444 479.5	2 146.2	3 254.5	450 158.9
May	0.0	128.8	0.0	128.8	432 818.1	2 148.2	6 998.6	442 243.1
June	0.0	128.8	0.0	128.8	434 739.9	2 165.2	4 688.2	441 870.2
July	0.0	128.8	0.0	128.8	418 788.6	2 157.8	3 115.6	424 337.2
August	0.0	128.8	0.0	128.8	413 636.9	2 157.2	6 233.4	422 301.9
September	0.0	128.8	0.0	128.8	427 119.5	2 164.3	2 131.4	431 688.7
October	0.0	128.8	0.0	128.8	424 323.8	2 163.3	4 245.4	431 005.6
November	0.0	128.8	0.0	128.8	422 751.0	2 163.1	10 096.8	435 283.3
December	0.0	128.8	0.0	128.8	414 039.3	2 176.1	149.4	416 636.8

 $<sup>^{\</sup>rm 1}$  Non-monetary financial institutions and non-financial sector.  $^{\rm 2}$  Excluding financial fixed assets, included in column 10.

**Table VIII.** Balance sheet of Narodowy Bank Polski (million zloty) Liabilities

										1
Period	Currency in circulation	Deposits and other liabilities to domestic residents	other monetary financial institutions	central government	other domestic residents <sup>1</sup>	Debt securities issued	Capital and reserves	External liabilities	Remaining liabilities	Total liabilities
	1	2	3	4	5	6	7	8	9	10
December 2016	187 295.0	64 308.1	36 756.1	26 291.5	1 260.5	81 308.5	57 456.6	110 342.4	2 300.5	503 011.1
January 2017	183 104.2	81 450.7	47 624.9	33 002.6	823.2	76 041.6	50 784.0	93 164.2	606.3	485 151.0
February	184 044.5	76 421.2	40 860.4	34 711.7	849.1	79 666.0	53 810.0	81 434.5	631.1	476 007.3
March	185 010.0	79 790.0	46 702.7	32 508.2	579.1	72 544.9	44 297.0	86 058.0	1 152.6	468 852.5
April	188 648.8	69 758.8	35 671.8	33 273.6	813.4	78 852.4	40 917.9	71 164.5	816.5	450 158.9
May	187 024.4	76 965.6	42 167.9	34 200.6	597.1	72 695.5	35 067.3	69 708.1	782.1	442 243.0
June	189 499.5	85 562.1	46 592.3	38 298.9	670.9	71 220.3	23 755.5	71 244.9	587.8	441 870.2
July	190 769.4	96 914.3	55 872.3	40 266.0	776.1	60 016.9	20 496.5	55 578.7	561.4	424 337.2
August	192 170.9	84 982.7	42 713.8	41 608.6	660.4	72 542.0	20 886.1	51 117.1	603.1	422 301.9
September	193 394.5	80 781.9	45 370.9	34 700.4	710.6	74 077.0	22 092.1	60 706.3	637.0	431 688.7
October	194 024.8	74 557.3	42 345.8	31 261.9	949.6	80 672.0	20 892.5	60 252.1	606.9	431 005.6
November	193 441.4	80 112.6	48 101.3	31 156.8	854.5	74 437.0	18 819.8	67 668.1	804.4	435 283.3
December	198 429.5	60 417.4	38 011.4	18 138.8	4 267.3	94 423.1	4 284.1	58 056.8	1 025.8	416 636.8

 $<sup>^{\</sup>rm 1}$  Non-monetary financial institutions, local government, social security funds and non-financial sector.

Table IX. Consolidated balance sheet of monetary financial institutions (million zloty) Assets

Period	Loans and other claims on domestic residents	general government	other domestic residents <sup>1</sup>	Debt securities	general government	other domestic residents <sup>1</sup>	Equity and non-MMF investment fund shares or units <sup>1</sup>	External assets	Fixed assets <sup>2</sup>	Remaining assets <sup>3</sup>	Total assets
	1	2	3	4	5	6	7	8	9	10	11
December 2016	1 128 013.4	83 387.5	1 044 625.9	307 606.1	278 224.0	29 382.1	12 783.3	572 727.2	52 609.9	24 590.8	2 098 330.7
January 2017	1 127 623.7	82 255.9	1 045 367.8	312 390.2	283 550.6	28 839.6	12 879.3	551 273.4	52 552.9	24 203.7	2 080 923.0
February	1 133 219.8	81 839.9	1 051 379.9	323 018.5	294 256.8	28 761.7	13 056.6	541 951.7	52 372.2	24 332.5	2 087 951.1
March	1 136 765.8	81 620.7	1 055 145.1	318 482.3	289 851.7	28 630.6	13 000.1	537 179.7	52 171.6	26 761.2	2 084 360.7
April	1 144 877.9	81 140.1	1 063 737.8	317 327.3	288 604.3	28 723.0	12 956.3	517 047.8	52 297.4	27 759.3	2 072 266.0
May	1 145 913.1	80 902.0	1 065 011.1	319 452.7	291 205.7	28 247.0	12 981.1	510 588.7	52 370.4	31 190.2	2 072 496.2
June	1 153 073.2	81 601.1	1 071 472.2	323 259.0	295 660.2	27 598.8	13 774.1	498 496.0	51 841.2	26 764.4	2 067 207.8
July	1 153 258.8	80 809.7	1 072 449.1	314 369.5	286 390.0	27 979.5	13 757.0	483 683.3	51 950.6	27 785.3	2 044 804.4
August	1 156 717.0	80 926.9	1 075 790.2	315 303.1	286 594.6	28 708.5	13 736.0	478 161.8	52 123.1	29 559.1	2 045 600.1
September	1 166 087.9	81 197.0	1 084 890.9	313 963.7	285 782.1	28 181.6	13 692.1	491 807.0	52 271.6	26 325.7	2 064 147.9
October	1 166 534.4	82 232.9	1 084 301.4	315 136.6	286 706.4	28 430.1	13 665.6	497 018.5	52 456.5	27 794.6	2 072 606.1
November	1 167 864.6	82 564.4	1 085 300.2	320 705.5	291 937.4	28 768.1	13 766.6	490 838.4	52 533.3	33 721.7	2 079 430.2
December	1 168 200.8	85 723.6	1 082 477.2	314 733.1	286 291.1	28 442.0	14 279.5	483 752.7	53 149.3	26 320.7	2 060 436.0

 $<sup>^1</sup>$  Non-monetary financial institutions and non-financial sector.  $^2$  Excluding financial fixed assets, incorporated in column 7.  $^3$  Including rights issues.

### Liabilities

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Period	Currency in circulation	Deposits and other liabili- ties to central government	Deposits and other liabilities to other domestic residents <sup>1</sup>	overnight	with agreed maturity	repurchase agreements	Money market fund shares/units	Debt securities issued	Capital and reserves	External liabilities	Remaining liabilities	Excess of inter-MFI liabilities	Total liabilities
	1	2	3	4	5	6	7	8	9	10	11	12	13
December 2016	174 401.2	55 777.7	1 113 237.9	640 902.8	466 096.5	6 238.6	0.0	59 003.4	311 013.4	338 518.7	45 788.1	590.5	2 098 331.0
January 2017	171 316.3	86 640.7	1 099 786.4	625 970.2	467 105.1	6 711.1	0.0	59 246.5	305 840.4	314 103.8	43 046.4	942.9	2 080 923.3
February	172 455.8	97 224.3	1 103 402.8	637 165.3	460 801.7	5 435.8	0.0	59 653.8	310 293.9	301 068.1	43 167.0	734.9	2 087 951.2
March	173 185.7	93 790.4	1 101 976.9	637 603.4	458 383.1	5 990.4	0.0	59 988.8	302 769.5	305 919.4	45 835.0	894.9	2 084 360.7
April	176 170.5	97 350.8	1 102 504.4	635 734.0	460 159.3	6 611.0	0.0	61 350.9	298 520.6	284 599.7	51 772.2	-2.9	2 072 266.2
May	174 841.0	98 992.7	1 110 350.3	650 464.2	450 811.2	9 074.9	0.0	62 413.0	294 148.2	282 129.4	48 860.0	761.6	2 072 496.1
June	176 627.0	110 457.0	1 105 703.4	653 894.1	444 067.7	7 741.6	0.0	62 664.9	283 002.6	281 478.9	46 256.3	1 017.6	2 067 207.8
July	177 989.3	102 357.4	1 107 011.7	659 399.3	440 186.8	7 425.6	0.0	65 171.9	281 218.6	263 452.0	46 689.3	914.2	2 044 804.4
August	178 882.8	99 817.4	1 111 036.9	664 263.1	441 481.6	5 292.2	0.0	67 813.0	285 745.5	257 146.2	43 717.2	1 441.0	2 045 600.1
September	180 895.7	98 999.8	1 115 250.3	663 562.7	447 269.3	4 418.3	0.0	69 976.9	288 727.0	264 653.1	44 072.3	1 572.7	2 064 147.9
October	180 874.0	89 191.4	1 127 303.3	676 034.9	445 980.0	5 288.3	0.0	76 491.1	289 000.3	260 028.1	47 480.3	2 237.6	2 072 606.1
November	180 870.4	82 338.3	1 135 623.3	693 572.0	436 113.8	5 937.5	0.0	77 266.4	292 730.9	261 613.7	46 862.3	2 124.9	2 079 430.2
December	184 478.4	49 154.1	1 160 615.5	721 880.0	432 257.2	6 478.3	0.0	78 206.9	279 280.6	251 230.8	55 898.6	1 571.1	2 060 436.0

 $<sup>^{\</sup>rm 1}$  Non-monetary financial institutions, local government, social security funds and non-financial sector.

 Table Xa.
 M3 and counterparts (million zloty)

M3

Period	Currency in circulation (excluding vault cash)	currency in circulation (including MFIs' vault cash)	cash in monetary financial institutions' vaults	Overnight deposits and other liabilities	households	other financial corporations	non-financial corporations	non-profit insti- tutions serving households	local government	social security funds	M1
	1	2	3	4	5	6	7	8	9	10	11
December 2016	174 401.2	187 295.0	12 893.8	640 902.8	402 000.9	25 898.5	169 753.0	14 911.5	25 254.6	3 084.2	815 304.0
January 2017	171 316.3	183 104.2	11 787.9	625 970.2	403 299.5	26 583.9	156 972.6	14 500.4	22 516.1	2 097.7	797 286.5
February	172 455.8	184 044.5	11 588.7	637 165.3	411 651.8	27 015.8	156 187.5	14 828.9	25 127.3	2 353.9	809 621.0
March	173 185.7	185 010.0	11 824.3	637 603.4	415 355.9	24 534.1	154 753.1	14 344.5	27 101.6	1 514.3	810 789.1
April	176 170.5	188 648.8	12 478.2	635 734.0	419 450.4	26 512.0	148 517.2	14 418.1	25 111.9	1 724.4	811 904.6
May	174 841.0	187 024.4	12 183.4	650 464.2	420 182.2	26 367.2	160 431.1	15 019.7	26 856.6	1 607.4	825 305.2
June	176 627.0	189 499.5	12 872.5	653 894.1	427 000.2	26 399.8	158 301.3	15 595.1	24 962.6	1 635.2	830 521.2
July	177 989.3	190 769.4	12 780.1	659 399.3	427 455.8	27 523.7	161 157.6	16 080.9	25 323.8	1 857.4	837 388.6
August	178 882.8	192 170.9	13 288.1	664 263.1	430 543.7	27 651.0	162 152.2	16 221.1	25 246.0	2 449.1	843 146.0
September	180 895.7	193 394.5	12 498.7	663 562.7	431 982.5	27 922.5	158 990.7	16 408.8	26 126.7	2 131.6	844 458.4
October	180 874.0	194 024.8	13 150.8	676 034.9	435 635.3	27 724.3	166 985.6	16 618.5	26 234.0	2 837.1	856 908.9
November	180 870.4	193 441.4	12 571.0	693 572.0	441 632.3	28 318.2	177 932.1	16 419.5	27 225.5	2 044.4	874 442.4
December	184 478.4	198 429.5	13 951.1	721 880.0	453 228.1	31 589.1	187 138.6	16 419.2	26 741.6	6 763.5	906 358.4

Period	Deposits and other liabilities with agreed maturity up to 2 years	households	other financial corporations	non- -financial corporations	non-profit institutions serving households	local govern- ment	social security funds	M2	Repurchase agreements	Debt securities issued with maturity up to 2 years	Money market fund shares	М3
	12	13	14	15	16	17	18	20	21	22	23	24
December 2016	440 907.8	302 916.8	23 243.6	99 234.4	7 251.0	5 886.8	2 375.3	1 256 211.9	6 238.6	3 211.1	0.0	1 265 661.7
January 2017	441 637.7	301 790.1	22 051.3	98 728.1	8 006.5	9 640.4	1 421.4	1 238 924.2	6 711.1	3 559.3	0.0	1 249 194.6
February	435 120.0	299 821.4	20 820.7	94 191.3	7 686.4	11 599.1	1 001.1	1 244 741.0	5 435.8	3 659.7	0.0	1 253 836.5
March	432 449.8	297 522.5	21 565.6	91 731.2	8 032.0	12 185.4	1 413.3	1 243 238.9	5 990.4	4 143.5	0.0	1 253 372.8
April	434 370.6	293 747.0	21 866.6	95 994.9	8 046.3	12 975.6	1 740.3	1 246 275.2	6 611.0	4 294.8	0.0	1 257 181.0
May	425 375.1	289 132.0	22 721.4	91 373.0	7 998.3	12 540.4	1 610.0	1 250 680.3	9 074.9	4 123.1	0.0	1 263 878.3
June	418 494.1	285 485.8	23 227.4	87 967.1	7 652.0	12 049.1	2 112.6	1 249 015.2	7 741.6	3 945.1	0.0	1 260 702.0
July	414 859.2	283 824.2	23 305.0	86 036.8	7 949.6	11 786.3	1 957.2	1 252 247.8	7 425.6	4 618.5	0.0	1 264 291.9
August	416 115.7	282 806.7	23 206.1	87 814.3	7 951.4	11 435.2	2 902.1	1 259 261.6	5 292.2	5 242.5	0.0	1 269 796.3
September	421 890.6	282 255.7	23 460.8	93 174.7	7 979.3	11 060.3	3 959.9	1 266 349.0	4 418.3	5 175.1	0.0	1 275 942.4
October	420 510.1	281 395.2	23 038.9	94 681.1	8 022.0	10 233.7	3 139.2	1 277 419.0	5 288.3	4 983.1	0.0	1 287 690.5
November	410 517.8	280 323.2	22 211.4	86 959.0	8 124.2	9 405.0	3 495.0	1 284 960.2	5 937.5	4 929.4	0.0	1 295 827.1
December	406 473.5	279 206.7	22 190.1	88 270.3	7 514.8	6 046.3	3 245.3	1 312 831.9	6 478.3	5 073.1	0.0	1 324 383.3

### Table Xb. M3 and counterparts (million zloty)

### M3 counterparts

Period	Net external assets	External assets	External liabilities	Credit to other domestic residents	Loans and other claims on domestic residents	households	other financial corporations	non-financial corporations	non-profit institutions serving households
	1	2	3	4	5	6	7	8	9
December 2016	234 208.5	572 727.2	338 518.7	1 137 243.4	1 076 440.2	665 062.0	58 546.2	314 533.1	6 484.7
January 2017	237 169.6	551 273.4	314 103.8	1 137 414.0	1 077 034.0	663 924.8	58 730.6	316 227.1	6 485.3
February	240 883.7	541 951.7	301 068.1	1 143 325.5	1 082 707.9	665 786.1	60 655.5	318 530.8	6 459.8
March	231 260.4	537 179.7	305 919.4	1 146 271.3	1 085 870.8	664 566.6	63 822.1	320 271.4	6 484.9
April	232 448.1	517 047.8	284 599.7	1 154 740.4	1 094 276.1	666 463.2	64 174.4	326 571.5	6 528.6
May	228 459.3	510 588.7	282 129.4	1 155 251.1	1 095 295.9	668 116.8	65 513.7	324 850.5	6 530.1
June	217 017.0	498 496.0	281 478.9	1 161 128.0	1 101 166.9	672 588.6	64 780.6	327 477.1	6 625.8
July	220 231.3	483 683.3	263 452.0	1 162 358.7	1 102 157.3	671 598.3	65 499.6	328 622.0	6 729.2
August	221 015.6	478 161.8	257 146.2	1 166 467.3	1 105 582.1	673 069.7	64 296.9	331 592.7	6 830.8
September	227 153.9	491 807.0	264 653.1	1 174 856.9	1 114 593.2	677 792.0	66 316.8	333 904.3	6 877.9
October	236 990.3	497 018.5	260 028.1	1 174 418.4	1 114 042.9	676 837.9	64 720.7	335 766.3	6 976.5
November	229 224.7	490 838.4	261 613.7	1 176 049.8	1 115 177.5	676 459.1	65 879.0	335 964.6	6 997.4
December	232 521.9	483 752.7	251 230.8	1 175 814.3	1 114 017.7	676 394.4	65 781.2	333 355.3	6 946.3

					of which issued	d by	Equity and non-	of w	nich:
Period	local government	social security funds	Debt securities	other financial corporations	non-financial corporations	local government	MMF investment fund shares or units	other financial corporations	non-financial corporations
	10	11	12	13	14	15	16	17	18
December 2016	31 814.1	0.1	48 019.9	3 958.6	25 423.4	18 637.8	12 783.4	10 601.5	2 181.9
January 2017	31 666.1	0.1	47 500.6	3 579.1	25 260.5	18 661.0	12 879.4	10 711.5	2 167.9
February	31 275.5	0.1	47 560.9	3 439.9	25 321.9	18 799.2	13 056.7	10 874.8	2 181.9
March	30 725.6	0.1	47 400.3	3 226.1	25 404.5	18 769.8	13 000.2	10 839.9	2 160.3
April	30 538.3	0.1	47 507.9	3 137.7	25 585.3	18 784.9	12 956.4	10 828.4	2 128.0
May	30 284.7	0.1	46 974.1	2 989.9	25 257.1	18 727.2	12 981.1	10 900.3	2 080.8
June	29 694.6	0.1	46 187.0	3 398.9	24 197.9	18 588.3	13 774.1	11 506.1	2 266.9
July	29 708.1	0.1	46 444.5	3 587.4	24 392.0	18 465.0	13 757.0	11 516.1	2 239.9
August	29 791.8	0.1	47 149.2	3 564.2	25 144.3	18 440.7	13 736.0	11 482.9	2 252.1
September	29 702.2	0.1	46 571.6	3 265.4	24 916.2	18 389.6	13 692.1	11 521.5	2 169.6
October	29 741.4	0.1	46 709.9	3 262.6	25 167.5	18 279.8	13 665.6	11 384.4	2 280.2
November	29 877.2	0.1	47 105.6	3 246.0	25 522.1	18 337.5	13 766.6	11 501.2	2 264.4
December	31 540.4	0.1	47 517.1	3 496.7	24 945.2	19 075.1	14 279.5	12 060.0	2 218.5

Table Xb. M3 and counterparts (million zloty), cont'd.

### M3 counterparts

		[	of w	hich:			[	
Period	Credit to central government, net	Credit to central government	loans	debt securities	Deposits of central government	Longer-term financial liabilities	Deposits and other liabilities with agreed maturity over 2 years	households
	19	20	21	22	23	24	25	26
December 2016	253 371.3	311 159.4	961.4	259 586.2	57 788.1	389 983.8	25 188.6	19 838.8
January 2017	226 873.0	315 479.3	993.0	264 889.6	88 606.3	385 029.4	25 467.4	20 156.4
February	227 219.6	326 021.8	967.5	275 457.6	98 802.2	390 392.0	25 681.9	20 430.2
March	226 324.4	321 976.9	952.8	271 081.9	95 652.4	382 686.1	25 933.3	20 646.7
April	220 829.2	320 421.1	966.9	269 819.4	99 591.8	379 124.1	25 788.6	20 614.4
May	221 540.3	323 095.7	995.6	272 478.5	101 555.4	375 311.4	25 436.0	20 434.8
June	215 979.1	328 978.3	1 109.8	277 071.9	112 999.2	364 753.8	25 573.7	20 564.5
July	215 140.6	319 026.5	1 062.2	267 925.0	103 885.9	365 571.1	25 327.6	20 439.5
August	217 852.5	319 288.8	1 086.4	268 153.8	101 436.4	372 063.0	25 365.9	20 574.3
September	217 386.3	318 886.8	1 096.6	267 392.1	101 500.5	376 406.9	25 378.7	20 695.3
October	229 118.8	320 918.1	1 044.3	268 426.6	91 799.2	383 370.3	25 469.9	20 880.5
November	241 677.6	326 287.0	997.6	273 599.9	84 609.4	388 389.5	25 596.0	21 087.0
December	268 846.7	321 399.1	1 011.8	267 216.0	52 552.3	374 796.5	25 783.7	21 344.1

Period	other financial corporations	non-financial corporations	non-profit institutions serving households	local government	social security funds	Debt securities issued with maturity over 2 years	Capital and reserves	Fixed assets (excluding financial fixed assets)	Other items (net)
	27	28	29	30	31	32	33	34	35
December 2016	4 452.1	776.5	102.1	19.0	0.0	53 781.8	311 013.4	52 609.9	-21 787.7
January 2017	4 445.2	746.2	100.7	18.8	0.0	53 721.6	305 840.4	52 552.9	-19 785.5
February	4 377.4	749.7	104.8	19.7	0.0	54 416.2	310 293.9	52 372.2	-19 572.5
March	4 281.3	885.1	101.2	19.0	0.0	53 983.3	302 769.5	52 171.6	-19 968.7
April	4 187.5	878.3	88.5	19.9	0.0	54 814.9	298 520.6	52 297.4	-24 010.0
May	4 102.1	792.1	86.7	20.4	0.0	55 727.2	294 148.2	52 370.4	-18 431.3
June	4 035.1	833.7	110.4	30.0	0.0	56 177.5	283 002.6	51 841.2	-20 509.5
July	3 952.4	797.8	117.4	20.6	0.0	59 024.8	281 218.6	51 950.6	-19 818.1
August	3 837.7	803.9	129.5	20.5	0.0	60 951.6	285 745.5	52 123.1	-15 599.1
September	3 761.2	774.4	127.2	20.7	0.0	62 301.2	288 727.0	52 271.6	-19 319.4
October	3 661.4	781.8	124.3	21.9	0.0	68 900.1	289 000.3	52 456.5	-21 923.3
November	3 589.7	773.5	123.7	22.2	0.0	70 062.6	292 730.9	52 533.3	-15 268.8
December	3 482.7	788.8	144.1	23.9	0.0	69 732.2	279 280.6	53 149.3	-31 152.4

Table XI. Reserve money and counterparts (million zloty)

Period	Currency in circulation (including MFIs' vault cash)	Banks' current accounts	Required reserves	Reserve money	Net external assets	Refinancing credit	Open market operations, net	Credit to central government, net	Other items, net	
	1	2	3	4	5	6	7	8	9	
December 2016	187 295.0	32 509.0	686.6	220 490.6	389 912.4	0.0	-81 308.5	-26 291.5	-61 821.8	
January 2017	183 104.2	44 331.1	716.7	228 152.0	388 157.0	0.0	-76 041.6	-33 002.6	-50 960.8	
February	184 044.5	38 216.2	728.1	222 988.8	391 323.5	0.0	-79 666.0	-34 711.7	-53 957.0	
March	185 010.0	42 107.8	727.5	227 845.3	377 145.0	0.0	-72 544.9	-32 508.2	-44 246.5	
April	188 648.8	30 983.2	739.7	220 371.6	373 315.1	0.0	-78 852.4	-33 273.6	-40 817.5	
May	187 024.4	38 088.3	758.9	225 871.6	363 110.0	0.0	-72 695.5	-34 200.6	-30 342.3	
June	189 499.5	43 354.0	765.4	233 619.0	363 495.0	0.0	-71 220.3	-38 298.9	-20 356.8	
July	190 769.4	52 653.5	768.9	244 191.8	363 209.9	0.1	-60 016.9	-40 266.0	-18 735.3	
August	192 170.9	39 091.2	768.0	232 030.2	362 519.9	0.0	-72 542.0	-41 608.6	-16 339.1	
September	193 394.5	42 703.8	752.3	236 850.6	366 413.3	0.0	-74 077.0	-34 700.4	-20 785.3	
October	194 024.8	39 267.6	794.5	234 086.9	364 071.7	0.0	-80 672.0	-31 261.9	-18 050.9	
November	193 441.4	45 075.8	794.4	239 311.6	355 082.9	0.0	-74 437.0	-31 156.8	-10 177.5	
December	198 429.5	32 749.3	785.5	231 964.3	355 982.5	0.1	-94 423.1	-18 138.8	-11 456.5	

## Methodological notes

#### Table I. Basic statistical data

Information contained in Table I is derived from the "Statistical Bulletin" of the Central Statistical Office (GUS). Definitions of the categories presented in the Table can be found in the GUS publications.

- Data presented in pts. 1, 2, 6, 7, 10 and 12 comprise national economy entities regardless of their ownership type, i.e. public sector entities (state-owned entities, units of local government and mixed ownership, where public sector entities prevail) and private sector entities. The private sector includes units of private domestic ownership (among others: companies, cooperatives, natural persons conducting economic activities, social organizations, associations, foundations), private foreign ownership (among others: foreign enterprises branches, foreign representatives, partnerships with exclusive foreign capital share) and "mixed" ownership with a private sector unit capital majority or lack of sectors majority in unit capital.
- The corporate sector comprises entities, which conduct their economic activities in the fields of: forestry, including the provision of services; marine fishing; mining and quarrying, manufacturing; electricity, water, gas and conditioned air production and supply; sanitation management and other sanitation services; construction; repair of motor vehicles, motorcycles; transport, storage and communication; wholesale and retail trade; hotels and restaurants; information and communication; real estate market services; legal services; accounting and tax services for head offices, management solutions; architecture and engineering services; technological research and analysis; advertising; market and public opinion polls; other professions, technical or academic activity; administration and support; recreational, cultural, sporting and other services computer repair and maintenance for individual clients; other business activities.
- According to the Polish Statistical Classification of Economic Activities (PKD 2007), the notion of "industry" applies to the following sections: "mining and quarrying", "manufacturing" and "electricity, gas and water production and supply" as well as water supply sanitation management and other sanitation services.
- Data on the sold production of industry (pt. 1), and the construction and assembly production (pt. 2) refer to economic entities with of more than 9 employees.
- 5 Data on the value of the sold production of industry (pt. 1) and the construction and assembly production (pt. 2) are disclosed net without the due value added tax (VAT) and the excise tax, while they include subsidies for specific purposes to products and services in the so-called base prices.
- 6 Construction and assembly production data (pt. 2) refer to works performed in Poland on commission (i.e. for third-party) and directly (i.e. without subcontractors) by

the business entities of the construction sector, i.e. classified under "construction" according to the PKD 2007.

- 7 Information on the sold production of industry (pt. 1) and the construction assembly production (pt. 2) are disclosed without seasonal adjustments.
- 8 Data on employed persons include persons employed on a full and part-time basis in the main place of work. Employed persons include: persons employed on the basis of a labour contract; owners and co-owners of units engaged in economic activities including contributing family members; outworkers; agents and persons employed by agents; members of agricultural production co-operatives. Data presented in the Bulletin do not include private farmers or employees of budget entities conducting activity within the scope of national defence and public safety.
- 9 Unemployment rate (pt. 9) is calculated as a percentage share of the unemployed in the total of employed and unemployed persons over 15 years of age.
- 10 Revenues from privatisation do not constitute the current revenues of the state budget; instead they finance the budget deficit (pt. 11).
- 11 Data on financial results of enterprises (pt. 12) pertain to business units that keep accounting books (except for the following units, classified according to PKD 2007 under "agriculture, forestry hunting and fishing" and financial and insurance services") with more than 49 employees.

#### Table II. Financial market – basic information

Information comprised in Table II has been derived from Narodowy Bank Polski (save for the data in pt. 6, supplied by the Warsaw Stock Exchange).

- Interest rates in Table 2 are presented on an annual basis at the level which was binding on the last day of a given month. The average monthly interest rate has been given only for the weighted average yield on purchased T-bills or the NBP money-market bills.
- 2 As from 1 January 2011, the NBP no longer sets the central bank discount rate.
- 3 Total reserve requirements (pt. 2, col. 12) pertain to the volumes declared by banks and binding on the last day of the month. Since 28 February 2002, the total reserve requirements are held exclusively on the NBP accounts.
- Information on Treasury bill tenders (pt. 3, except for the stocks of bills in circulation at the end of the month col. 18) comprises data from tenders conducted within one month. The average yield on bills purchased is weighted by the share of the sales of bills with different maturities in the total value of bills purchased. The stock of bills in circulation at month end has been determined on the basis of the agreed maturity, calculated from the day after the tender which resulted in the sale of the bill. The above stock does not include bills in circulation which do not stem from tenders.

- 5 Information on tenders for the NBP money-market bills (pt. 4, except for the stock of bills in circulation at month end col. 24) comprises data from tenders conducted within one month. The average yield on bills purchased is weighted by the share of the sales of bills with different maturities in the total value of bills purchased.
- 6 The below presentation of indices comprises precise data involving the situation of the largest (WIG 20), medium (mWIG40) and small stock companies (sWIG80).
  - WIG20 index has been calculated since 16 April 1994 based on the value of portfolio with shares in 20 major and most liquid companies in the main stock market. The initial value of WIG20 index was 1,000 points. It is a price index and thus when it is calculated it accounts only for prices of underlying shares whereas dividend income is excluded. The WIG20 index may not include more than 5 companies from a single exchange sector.
  - mWIG40 index is successor of MIDWIG index and has been calculated since 31 December 1997 and comprises 40 medium size companies listed at WSE. The initial value of index was 1,000 points. mWIG40 is a price index and thus when it is calculated it accounts only for prices of underlying shares whereas dividend income is excluded. The mWIG40 index excludes WIG20 and sWIG80 index participants and foreign companies listed at WSE and other markets with the market capitalization at the ranking date above EUR 1 billion.
  - sWIG80 index is successor of WIRR index that has been calculated since 31 December 1994 and comprised 1% of smaller companies listed at WSE. The initial value of index was 1,000 points. sWIG80 is a price index and thus when it is calculated it accounts only for prices of underlying shares whereas dividend income is excluded. The sWIG80 index excludes WIG20 and mWIG40 index participants and foreign companies listed at WSE and other markets with the market capitalization at the ranking date above EUR 100 million.
- 7 The indices comprise companies from all the quotation markets.
- 8 Capitalization refers only to domestic companies.
- The P/E ratio shows the relation of the market price to net earnings and is calculated as a quotient of the total market value of companies at month end to their aggregated profits and losses generated within the last 4 quarters, for which financial data are available.
- 10 The turnover ratio shows the relation between the value of sold shares to the average value of shares quoted in a given month.
- 11 The monthly turnover value and the turnover ratio comprise the continuous quotation and fixing.

### Table III. PLN/USD and PLN/EUR daily exchange rates

The information has been based on the data of Narodowy Bank Polski.

- 1 NBP average exchange rate is the official exchange rate used for statistical and accounting purposes.
- 2 The average PLN/USD and PLN/EUR exchange rates and the USD/EUR ratio were calculated as the arithmetic average of NBP average exchange rates for a month (based on daily exchange rates).

### **Monetary statistics**

In this issue of the *Annual Report* time series for periods starting from June 2017 are compiled from data collected in the new monetary statistics reporting system. Time series up to May 2017 are derived from the former reporting scheme.

Due to the launch of new reporting system description of categories in tables: VII, VIII, IX, X, have been adjusted in accordance with new reporting system's terminology.

Narodowy Bank Polski releases monetary statistics based on data received from monetary financial institutions (MFI), which comprise Narodowy Bank Polski, banks operating in Poland and branches of foreign credit institutions and foreign banks, credit unions and money market funds.<sup>1</sup>

#### Sectoral classification

**Financial sector** comprises the following sub-sectors:

- monetary financial institutions<sup>2</sup> (including the central bank and other monetary financial institutions). In Poland, the concept of other monetary financial institutions applies to banks, credit unions and money market funds (MMFs),
- non-MMF investment funds,
- insurance corporations,
- pension funds,
- other financial intermediaries (including, financial leasing companies, factoring companies, brokerage offices, and financial companies created for securitization of assets),

<sup>&</sup>lt;sup>1</sup> Starting from January 2012 the list of Polish monetary financial institutions (MFIs) does not include money market funds (MMFs), as no investment fund meets the criteria of MMF definition as set forth in the regulation of the European Central Bank No. 1071/2013 of 24 September 2013 concerning the balance sheet of the monetary financial institutions sector (ECB/2013/33).

<sup>&</sup>lt;sup>2</sup> In accordance with the ECB definition, monetary financial institutions (MFIs) comprise financial institutions whose business is to receive deposits or close substitutes for deposits from entities other than MFIs and, for their own account, to grant credits or to make investments in securities.

- financial auxiliaries and captive financial institutions and money lenders (including bureaus de change, stock exchanges, hire purchase institutions).

#### Non-financial sector comprises the following sub-sectors:

- non-financial corporations (including state-owned corporations and private corporations and co-operatives),
- individual entrepreneurs,<sup>3</sup>
- farmers,
- individuals.
- non-profit institutions serving households.

In the publications of Narodowy Bank Polski, claims and liabilities of MFIs on/to the non-financial sector are presented in accordance with the EU standards, i.e. sub-divided into three sectors:

- households comprising:
  - individuals,
  - farmers,
  - individual entrepreneurs;
- non-financial corporations comprising state-owned corporations and private corporations and co-operatives (including: individual entrepreneurs with more than 9 employees);
- non-profit institutions serving households: (separate legal entities, which serve households. Their principal resources, apart from those derived from occasional sales, are derived from voluntary contributions in cash or in kind from households, from payments made by general governments and from property income).

#### **General government** comprises the following sub-sectors:

- central government (including public governing bodies, government administration bodies, state control and law protection bodies, courts and tribunals, public universities, state institutions of culture etc.);
- local government (including, among others, local administrative offices at regional level, local parliaments, public elementary schools administered by local government units, institutions of culture financed by local governments, welfare institutions, etc.);
- social security funds (comprise the Social Insurance Institution and the Agricultural Social Insurance Fund and the funds they manage, and the national healthcare Fund and its branches).

## Table IV. Average MFI interest rates on outstanding amounts, PLN denominated

Data on zloty denominated businesses refer to all businesses at the end of the reporting month, these concluded prior to the reporting month and still binding as well as new businesses. This interest rate is a quotient of interest on average zloty denominated business by average volume of businesses per reporting month, commissions and other charges excluded.

<sup>&</sup>lt;sup>3</sup> Natural persons conducting business activities on their own account, with a maximum of 9 employees.

The interest rate is calculated based on data received from the following banks (24):

- 1 Powszechna Kasa Oszczędności Bank Polski SA
- 2 Bank Handlowy w Warszawie SA
- 3 ING Bank Śląski SA
- 4 Bank Zachodni WBK SA
- 5 mBank SA
- 6 Bank Millennium SA
- 7 Bank Polska Kasa Opieki SA
- 8 Euro Bank SA
- 9 Bank Ochrony Środowiska SA
- 10 Raiffeisen Bank Polska SA
- 11 Deutsche Bank Polska SA
- 12 Bank Polskiej Spółdzielczości SA
- 13 Credit Agricole Bank Polska SA
- 14 Idea Bank SA
- 15 Bank BGŻ BNP Paribas SA
- 16 Santander Consumer Bank SA
- 17 mBank Hipoteczny SA
- 18 Getin Noble Bank SA
- 19 Alior Bank SA
- 20 Polski Bank Spółdzielczy w Ciechanowie
- 21 Krakowski Bank Spółdzielczy
- 22 Podkarpacki Bank Spółdzielczy
- 23 Wielkopolski Bank Spółdzielczy
- 24 Bank Spółdzielczy w Brodnicy.

At the end-December 2017, the above banks held 81,3% of deposits of residents and 84,5% of credit to households and non-financial corporations. From December 2014 onwards, new methodology for calculating average weighted interest has been applied. New method involves using data on reporting agent's homogenous groups (layers). For more information please refer to http://www.nbp.pl/en/statystyka/oproc/mir\_new/manual\_mir.pdf.

## Table V. Average MFI interest rates on new and renegotiated business, PLN denominated

Information refers to agreements carried out in a given reporting month. Renegotiated existing agreements shall be deemed new businesses.

Interest rates in the statistics on new businesses differ from those in Table IV the formula is applied to statistical information on new businesses, also known as Narrowly Defined Effective Rate (NDER). The concept of Narrowly Defined Effective Rate was coined as an opposite to widely understood effective interest rate or Real Interest Rate (RIR). The NDER included, the new business statistics provides RIR for the second category of consumer and house purchase loans. As opposed to the NDER, which covers for interest costs of capital the real interest rate incorporates all charges paid by the borrower. These charges are most of all commissions (brokers included) but also compulsory loan insurance premiums against death or unemployment of the borrower.

For Table V data are collected from the same sample of banks as in case of table IV. Weighted average is calculated with the use of the same method.

## Table VI. Average MFI interest rates on new and renegotiated business, EUR denominated

General rule of calculating interest rate are the same as for Table IV and Table V. The Table IV and V sample of banks applies as well.

#### General comments on Tables VII, VIII, IX

- 1 The figures refer to the end of each reporting month and have been derived from balance sheets received from the banks and from the balance sheet of Narodowy Bank Polski and credit unions and money market funds.<sup>4</sup>
- 2 The presentation is structured in accordance with the ECB standards.
- 3 Assets in tables VII, VIII and IX are shown gross of provisions, accumulated depreciation (except for debt securities presented at the carrying amount).

## Table VII. Aggregated balance sheet of other monetary financial institutions – assets and liabilities

- 1 Loans and other claims on domestic residents (assets col. 2) loans granted, debt purchased, realised guarantees and sureties, other claims and claims on repurchase agreements.
- 2 Debt securities (assets col. 6) are debt securities issued by domestic residents and held by other monetary financial institutions.
- 3 Money market funds shares/units<sup>5</sup> purchased by other MFIs (assets col. 10).
- 4 Equity and non-MMF investment fund shares or units (assets col. 11) include shares, and fixed financial assets issued by domestic residents.
- 5 External assets (assets col. 14) include all assets of non-residents denominated in zloty and foreign currencies.
- 6 Fixed assets (assets col. 15) include total fixed assets except for financial fixed assets.

<sup>&</sup>lt;sup>4</sup> See footnote 1.

<sup>&</sup>lt;sup>5</sup> See footnote 1. Zero-sum in "Money market fund shares/units" results from change indicated in the footnote 1.

- 7 Remaining assets (assets col. 16) other cash equivalents held at other monetary financial institutions, vault cash excluded, as well as other claims and interest due and not due on loans and other claims, settlement accounts, claims on third parties, deferred income and expenditure, claims on financial derivatives positions, valuation adjustments, rights issue, other assets.
- 8 Deposits and other liabilities to domestic residents (liabilities col. 1) comprise overnight deposits, deposits with agreed maturity, blocked deposits, loans received, claims from cash collateral (classified to "with agreed maturity"), other liabilities and claims on repurchase agreements, subordinated loans except for those in the form of securities issued.
- 9 Money market funds shares/units<sup>6</sup> issued are liabilities of money market funds against shares/units issued (liabilities col. 8).
- 10 Debt securities issued (liabilities col. 9) are liabilities on own debt securities issued by other monetary financial institutions and subordinated claims in the form of securities issued (purchased by residents and non-residents).
- 11 Capital and reserves (liabilities col. 10) comprise share paid-in capital, called-up capital unpaid, own shares, accumulated reserves, general risk provisions, reserve capital and retained earnings, supplementary funds provisions, including specific provisions, impairment allowances, mortgage notes reserves, specific provisions for off-balance liabilities, general risk provisions.
- 12 External liabilities (liabilities col. 11) include all liabilities of non-residents denominated in zloty and foreign currencies, except for debt securities issued.
- 13 Remaining liabilities (liabilities col. 12) include interest not due on deposits and other liabilities and interest on debt securities issued, suspense and transit items, liabilities against third parties, deferred income and expenditure, liabilities from financial derivatives positions, other liabilities, valuation adjustments.

### Table VIII. Balance sheet of Narodowy Bank Polski – assets and liabilities

- 1 The item loans and other claims on domestic residents (assets col. 1) comprises receivables from loans, including rediscount, lombard, refinancing loans, loans granted from foreign credit facilities, open market operations, other loans and receivables from current and fixed term deposits placed.
- 2 Debt securities (assets col. 5) are securities issued by domestic residents and held by Narodowy Bank Polski.
- 3 Money market fund shares/units<sup>7</sup> (assets, col. 9).

<sup>&</sup>lt;sup>6</sup> See footnote 1. Zero-sum in "Money market fund shares/units" results from change indicated in the footnote 1.

<sup>&</sup>lt;sup>7</sup> See footnote 1. Zero-sum in "Money market fund shares/units" results from change indicated in the footnote 1.

- 4 Equity and non-MMF investment fund shares or units issued by domestic residents (assets col. 10) at the moment in the case of NBP they include only fixed financial assets.
- 5 External assets (assets col. 13) include all assets of non-residents denominated in zloty and foreign currencies.
- 6 Fixed assets (assets col. 14) include total fixed assets except for financial fixed assets.
- Remaining assets (assets col. 15) include interest due and not due on loans and other claims, deferred costs, inter-branch settlements and other assets excluding fixed assets.
- 8 Deposits and other liabilities to domestic residents (liabilities col. 2) represent liabilities on overnight deposits, deposits with agreed maturity, reserve requirements, auction deposits (open market operations), separated funds and other deposits.
- 9 Debt securities issued (liabilities col. 6) represent liabilities on NBP debt securities issued.
- 10 Capital and reserves (liabilities col. 7) in the case of NBP it comprises equity i.e. authorised capital, as well as reserve fund and provisions, which include specific provisions, accumulated depreciation and valuation allowances, profit/loss of the current year, loss incurred in previous years and valuation adjustments.
- 11 External liabilities (liabilities col. 8) include all liabilities of non-residents denominated in zloty and foreign currencies.
- 12 Remaining liabilities (liabilities col. 9) include interest from deposits and debt securities issued, deferred income, inter and intra-MFI settlements, other liabilities.

## Table IX. Consolidated balance sheet of monetary financial institutions – assets and liabilities

- 1 Table IX comprises consolidated balance sheet of monetary financial institutions.
- 2 In the assets and liabilities of the above-mentioned balance sheet, domestic inter-MFI operations have been netted out.
- Remaining assets (assets col. 10) and currency in circulation (liabilities col. 1) were decreased by cash in vaults of other monetary financial institutions.

## List of the most important abbreviations

bp basis point  CPI Consumer Price Index  EBA European Banking Authority  EBRD European Bank for Reconstruction and Development  ECB European Central Bank  ECOFIN Economic and Financial Affairs Council  ESCB European System of Central Banks  ESRB European Systemic Risk Board  EU European Union  FCL Flexible Credit Line  Fed Federal Reserve System  FSC Financial Stability Committee (Komitet Stabilności Finansowej)  GDP Gross Domestic Product  GUS Central Statistical Office (Główny Urząd Statystyczny)  IMF International Monetary Fund  KDPW SA Watościowych SA)  KIR SA National Depository for Securities (Krajowy Depozyt Papierów Wartościowych SA)  KIR SA National Clearing House (Krajowa Izba Rozliczeniowa SA)  KNF Polish Financial Supervision Authority (Komisja Nadzoru Finansowego)  MPC Monetary Policy Council  NBP Narodowy Bank Polski (National Bank of Poland)  OECD Organisation for Economic Co-operation and Development  SDR Special Drawing Rights  SEPA Single Euro Payments Area  SORBNET2 Real-Time Gross Settlement System [RTGS] at the NBP Head Office  Trans-European Automated Real-Time Gross Settlement Express  Transfer System  WB World Bank	BIS	Bank for International Settlements					
EBA European Banking Authority EBRD European Bank for Reconstruction and Development ECB European Central Bank ECOFIN Economic and Financial Affairs Council ESCB European System of Central Banks ESRB European Systemic Risk Board EU European Union FCL Flexible Credit Line Fed Federal Reserve System FSC Financial Stability Committee (Komitet Stabilności Finansowej) GDP Gross Domestic Product GUS Central Statistical Office (Główny Urząd Statystyczny) IMF International Monetary Fund KDPW SA National Depository for Securities (Krajowy Depozyt Papierów Wartościowych SA) KIR SA National Clearing House (Krajowa Izba Rozliczeniowa SA) KNF Polish Financial Supervision Authority (Komisja Nadzoru Finansowego) MPC Monetary Policy Council NBP Narodowy Bank Polski (National Bank of Poland) OECD Organisation for Economic Co-operation and Development SDR Special Drawing Rights SEPA Single Euro Payments Area SORBNET2 Real-Time Gross Settlement System [RTGS] at the NBP Head Office Transfer System	bp	basis point					
EBRD European Bank for Reconstruction and Development  ECB European Central Bank  ECOFIN Economic and Financial Affairs Council  ESCB European System of Central Banks  ESRB European Systemic Risk Board  EU European Union  FCL Flexible Credit Line  Fed Federal Reserve System  FSC Financial Stability Committee (Komitet Stabilności Finansowej)  GDP Gross Domestic Product  GUS Central Statistical Office (Główny Urząd Statystyczny)  IMF International Monetary Fund  KDPW SA National Depository for Securities (Krajowy Depozyt Papierów Wartościowych SA)  KIR SA National Clearing House (Krajowa Izba Rozliczeniowa SA)  KNF Polish Financial Supervision Authority (Komisja Nadzoru Finansowego)  MPC Monetary Policy Council  NBP Narodowy Bank Polski (National Bank of Poland)  OECD Organisation for Economic Co-operation and Development  SDR Special Drawing Rights  SEPA Single Euro Payments Area  SORBNET2 Real-Time Gross Settlement System [RTGS] at the NBP Head Office  Trans-European Automated Real-Time Gross Settlement Express  Transfer System	CPI	Consumer Price Index					
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	WB	World Bank					

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