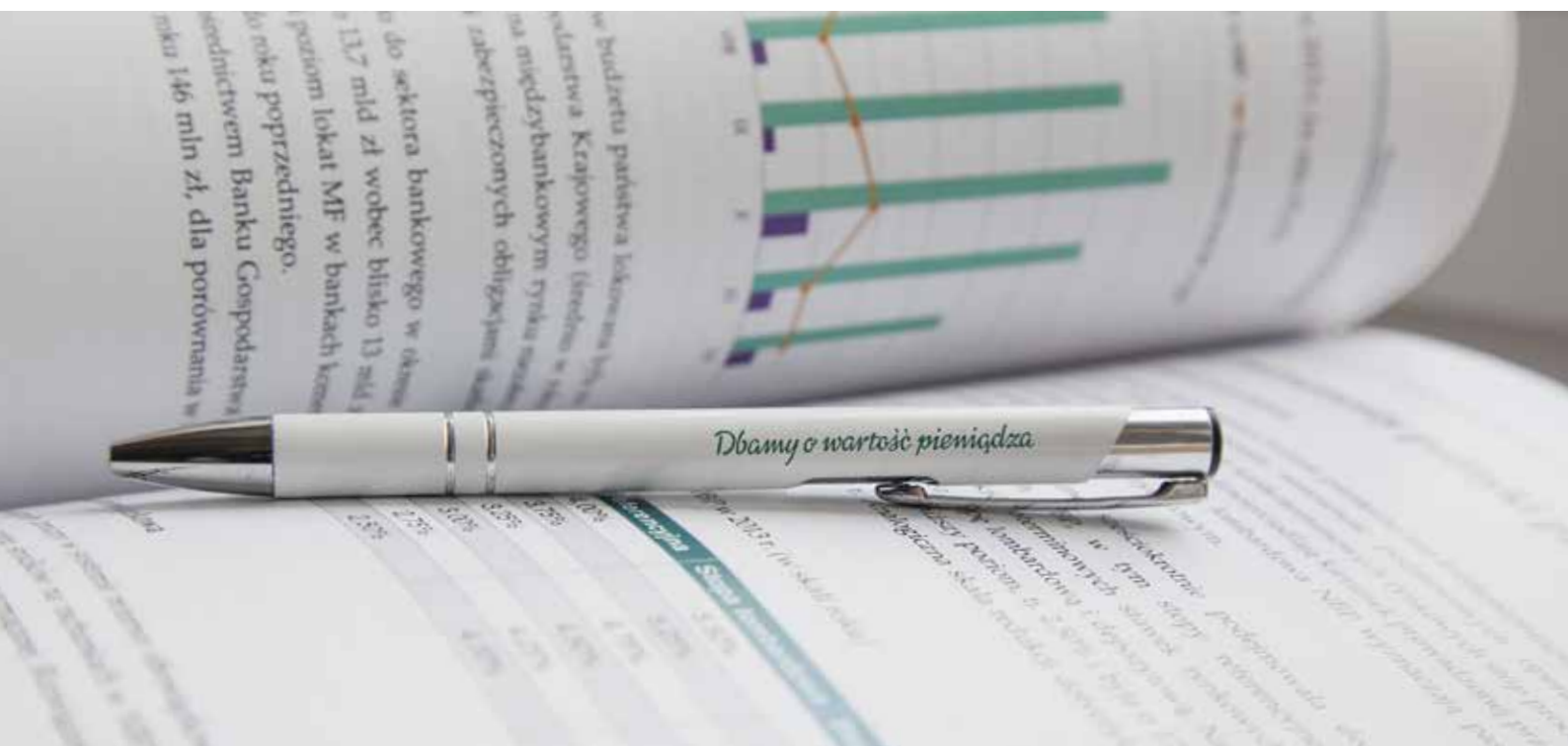

Annual Report 2019

Banking Sector Liquidity Monetary Policy Instruments of Narodowy Bank Polski



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Warsaw, 2020

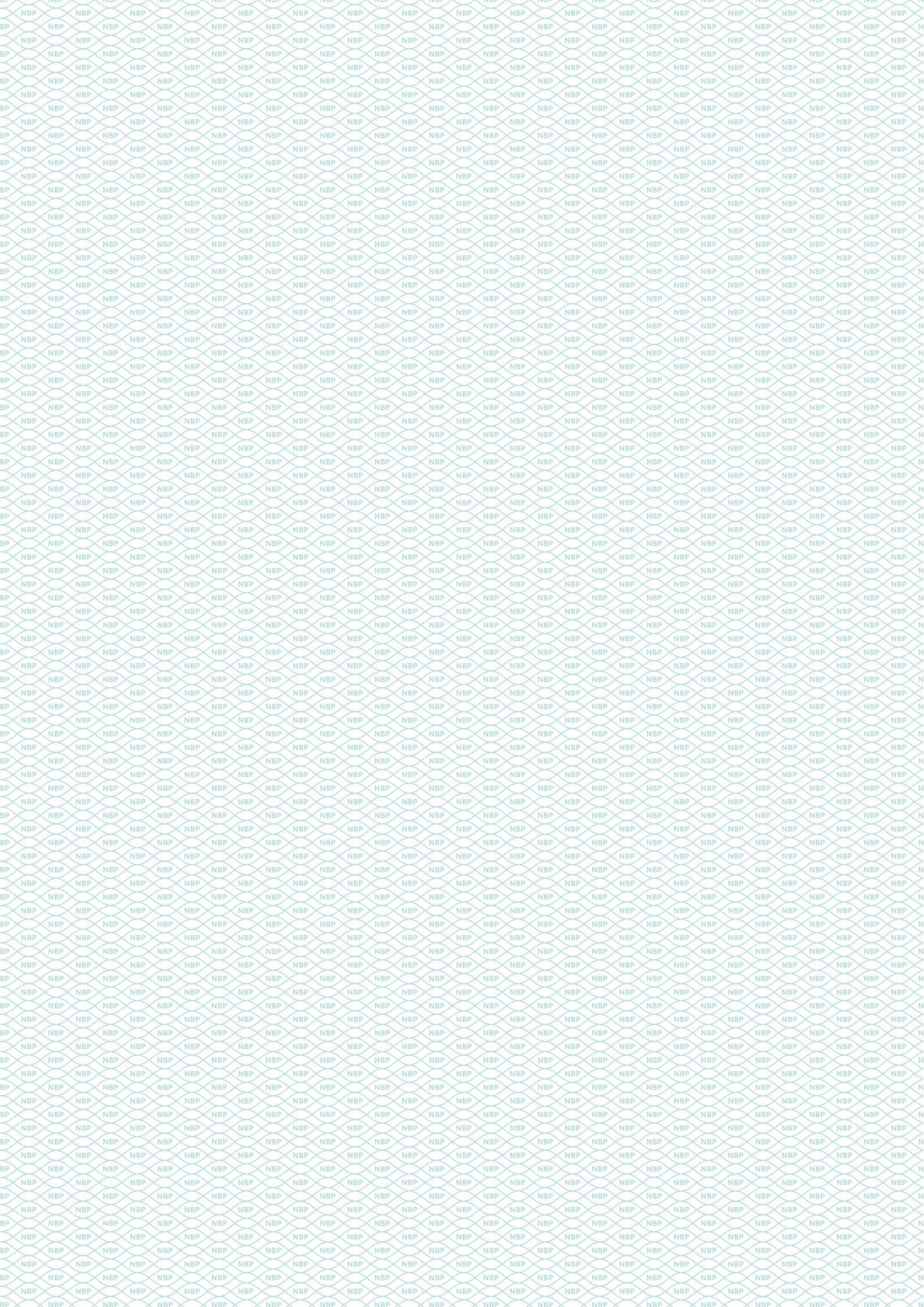
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Introduction



Introduction

In 2019, Narodowy Bank Polski (NBP) pursued monetary policy in accordance with the *Monetary Policy Guidelines for 2019*.

The basic instrument of the monetary policy in 2019 was the short-term interest rate – the NBP reference rate. By setting the level of the NBP reference rate, the Monetary Policy Council (MPC) determines the yields on the monetary policy instruments. Changes in the level of this rate determine the course of monetary policy and affect the path of market rates. The deposit rate and the lombard rate set the fluctuation band for overnight interest rates in the interbank market, which is symmetric with respect to the reference rate.

In 2019, the Monetary Policy Council made no changes in interest rates. The last change took place in March 2015. Throughout 2019 the NBP reference rate stood at 1.5%, the deposit rate at 0.5%, and the lombard rate at 2.5%.

NBP implemented the monetary policy guidelines adopted by the MPC by carrying out open market operations through which it affected banking sector liquidity in a manner allowing short-term market rates to be maintained at a level conducive to the achievement of the inflation target assumed by the MPC. In 2019, the main open market operations involved the issuance of 7-day NBP bills on a regular basis. The fine-tuning operations involved the regular (on the last working day of the reserve maintenance period) and ad-hoc (during the reserve maintenance period) issuance of NBP bills with shorter maturities than the main operations, and were aimed to reduce the volatility of short-term market interest rates.

Access to the open market operations, the main ones and the regularly conducted fine-tuning ones, was granted to all banks complying with the terms and conditions set by NBP. Moreover, the Bank Guarantee Fund (BFG) had access to the main open market operations too. Banks operating as Money Market Dealers (MMD) had access to the ad-hoc fine-tuning operations. In 2019, 12 banks most active in both the money and foreign exchange markets enjoyed the status of a Money Market Dealer.

Commercial banks also had the possibility of using standing facilities, placed at their disposal by NBP, to facilitate their short-term liquidity management. Banks were able to deposit excess funds with NBP via overnight deposit facility and cover liquidity shortages via the marginal lending facility.

In 2019, NBP did not carry out any structural operations targeted at a long-term change in banking sector liquidity.

In the year under consideration, there was a decrease in short-term liquidity of the banking sector, measured as the average annual balance of central bank operations, i.e. main and fine-tuning open market operations as well as standing facilities.

Table I Average level of open market operations (NBP bills and repo), FX swaps and standing facilities in the years 2001–2019 (in PLN million)

Period	NBP bills	Repos	FX swaps	Standing facilities		
				Deposit facility	Marginal lending facility	Balance (deposit – credit)
2019	80 393	0	0	1 125	0	1 125
2018	88 796	0	0	1 370	0	1 370
2017	72 786	0	0	846	0	846
2016	72 438	0	0	772	4	768
2015	89 092	0	0	500	0	500
2014	108 518	0	0	298	0	298
2013	126 078	0	0	463	0	463
2012	95 913	0	0	393	0	393
2011	95 217	0	0	711	0	711
2010	74 968	5 097	0	1 036	0	1 036
2009	31 873	11 456	1 076	2 461	14	2 447
2008	11 530	2 135	162	1 421	14	1 407
2007	19 302	–	–	530	18	512
2006	19 758	–	–	150	50	100
2005	16 699	–	–	162	29	133
2004	5 275	–	–	310	22	288
2003	6 251	–	–	167	34	133
2002	10 565	–	–	80	170	-90
2001	14 701	–	–	715	234	481

Note: average values are quoted in annualized terms in the reserve maintenance periods.

Source: NBP.

In 2019, the average level of short-term banking sector liquidity amounted to PLN 81,518 million. Compared to the average level of the previous year, liquidity decreased by PLN 8,648 million. In the course of the year, the level of short-term banking sector liquidity decreased from PLN 86,625 million in December 2018 to PLN 86,330 million in December 2019, which means a decrease by PLN 295 million.

The average level of standing facilities was PLN 1,125 million. The deposit rate determined the yield on the overnight deposit facility and the lombard rate – the costs of incurring the marginal lending facility.

The year 2019 saw a lower volatility of the POLONIA rate in comparison with 2018. This rate remained stable and its deviation from the NBP reference rate was recorded mainly at the end of required reserve maintenance periods. The average absolute deviation of the POLONIA rate from the reference rate in 2019 was 14 bps (versus 21 bps in 2018).

Table II Deviation of market rates from the NBP reference rate in 2001–2019

Period	Average reference rate (in %)*	Deviation of rates from reference rate in basis points (annual average)**				
		O/N	SW	2W	1M	POLONIA
2019	1.50	8	5	7	12	14
2018	1.50	9	4	8	12	21
2017	1.50	9	7	10	14	12
2016	1.50	15	7	8	10	16
2015	1.58	10	9	10	12	12
2014	2.39	9	6	6	7	11
2013	2.94	8	5	5	7	18
2012	4.61	10	3	5	11	21
2011	4.22	21	3	3	9	43
2010	3.50	49	17	10	7	69
2009	3.77	69	23	14	11	89
2008	5.72	30	16	19	30	32
2007	4.40	19	9	11	16	23
2006	4.06	10	6	6	7	16
2005	5.34	21	6	6	9	29
2004	5.79	40	11	10	15	–
2003	5.67	28	8	7	9	–
2002	8.82	90	60	–	32	–
2001	16.13	142	–	–	42	–

* Average reference rate was weighted by its duration.

** Deviations of rates against the reference rate – a uniform basis of 365 days per year was used.

Source: NBP.

The instrument used by NBP, which helps to smooth the fluctuations in short-term interest rates and to stabilise banking sector liquidity, was the required reserve system. An essential feature of this instrument was obliging the banks to maintain, in the required reserve period, funds on accounts with NBP at an average level not lower than the required reserve. In 2019, the basic required reserve ratio did not change and amounted to 3.5%. The interest rate on the required reserve from 1 January 2018 amounted to 0.5% in accordance with Resolution No. 7/2017 of the Monetary Policy Council (MPC).

Pursuant to Resolution No. 6/2017 of 8 November 2017, as of 1 March 2018 the MPC determined a zero required reserve rate on funds acquired for at least two years.

Chapter 1

Banking sector liquidity



Banking sector liquidity

1.1 Liquidity developments in 2019

In 2019, monetary policy was conducted – as in the previous years – in an environment of excess liquidity of the banking sector. In 2019, the average level of short-term banking sector liquidity amounted to PLN 81,518 million, a decrease of PLN 8,648 million in comparison with 2018 (PLN 90,166 million), i.e. of 9.6%.

Banking sector short-term liquidity in January 2019 amounted to PLN 84,315 million, while in December 2019 it stood at PLN 86,330 million. In December 2019, the average level of short-term banking sector liquidity was lower by PLN 295 million, i.e. 0.3%, as compared to December 2018.

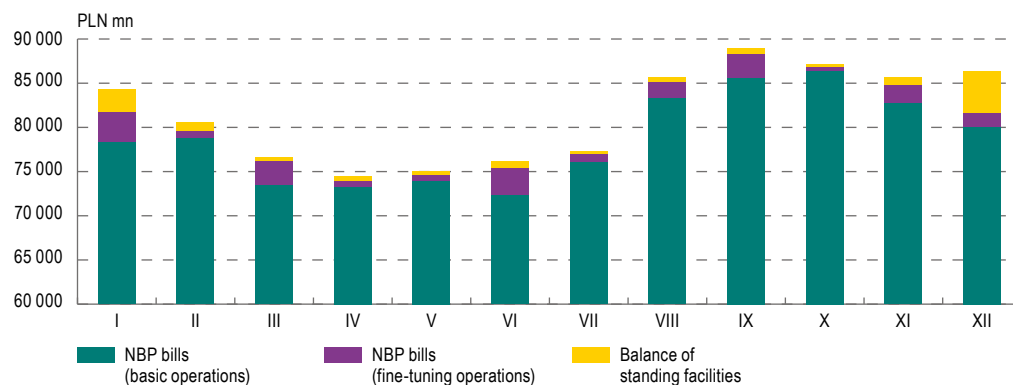
Table 1.1 Absorption of short-term liquidity as part of operations executed by NBP in 2019 (in PLN million)

2019	Average level of NBP bills (main operations)	Average level of NBP bills (fine-tuning operations)	Average level of overnight deposit	Average level of marginal lending facility	Average level of short-term banking sector liquidity
	(1)	(2)	(3)	(4)	(1) + (2) + (3) - (4)
I	78 330	3 340	2 645	0	84 315
II	78 721	839	1 065	0	80 625
III	73 393	2 741	488	0	76 622
IV	73 265	633	544	0	74 442
V	73 933	677	438	0	75 048
VI	72 331	3 082	722	0	76 135
VII	76 026	917	350	0	77 293
VIII	83 290	1 774	657	0	85 721
IX	85 575	2 689	690	0	88 954
X	86 380	450	305	0	87 135
XI	82 731	1 989	979	0	85 699
XII	80 037	1 499	4 794	0	86 330
On average	78 662	1 732	1 125	0	81 518

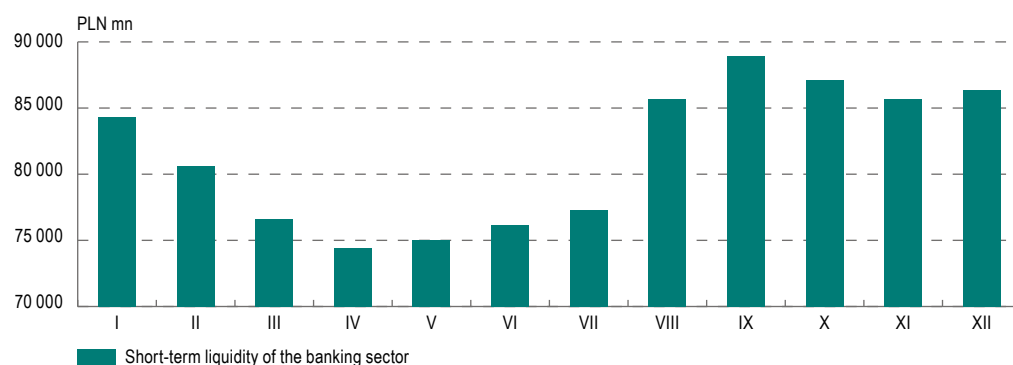
Note: average values over required reserve maintenance periods.
Source: NBP.

In order to maintain market interest rates at a stable level, in accordance with the *Monetary Policy Guidelines for 2019*, NBP absorbed the liquidity surplus by issuing NBP bills with a maturity of 7 days as main open market operations (the average value in 2019 amounted to PLN 78,662 million) and NBP bills with shorter maturities as fine-tuning operations (the average value in 2019 amounted to PLN 1,732 million). In total, the average level of NBP bills in 2019 amounted to PLN 80,393 million. 52 main open market operations and 16 fine-tuning operations were conducted.

The excess funds not invested in open market operations were placed by banks as overnight deposit with NBP.

Figure 1.1 Operations carried out by NBP in 2019

Source: NBP.

Figure 1.2 Level of short-term liquidity of the banking sector in 2019

Source: NBP.

The direction of changes in banking sector liquidity during the year was varied.

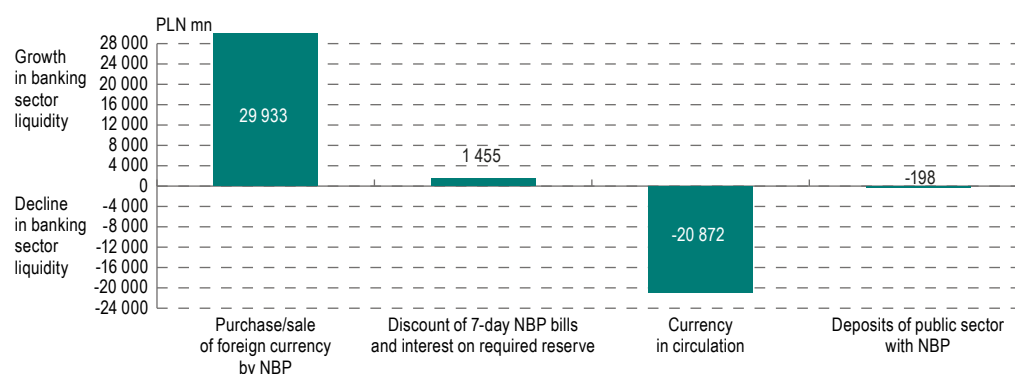
The level of banking sector liquidity decreased from January to April 2019 and in October and November 2019.

In contrast, an increase in the level of banking sector liquidity was recorded from May to September and in December 2019.

Among autonomous factors affecting the decline in banking sector liquidity, of key importance was the increase in currency in circulation which, on average, amounted to PLN 20,872 million (comparing December 2019 to December 2018).

Decreasing banking sector liquidity was due to the transactions of foreign currency sale conducted by NBP for the sake of the European Commission as well as the intermittently high balance of the EC's account and social security funds' accounts with NBP.

The foreign currency purchase transactions conducted by NBP from the MF foreign currency account were conducive to the increase in banking sector liquidity too.

Figure 1.3 Major factors influencing short-term liquidity of the banking sector in 2019

Source: NBP.

In addition, the increase in banking sector liquidity in 2019 was due to the payments made by NBP to the banking sector arising from the discount of the NBP bills and required reserve remuneration. These factors resulted in the average total growth in liquidity by the amount of PLN 1,455 million.

1.2 Impact of autonomous factors on changes in banking sector liquidity

1.2.1 Purchase and sale of foreign currencies by NBP

In 2019, operations consisting in the purchase of foreign currencies by NBP prevailed over their sale, as a result of which banking sector liquidity increased on average by PLN 29,933 million, in December 2019 to December 2018 terms.

The purchase of foreign currencies by NBP included:

- purchase of foreign currencies from the Ministry of Finance within the limit determined for 2019¹ equivalent to PLN 45,547 million (mainly from the foreign currency account of the Ministry of Finance held with NBP in the amount of PLN 45,464 million),
- services provided to the central government and other entities whose accounts are held with NBP, in the amount of PLN 11,069 million,
- conversion of EU funds to PLN directly from the EU fund accounts, equivalent to PLN 200 million.

Throughout 2019, NBP purchased foreign currencies amounting to a total of PLN 56,816 million (in 2018, this amount reached PLN 38,630 million). Such transactions were mainly performed in the third quarter of the year and amounted to a total of PLN 24,999 million.

The sale of foreign currencies by NBP was related to:

- the conversion of the membership fee paid to the account of the European Commission (EC) in the amount of PLN 21,857 million,

¹ Detailed information concerning the limits of foreign currency purchase and sale between the MF and NBP is presented in Annex No. 5.

- services provided to the central government and other entities whose accounts are held with NBP, in the amount of PLN 6,859 million.

In 2019, NBP sold foreign currencies in the total amount of PLN 28,716 million.

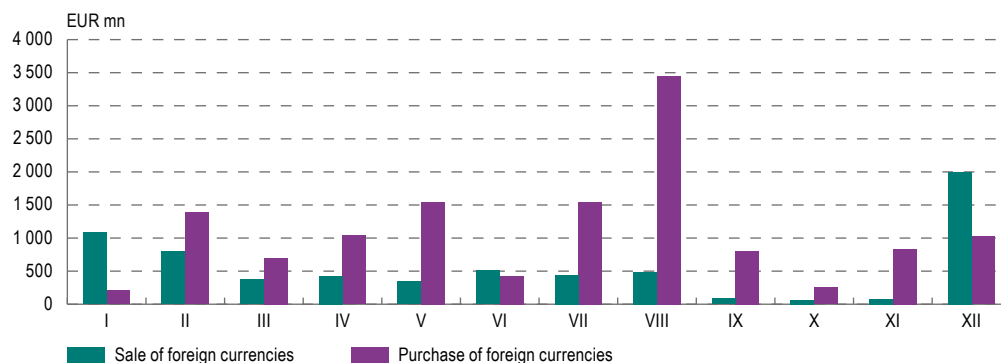
The conversion of funds from the MF foreign currency account with NBP to the Polish zloty amounted to 80% of all foreign currency purchase transactions executed by the central bank. These transactions took place mainly in February (to the amount of PLN 5,215 million, i.e. EUR 1,205 million), May (to the amount of PLN 5,636 million, i.e. EUR 1,309 million), July (to the amount of PLN 5,555 million, i.e. EUR 1,301 million) and August 2019 (to the amount of PLN 13,868 million, i.e. EUR 3,203 million).

The purchase of foreign currency from central government entities and other entities holding foreign currency accounts with NBP increased considerably in comparison with the previous years and was over twice as large as in 2018. The main reason for the increase in this item were the transactions of conversion of EUR into PLN on behalf of the Ministry of Environment, which took place cyclically, once every two weeks. The purchase of foreign currency from entities holding foreign currency accounts with NBP by the central bank showed an upward trend from the first to the third quarter (from PLN 2,477 million in the first quarter to PLN 3,158 million in the third quarter). In the fourth quarter the level of transactions carried out amounted to PLN 2,492 million.

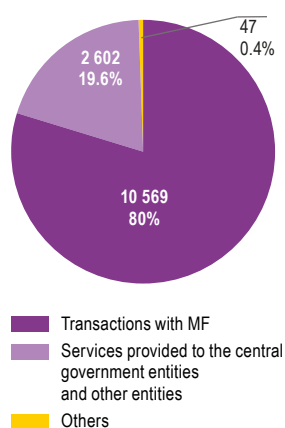
In 2019, similarly as in the previous year, NBP conducted purchase transactions directly from the EU fund accounts. They constituted an insignificant account in comparison with the total currency purchase transactions carried out by the central bank and amounted to 0.4%. The conversion of these EU funds was ordered by the Ministry of Finance and the Ministry of Investment and Economic Development. These funds were not credited to the MF foreign currency account as part of the consolidation of funds.

The other side of foreign currency transactions carried out by the central bank involved transactions of foreign currency sale for the sake of the EC. In 2019, these transactions involved mainly the conversion into EUR of the membership fee paid by Poland to the European Union budget in PLN. Decisions concerning the dates and levels of conversion of funds in PLN into foreign currency were made by the European Commission (EC) depending on the needs. The currency conversion was performed unevenly throughout the year. The largest amount of foreign currencies was sold in this respect in December (25%), January (19%) and February (14%).

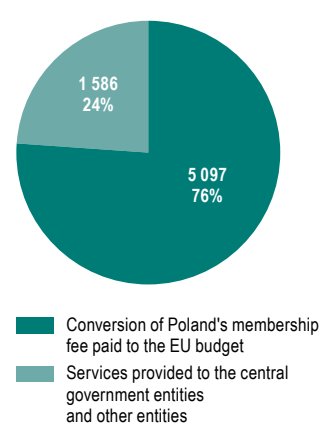
Moreover, transactions of foreign currency sale were carried out within the framework of services provided to central government entities and other entities holding foreign currency accounts with the central bank. The volume of operations varied from month to month. Like in the previous years, the majority of foreign currency for the needs of the said entities was sold in December (45%). In 2019, the sale of foreign currencies to budget entities was lower than in the previous year and accounted for 70% of the value of this type of FX transactions carried out in 2018.

Figure 1.4 Purchase and sale of foreign currencies by NBP in 2019

Source: NBP.

Figure 1.5 The structure of currency purchase by NBP in 2019 (in EUR mn)

Source: NBP.

Figure 1.6 The structure of currency sale by NBP in 2019 (in EUR mn)

Source: NBP.

FX operations carried out by the central bank as part of its currency purchase and sale activities in 2019

Foreign operations of the State Treasury

In 2019, the servicing of State Treasury foreign debt was carried out with the funds from the Ministry of Finance's foreign currency account with NBP. These transactions were executed by the central bank on behalf of the Ministry of Finance. NBP did not sell foreign currencies to the Ministry of Finance.

The MF's foreign currency account was credited mainly by foreign currencies coming from the European Union, as well as from the issue of bonds to foreign markets (EUR 2,000 million). Additionally, in January and December 2019, funds were transferred under facilities from the European Investment Bank. Over 99% of funds on the account were kept in EUR.

In 2019, the average level of the MF's foreign currency account with NBP amounted to EUR 4,210 million. The amount of funds in the account initially showed an upward trend.

In the first quarter of 2019, its average balance amounted to EUR 5,455 million (in 2018 Q4 it had stood at EUR 2,821 million), while in the second quarter it reached EUR 6,402 million. The levels in the subsequent two quarters were lower and equal to EUR 3,378 million and EUR 1,603 million, respectively. Payments made from the foreign currency account involved, among others, the repayment of liabilities to holders of international Treasury bonds and repayments of incurred foreign loans, payment of shares and other transactions.

Transactions resulting from the European Union membership

In 2019, as in the previous years, operations involving the sale of foreign currencies by NBP to the European Commission were the main transactions related to Poland's membership in the European Union. The membership fee is paid to the EU budget in national currencies. For the needs of free transfer of EU funds to the fund accounts to other Member States, the European Commission converts funds originating from the membership fee into the single currency.

In 2019, the value of transactions associated with the currency conversion of the membership fee amounted to EUR 5,097 million (equivalent of PLN 21,857 million). Those operations were ordered by the EC, which submitted instructions to NBP upon occurrence of financial needs associated with covering the costs of projects implemented in Member States. The European Commission converted the largest amounts of funds into EUR in the first quarter of 2019 (PLN 8,166 million, i.e. EUR 1,900 million), when it transferred high amounts to the accounts of structural funds and for the programmes under the Common Agricultural Policy. In addition, these funds were partially transferred to other EU Member States.

The European Commission is not obliged to convert all PLN funds received in a given year into EUR during that year. Accordingly, a part of funds in PLN paid to the European Union remains on the EC's PLN account with NBP for the next year. The balance of EC funds as at 31 December 2019 amounted to PLN 2,257 million, as compared with the amount of PLN 2,589 million as at 31 December 2018.

In 2019, the funds received by Poland from the European Union were exchanged into PLN directly from the fund accounts with NBP in the amount of PLN 200 million, i.e. EUR 47 million, under transactions of foreign currency purchase by the central bank.

In 2019, a modest part of the foreign currency funds of the Ministry of Finance deposited on the account with NBP was transferred (entirely in USD) to Bank Gospodarstwa Krajowego (BGK). Depending on the situation on the FX market, the Ministry of Finance has an option to decide how to use these resources, among others, whether to convert them into PLN on the interbank market.

Services to central government entities

Apart from foreign currency operations related to servicing foreign payables and receivables of the State Treasury and transactions involving the use of funds related to EU membership, the central bank carried out foreign currency operations with other entities authorised to exchange foreign currencies at NBP under bank account agreements. In 2019, the value of transactions involving the purchase of foreign currencies by NBP amounted to the

equivalent of PLN 11,069 million. The value of the sale of foreign currencies by the central bank amounted to the equivalent of PLN 6,859 million.

1.2.2 Currency in circulation

Currency in circulation is a monetary aggregate which has been growing steadily for many years. The average level of currency in circulation in December 2019 amounted to PLN 239,409 million, which means an increase of PLN 20,872 million compared to December 2018 (in 2018 this growth was equal to PLN 21,412 million). The annual growth rate of currency in circulation in 2019² stood at 9.6%.

The high increase in currency in circulation may be attributed, as in the previous years, to NBP interest rates being maintained at a low and constant level. The amount of currency in circulation was also influenced by factors of a seasonal nature, which explain the changes in the level of this monetary aggregate in selected periods throughout 2019 (from weekly to yearly seasonality as well as increases observed in pre-holiday periods).

Figure 1.7 Daily changes of currency in circulation, cumulatively in the years 2015–2019



Source: NBP.

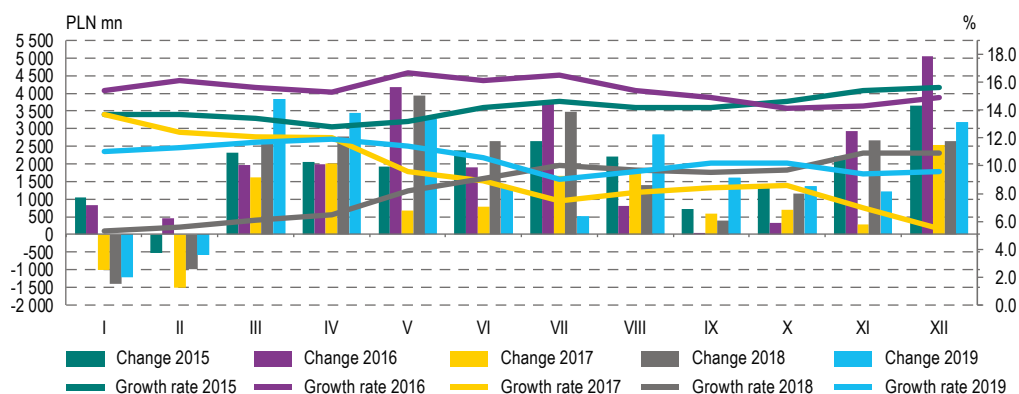
In 2019, the path of changes in currency in circulation was not much different from that observed in the previous years. The annual growth rate of currency in circulation (y/y) oscillated between 9.0% in July and 11.9% in April.

The highest average growth of currency in circulation occurred in the March (PLN 3,846 million), April (PLN 3,435 million), May (PLN 3,280 million) and December (PLN 3,177 million) period of maintaining the required reserve. The monthly growth rate in these months ranged between 1.3% and 1.8% (in the remaining months it ranged between -0.6% and 1.2%).

² Calculated as a comparison of the average level in December of the year under discussion compared to the level in December of the previous year.

The high increases in currency in circulation showing in individual data were seasonal and took place in April and December. This was due to the cumulation of high cash withdrawals before Easter and Christmas and before long public holidays (the May weekend, the end-of-the-year holiday).

Figure 1.8 Average change of currency in circulation in individual months of 2015–2019 (left axis) vs. the growth rate of currency in circulation (right axis)



Source: NBP.

1.2.3 Public sector deposits held with the central bank

Public sector deposits with the central bank include funds on current accounts and term deposits of the State Budget in PLN (from 1-day to 7-day).

In 2019, the level of public sector deposits with NBP was an outcome of the following factors:

- changes in the volume of budgetary incomes and expenses,
- settlements resulting from the issue and redemption of State Treasury securities,
- funds coming from the Ministry of Finance's foreign currency account with NBP converted into PLN,
- limits set for the Ministry of Finance's PLN term deposits with the central bank,
- flows of funds between Poland and the European Union (including, among others, payment of Poland's membership fee to the EU budget),
- payments resulting from servicing other transactions connected with the State Budget's borrowing needs.

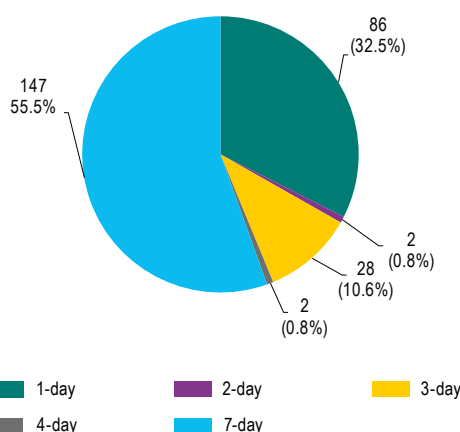
In 2019, the average level of public sector deposits stood at PLN 4,499 million and was higher by PLN 728 million comparing to the previous year (PLN 3,771 million). The average level of the public sector deposits held on current accounts with NBP amounted to PLN 3,561 million (against PLN 2,884 million in 2018), whereas the average level of the Ministry of Finance's PLN term deposits with NBP, representing a significant position in the structure of public sector deposits denominated in PLN (20.9%) amounted to PLN 938 million against PLN 887 million in 2018.

The Ministry of Finance invested surplus funds of the State Budget on a temporary basis with Narodowy Bank Polski. A total of 265 deposits were made in 2019. More than a half,

i.e. 55.5% of all deposits, were made with a 7-day period of maturity (147 deposits), 118 deposits were made with the shortest 1-, 2-, 3- and 4-day periods of maturity,³ which accounted for 44.5% of the total deposits.

In the period under discussion, the average level of overnight deposits, placed automatically at the end of the day, amounted to PLN 8 million (against PLN 21 million in 2018).

Figure 1.9 The quantitative structure of Ministry of Finance's term deposits with NBP in 2019



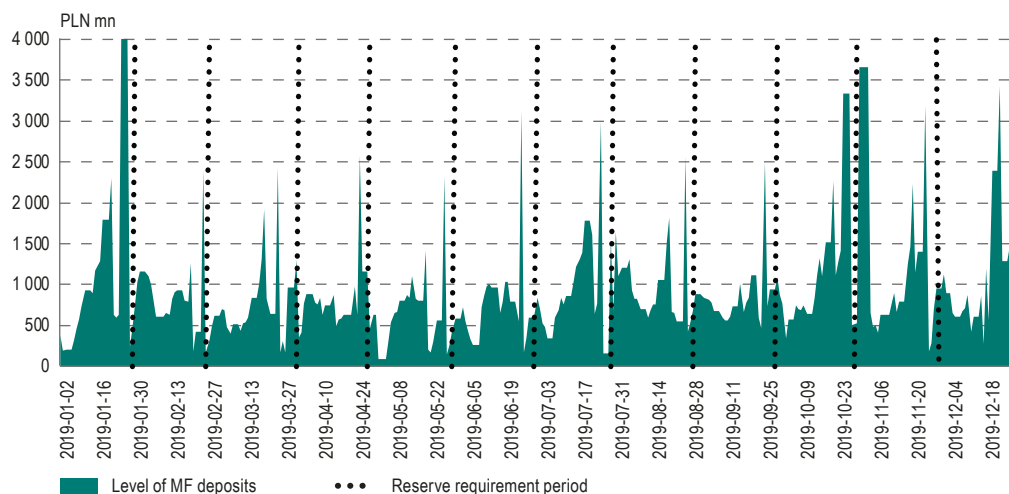
Source: NBP.

The level of the Ministry of Finance's PLN term deposits with NBP in 2019, as in the previous years, was highly variable and its average levels in individual months ranged between PLN 617 million and PLN 1,293 million. Deposits reached their highest level in Q4, amounting to: PLN 1,165 million in October, PLN 1,293 million in November and PLN 1,133 million in December. The average volume of the Ministry of Finance's deposits placed in 2019 accounted for 37.4% of the established daily limit (for comparison, in 2018 this figure represented 32.8%).

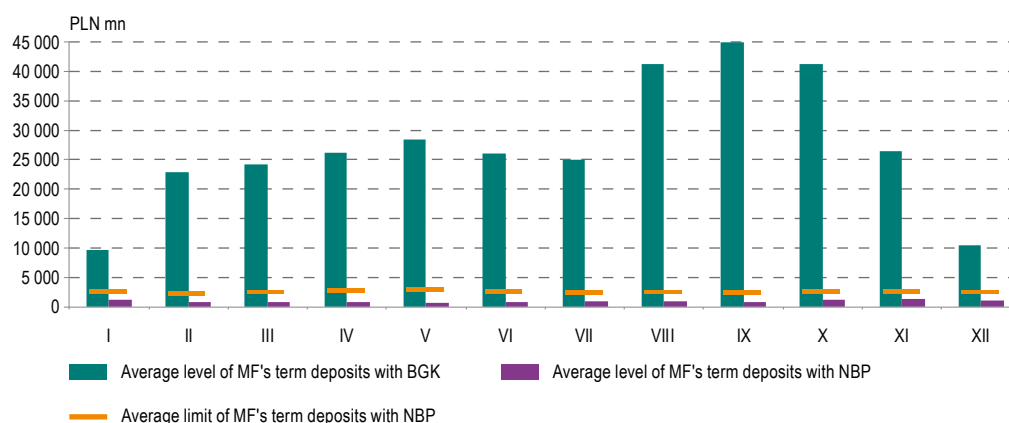
In accordance with the agreement concerning depositing the MF's funds on term deposit accounts in PLN with NBP, it has been agreed that the limit of the MF's term deposits in PLN with NBP will be increased at the end of each month.⁴ This was related to the periods of the highest tax revenues (coming from PIT, CIT, VAT) and the dates of redemption of Treasury bonds. Only in January 2019, on two occasions, did the volume of deposits reach the assigned limit. Each month the highest levels of deposits were observed on the VAT settlement days (the 25th or 26th day of the month).

³ 3-day deposits and two 4-day deposits are treated as the deposits with the shortest maturity periods since they were always made before the bank holidays (on Friday, 19 April 2019 and on Thursday, 31 October 2019).

⁴ See also Annex 5.

Figure 1.10 Daily levels of the Ministry of Finance's term deposits with NBP in 2019

Source: NBP.

Figure 1.11 The average level of the Ministry of Finance's term deposits in PLN in 2019

Source: NBP.

In 2019, as in the previous years, the majority of funds from the State Budget was invested on the interbank market. The average level of the MF's deposits with commercial banks amounted to PLN 27,283 million and was lower by PLN 1,385 million (i.e. 4.8%) in relation to the previous year.

The Ministry of Finance placed funds on the interbank market, mainly in the form of uncollateralised term deposits. Moreover, the MF performed buy-sell back operations collateralised in Treasury bonds. A part of the Ministry of Finance funds was placed through BGK as a deposit facility with NBP (on average PLN 138 million per year compared with PLN 276 million in 2018).

The highest amount of funds at the disposal of the Ministry of Finance was deposited in August, September and October, which was preceded by a significant accumulation of funds

from high volume purchases from the FX currency account carried out in August. These funds were rolled forward to the next two months.

In 2019, redemption of Treasury bonds by the MF took place four times: on 25 January 2019 – bond series WZ0119, 25 April 2019 – bond series OK0419, 25 July 2019 – bond series PS0719, and 25 October 2019 – bond series DS1019. In 2019, the Ministry of Finance did not issue Treasury bills.

Chapter 2

Monetary policy instruments



Monetary policy instruments

2.1 Interest rate

The primary instrument of the monetary policy is the short-term interest rate – the NBP reference rate which determines the yield on main open market operations, affecting at the same time the level of short-term market interest rates. Changes in the NBP reference rate reflect the course of the monetary policy pursued by the central bank. The NBP deposit and lombard rates set the fluctuation band of the overnight interest rate in the interbank market.

In 2019, the Monetary Policy Council did not make a decision to change the basic short-term interest rate, i.e. the NBP reference rate. Throughout the entire 2019 the reference rate was maintained at the level applicable as of 5 March 2015.

In 2019, the basic NBP interest rates were at the following levels:

- the reference rate – 1.50%,
- the lombard rate – 2.50%,
- the deposit rate – 0.50%.

2.2 Open market operations

In accordance with the *Monetary Policy Guidelines for 2019*, implementing the operational objective, NBP made efforts to keep the POLONIA rate close to the NBP reference rate. Open market operations representing the key instrument used to shape market interest rates can be divided as follows:

- main operations – in the form of regular issuance of NBP bills with a maturity of 7 days,
- fine-tuning operations – in the form of issuance of NBP bills with maturities shorter than those of main operations (in 2019 those were 1-, 2- and 3-day maturities).

Open market operations were carried out by NBP in order to ensure adequate conditions for commercial banks to balance their own liquidity positions in the required reserve maintenance periods.

Open market operations in 2019 were carried out amid persistent excess liquidity in the banking sector. From the beginning of the year to the end of April 2019, banking sector liquidity, measured by the issuance of NBP bills,⁵ was characterised by a downward trend. The average level of NBP bills in the January reserve maintenance period amounted to PLN 81,670 million, while in April it was PLN 73,898 million. Over the next five months, liquidity gradually increased, reaching the level of PLN 88,264 million in September. In the fourth quarter the average level of NBP bills gradually decreased, reaching the value of PLN 81,536 million in the December reserve maintenance period.

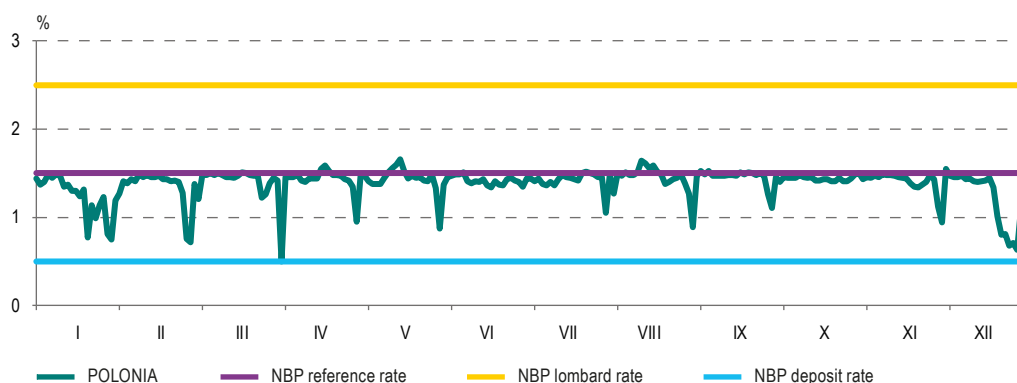
⁵ In this chapter we disregard standing facilities.

The main reason for these liquidity fluctuations were foreign currency transactions, which in most months stayed on the side of foreign currency purchase by NBP, thus causing the increase in banking sector liquidity. Only in 2019 Q1 did the foreign currency transactions lead to a drop in banking sector liquidity on account of an advantage of the operations of foreign currency sale by the central bank over their purchase in terms of averages. The factor adding the most to reducing liquidity was the change in the level of currency. Only in January and February was the change in the average level of currency in circulation conducive to an increase in the liquidity of the banking sector. In the other months this factor led to a decrease in liquidity.

In 2019 FX transactions led to an increase in the liquidity of the banking sector of PLN 29,933 million, while the change of currency in circulation caused a decrease in liquidity of PLN 20,872 million (on average from December 2018 to December 2019).

The average level of open market operations in 2019 amounted to PLN 80,393 million. NBP bills issued under main operations accounted for 97.8% of the value, while those issued under fine-tuning operations constituted 2.2%. The yield on open market operations was determined at the reference rate level.

Figure 2.1 POLONIA short-term market rate against NBP rates in 2019



Source: NBP.

2.2.1 Main operations

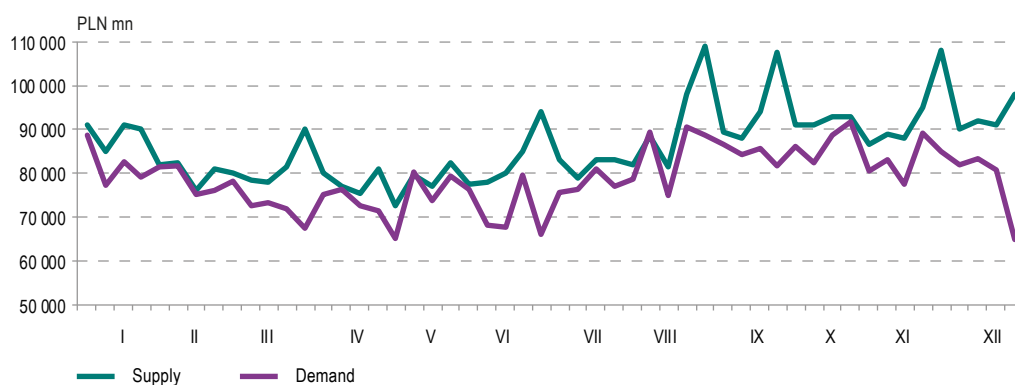
In 2019, NBP carried out main open market operations which involved the issuance of NBP bills with a maturity of 7 days.⁶ NBP bills were issued regularly once a week (as a rule on Fridays). Access to main open market operations was available to all banks participating in the SORBNET2 system with an account in the SKARBNET4 system operated by NBP. Moreover, the Bank Guarantee Fund (BFG) also had access to those operations. Tenders for NBP bills had the settlement period of $t + 0$ and the yield equal to the NBP reference rate.

In 2019, the average level of NBP bills issued under the main operations amounted to PLN 78,662 million and was lower by PLN 8,475 million as compared to the average level in 2018. In 2019, the central bank offered NBP bills totalling PLN 4,497,500 million for

⁶ Operations conducted on 26 April and 25 October (6-day), as well as on 2 May and 31 October (8-day) were an exception.

sale under the main operations. In that period, the bids received from banks amounted to PLN 4,103,402 million, whereas the value of bids accepted by the central bank amounted to PLN 4,101,568 million. The aggregate values of supply in 2019 were at a higher level than the aggregate values of demand. The ratio of commercial banks' demand for NBP bills to supply offered by NBP was at an annual average of 0.91.

Figure 2.2 NBP bills – demand in relation to supply at tenders for main open market operations in 2019



Source: NBP.

In 2019, underbidding of NBP bills was far more frequent than overbidding (in 50 out of 52 tenders for main open market operations). The ratio of commercial banks' demand for NBP bills in main operations in individual tenders to the supply offered by NBP fluctuated between 0.66 and 1.01.

2.2.2 Fine-tuning operations

In 2019, NBP carried out fine-tuning operations in the form of issuance of NBP bills with maturities shorter than in the case of main operations. These operations were carried out on the initiative of the central bank in order to mitigate fluctuations in short-term market interest rates. As in the previous year, they were conducted regularly on the last day of the reserve maintenance period and *ad hoc* during this period.

The goal of operations carried out on the last day of the reserve maintenance period was to balance the liquidity conditions in the banking sector on average in the entire required reserve maintenance period. In 2019, NBP conducted 12 regular fine-tuning operations. Regular fine-tuning operations had the form of O/N transactions. Due to the 2019 calendar structure, there were seven 1-day operations and five 3-day operations.

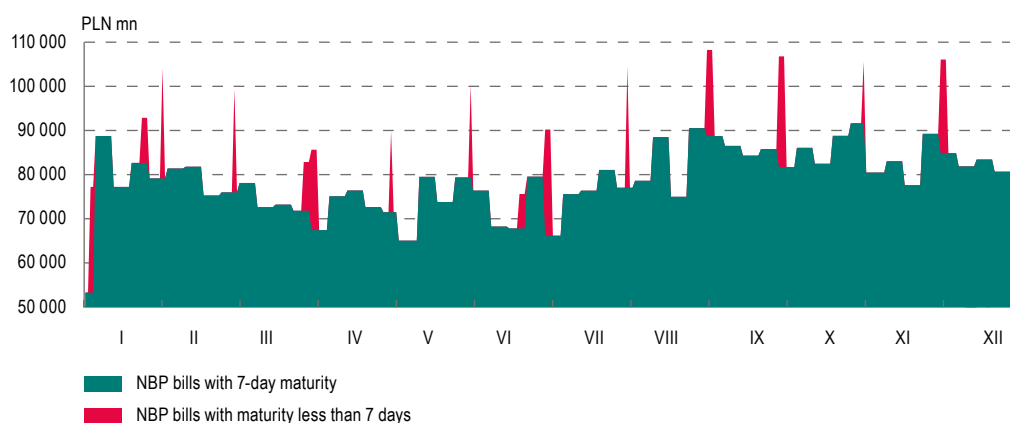
Additionally, in 2019, four open market operations were offered by NBP (two in January and one in March and June), conducted during the reserve maintenance period in order to compensate for the deviations in market interest rates from the reference rate. These were 3-day operations conducted three times and a single 2-day operation.

As a result of 16 fine-tuning operations which were conducted in 2019, the average annual level of these operations amounted to PLN 1,732 million and was higher by PLN 73 million than the 2018 level. In 2019, the central bank offered for sale under fine-tuning operations

NBP bills amounting to PLN 386,000 million. In that period, the bids received from banks amounted to PLN 341,150 million, whereas the value of bids accepted by the central bank amounted to PLN 333,843 million.

Overbidding from banks in relation to NBP bills offered by the central bank in fine-tuning operations occurred in four tenders (on the last business day of the reserve maintenance period). The ratio of commercial banks' demand for NBP bills in fine-tuning operations in individual tenders to the supply offered by NBP fluctuated between 0.39 and 1.17.

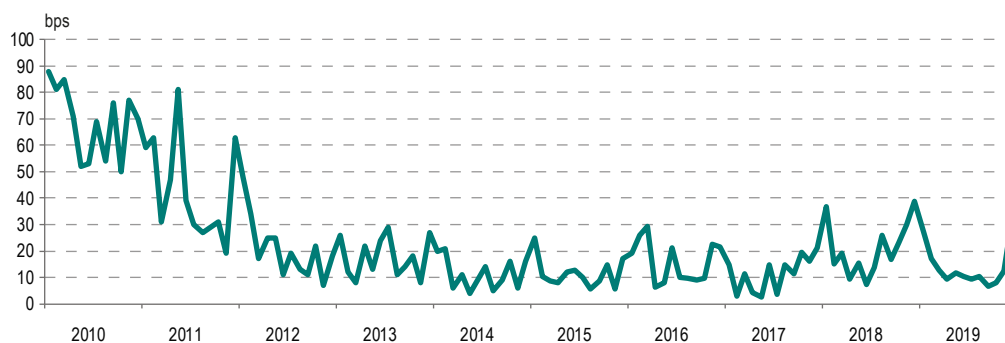
Figure 2.3 Operations carried out by NBP in 2019



Source: NBP.

The objective of the banking sector liquidity management policy adopted by NBP, as in the previous year, was to establish the optimal, from the point of view of influencing the shortest-term market rates (in particular, the POLONIA rate), liquidity conditions in the banking sector. Maintaining the POLONIA rate near the reference rate was achieved by means of main open market operations as well as regular and irregular fine-tuning operations. Setting the levels of individual open market operations, the central bank endeavoured to maintain balanced liquidity conditions in the banking sector throughout the reserve maintenance period. Supply was determined at a level (based on the prepared forecasts of banking sector liquidity in the maturity period of a given operation) intended to allow market participants to minimise the average deviation of the aggregate level of current accounts held with NBP from the value of the reserve requirement (in a given reserve maintenance period).

Figure 2.4 Average absolute deviation of the POLONIA rate from the NBP reference rate in individual required reserve maintenance periods in the years 2010–2019



Source: NBP.

2.3 Reserve requirement

In 2019, banks, credit unions (SKOKs) and the National Credit Unions were obliged to maintain average funds on accounts with NBP in the reserve maintenance period, not lower than the value of the required reserve. This solution helped to stabilise the level of short-term interest rates.

Returnable funds on bank accounts and funds obtained from the sale of securities with the exception of funds received from another domestic bank, a credit union, and the National Credit Unions were the basis for calculating the required reserve. Moreover, the basis for the reserve calculation in banks, branches of credit institutions and branches of foreign banks did not include funds obtained from abroad for a minimum of two years and deposited in savings and credit accounts with building societies, as well as funds accumulated on individual pension accounts or funds acquired under agreements on individual pension security accounts. Both banks and credit unions were able to exclude returnable funds obtained from BFG from the basis for calculating the required reserve.

The required reserves were calculated and maintained in the Polish zloty. The value of the required reserve calculated by individual entities was diminished by an equivalent of EUR 500 thousand.

In 2019, the basic required reserve ratio amounted to 3.5% on all liabilities constituting the basis for calculating the required reserve, except for funds received from repo and sell-buy back transactions and funds acquired for at least two years (from 1 March 2018), on which the required reserve ratio was 0%.

As at 31 December 2019, the amount of the required reserve was PLN 46,845 million, with the banking sector reserve at PLN 46,630 million and the credit unions' reserves at PLN 215 million. The total required reserve was higher, compared to the level as at 31 December 2018, by PLN 3,651 million, which means an increase of 8.5%. The change in the amount of the required reserve at the end of 2019 was due to the increase of 8.2% in the underlying deposits and the exemption of six banks from the maintaining of reserve requirements by the NBP Management Board (at the end of 2019, the amount of the exemption from the mandatory reserve stood at PLN 1,412 million).

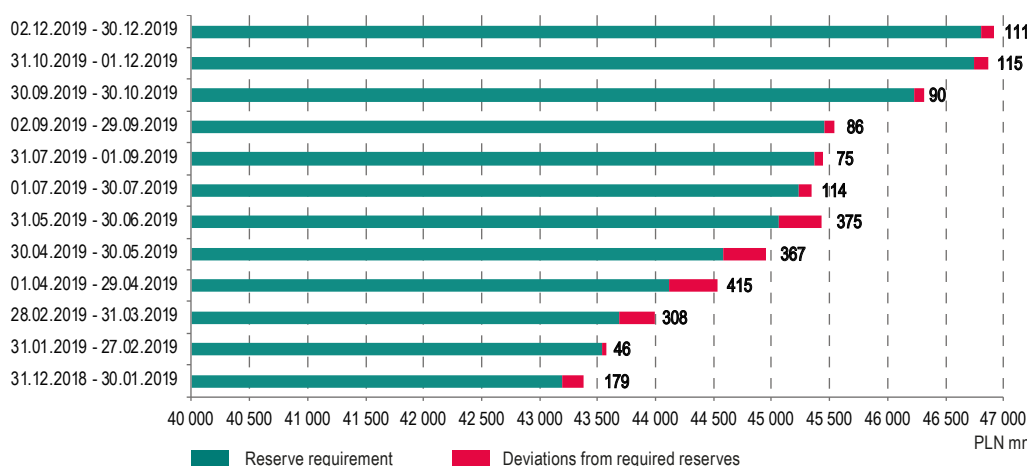
As of 1 January 2018, the Monetary Policy Council decreased the level of interest rate on the required reserve funds to 0.5%, i.e. to the level currently corresponding to the NBP deposit rate.

In 2019, in all the reserve maintenance periods a small surplus of the average holdings on banks' NBP accounts was recorded over the required reserve level. It reached the lowest level in February (PLN 46 million), whereas the largest surplus was recorded in April (PLN 415 million). The average surplus of the required reserves holdings in 2019 amounted to PLN 190 million and accounted for 0.42% of the average level of required reserves.

The year 2019 recorded three cases of banks' non-compliance with the reserve requirements.

In 2019, six banks under resolution benefited from the exemption from the maintaining of reserve requirements, including three commercial banks from the partial exemption and one commercial bank and two cooperative banks from the full exemption.

Figure 2.5 Changes in the required reserve level and deviations from the reserve requirement in 2019



Source: NBP.

2.4 Standing facilities

Standing facility operations (deposit facility and marginal lending facility) stabilised the level of interbank liquidity and limited the scale of overnight rates fluctuations.

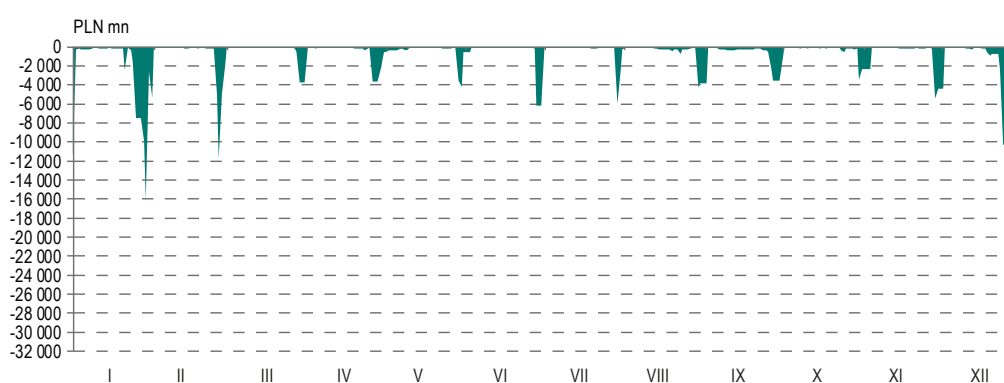
The lombard interest rate set the maximum price of funds obtained from NBP, indicating at the same time the ceiling of rate fluctuations in the interbank market, while the interest rate on deposit facility set the floor for the rate fluctuations.

Additionally, the four-fold level of interest rate on the lombard credit determined the amount of the so-called maximum interest.

2.4.1 Deposit facility

In 2019, the total value of the deposit facilities placed by banks with NBP (calculated as the total days of their placement) amounted to PLN 410,478 million and was lower by 17.48% comparing to deposits placed in the previous year. The total value of a single deposit placed by banks under the overnight facility ranged from PLN 50 million to PLN 31,705 million. Its average daily level amounted to PLN 1,125 million against PLN 1,370 million in 2018. Banks invested the largest amounts on the last days of the required reserve maintenance periods.

Figure 2.6 The use of deposit facility in 2019



Source: NBP.

2.4.2 Marginal lending facility

In 2019, similarly as in the previous years, banks used the marginal lending facility only occasionally. The total marginal lending facility used throughout the year amounted to PLN 8 million, and was over seven times lower than the amount used in 2018 (PLN 57 million). The marginal lending facility was incurred exclusively in order to test banks' internal procedures. The average daily use of the marginal lending facility amounted to PLN 0.02 million (against PLN 0.2 million in 2018).

Chapter 3

Other operations



Other operations

3.1 Intraday credit facility

In the previous year, banks on a daily basis used a non-interest bearing intraday facility that is taken and repaid on the same trading day. This instrument facilitated management of liquidity during the operating day, simultaneously ensuring liquidity of interbank settlements at NBP. Daily supply of operating liquidity to banks ranged from PLN 43,693 million to PLN 56,616 million. In 2019, the total use of intraday credit amounted to PLN 12,099,732 million and basically was not much different from that observed in 2018 (PLN 12,107,646 million).

3.2 Intraday credit facility in euro

Intraday credit facility in euro is an instrument that ensures smooth settlements in the TARGET2-NBP system. The loan collateralised with Treasury bonds accepted by the ECB was incurred and repaid on the same trading day. The use of this facility in 2019 grew over threefold and stood at EUR 68,243 million. The average daily supply of operating liquidity in EUR to banks reached the level of EUR 268 million. This growth in 2019 was due to a larger number of banks taking recourse to the facility than in 2018.

Glossary



Glossary

Money Market Dealers – banks that are the most active in the money and foreign exchange markets, with which NBP enters into Money Market Dealer agreements. In addition to the access to the main open market operations, these banks can take part in all fine-tuning operations. One of the obligations of the Money Market Dealer is the participation in the fixing of the POLONIA reference rates when performing the function.

Deposit facility – an instrument which enables banks to deposit their liquidity surplus on an overnight basis with the central bank. The interest rate on that deposit constitutes the lower limit for market rate quoted for that particular period.

Marginal lending facility (lombard credit) – an instrument which enables commercial banks to obtain credit on an overnight basis. The interest on that facility indicates the marginal cost of obtaining funds from the central bank. It is collateralised with securities accepted by the central bank.

Intraday credit facility (PLN or EUR) – a non-interest bearing credit facility which enables banks to obtain funds on an intraday basis, collateralised with securities accepted by the central bank. It is an instrument which allows commercial banks to manage intraday liquidity.

Banking sector short-term liquidity – liquidity defined as the balance of open market operations conducted by NBP, i.e. main and fine-tuning operations as well as foreign exchange swaps and standing facilities.

Standing facilities – operations conducted at the initiative of commercial banks. Under these operations commercial banks are able to deposit their liquidity surplus with NBP using the deposit facility or reduce short-term liquidity shortages using the marginal lending facility.

Fine-tuning operations – operations which may be conducted by NBP in order to limit the impact of changes in the banking sector liquidity conditions on the short-term market interest rates.

Open market operations – a principal instrument of the central bank which is used to maintain short-term market interest rates at a level consistent with the NBP reference rate determined by the Monetary Policy Council.

Main operations – operations conducted on a regular basis (once a week). In the context of the banking sector liquidity surplus, they consist in issuance of NBP bills, typically with a 7-day maturity. During tenders, a fixed yield at the level of the NBP reference rate applies.

Repo operations – short- and long-term refinancing operations aimed at providing liquidity to the banking sector, collateralised with securities approved by NBP.

Structural operations – operations conducted in order to change the long-term structure of banking sector liquidity. Under these operations the central bank may carry out the following structural operations: issuance of bonds, early redemption of bonds, purchase or sale of securities in the secondary market.

Foreign exchange swaps – operations under which NBP is able to purchase (or sell) the zloty for foreign currencies in the spot market and simultaneously to resell (or repurchase) the zloty under forward transaction on a specific value date.

Reserve requirement – a monetary policy instrument used by the central bank, among other things, to regulate banking sector liquidity and to mitigate volatility of short-term interest rates. The obligation to maintain the reserve is also an element of liquidity management at banks. The reserve requirement is an obligation imposed on banks to maintain a specific average level of funds (set as a percentage of funds accumulated by banks) on their accounts with the central bank.

POLONIA rate – the POLONIA rate (Polish Overnight Index Average) was introduced by NBP and ACI Polska in early 2005. It is an average overnight rate weighted by the value of transactions in the interbank deposit market. The rate reflects the actual interest rates on short-term interbank deposits. The POLONIA rate is published by NBP in the TM Reuters service (NBPS), Bloomberg service (PZCFPLNI Index) and at the NBP website each day at about 5.00 p.m.

The fixing of the POLONIA rate is carried out by NBP on each operating day at 4.45 p.m. The participant is obliged to provide the central bank with a list of overnight transactions concluded with other participants and submitted on a given day until 4.30 p.m.

Since 1 December 2017, NBP has been acting as the Fixing Organiser of the Polonia Reference Rate.

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

NBP lombard rate – determines the costs of funding obtainable from NBP. It sets the ceiling for the growth in the overnight market rate.

NBP deposit rate – determines the interest rate on deposits with NBP. It sets the floor for fluctuations of the overnight market rate. The deposit rate and the lombard rate create the fluctuation band for the overnight rate, which is symmetric to the central bank's reference rate.

Publication of information in information services – in the TM Reuters service, on the NBPM site and in the Bloomberg service on the NBP18 site, NBP provides banks with information on the current market liquidity situation, specifically concerning:

- banks' current accounts, deposit facility placed with NBP and marginal lending facility (lombard credit) provided by NBP, on a daily basis,
- level of required reserve during a specific reserve maintenance period,
- average balance of banks' current accounts during the required reserve maintenance period,

-
- forecast of an average daily balance of the current account in the period from the issue date of NBP bills (under main operations) until the day preceding their maturity; information on the forecast average balance of banks' current accounts is published at the moment the decision on the value of NBP bills on offer is taken.

Information on current auctions for NBP bills is also published on the NBPT site of the TM Reuters news service and the NBP19 site of the Bloomberg news service. The outcome of tenders is posted on the NBPU site (TM Reuters) and NBP20 site (Bloomberg).

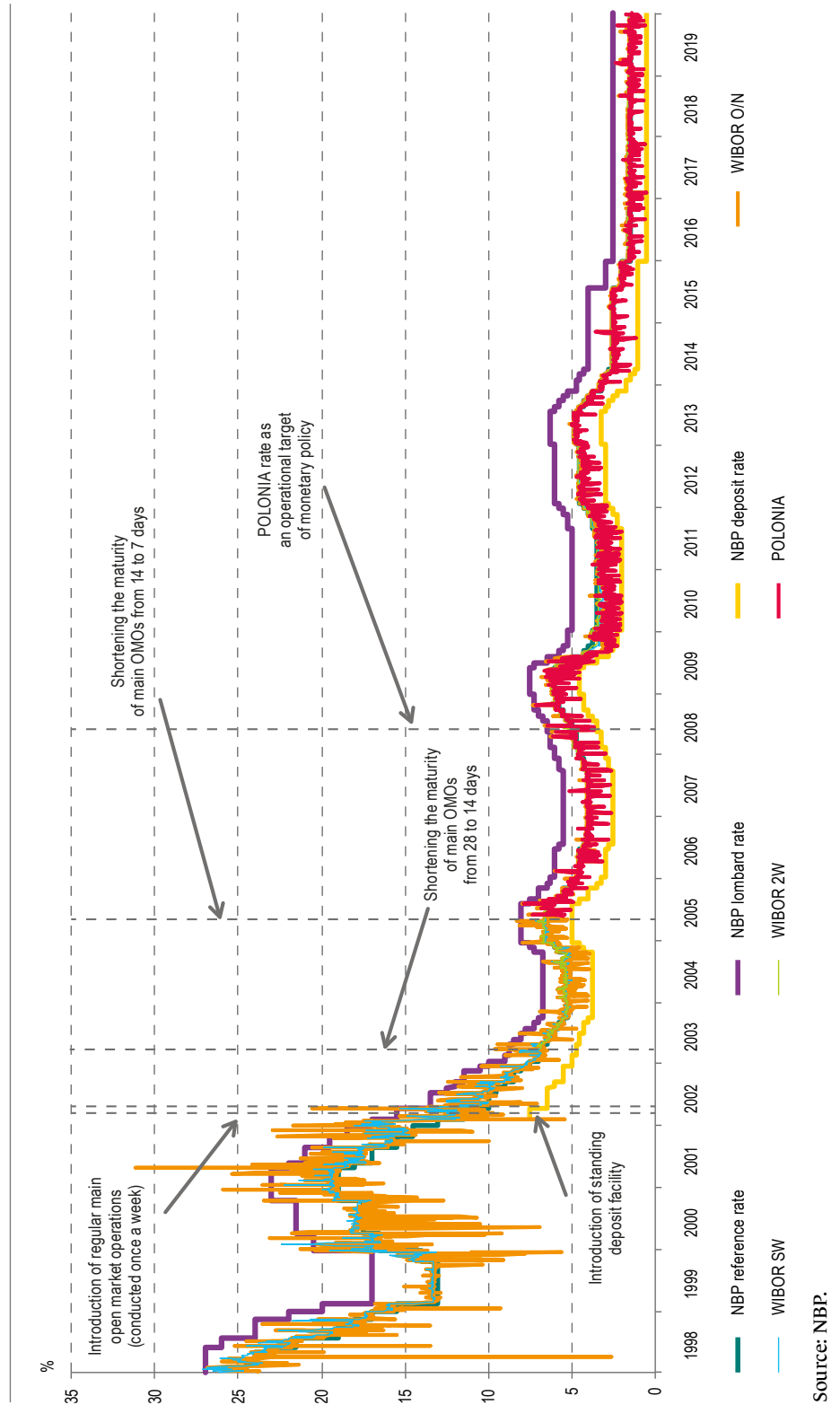
Current information concerning the liquidity situation and auctions carried out by NBP under open market operations is regularly published on the NBP website (www.nbp.pl).

Annexes



Annex 1

Volatility of the shortest-term interest rates in the years 1998–2019



Annex 2

The NBP monetary policy instruments in the years 1990–2019

Item	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Required reserves																														
Issue of NBP bills																														
Issue / repurchase of NBP bonds																														
Repo / reverse repo operations																														
Outright operations																														
Loans for central investments																														
Rediscount loan																														
Marginal lending facility																														
Deposit facility																														
Loan limits																														
Deposits for households																														
Intraday credit																														
FX swap operations																														

Source: NBP.

Annex 3

Main operations in 2019

No.	Tender date*	Maturity date	Maturity period (in days)	Nominal value of sales offers (PLN mn)	Nominal value of offers to buy (PLN mn)	Nominal value of accepted offers (PLN mn)	Average yield on bills annual 365/360 (%)
1	04.01.2019	11.01.2019	7	91 000.00	88 741.30	88 741.30	1.5
2	11.01.2019	18.01.2019	7	85 000.00	77 212.90	77 212.90	1.5
3	18.01.2019	25.01.2019	7	91 000.00	82 655.20	82 655.20	1.5
4	25.01.2019	01.02.2019	7	90 000.00	79 140.40	79 140.40	1.5
5	01.02.2019	08.02.2019	7	82 000.00	81 392.20	81 392.20	1.5
6	08.02.2019	15.02.2019	7	82 500.00	81 795.80	81 795.80	1.5
7	15.02.2019	22.02.2019	7	76 000.00	75 266.90	75 266.90	1.5
8	22.02.2019	01.03.2019	7	81 000.00	75 977.85	75 977.85	1.5
9	01.03.2019	08.03.2019	7	80 000.00	78 104.45	78 104.45	1.5
10	08.03.2019	15.03.2019	7	78 500.00	72 627.00	72 627.00	1.5
11	15.03.2019	22.03.2019	7	78 000.00	73 206.70	73 206.70	1.5
12	22.03.2019	29.03.2019	7	81 500.00	71 814.85	71 814.85	1.5
13	29.03.2019	05.04.2019	7	90 000.00	67 438.80	67 438.80	1.5
14	05.04.2019	12.04.2019	7	80 000.00	75 088.90	75 088.90	1.5
15	12.04.2019	19.04.2019	7	77 000.00	76 403.45	76 403.45	1.5
16	19.04.2019	26.04.2019	7	75 500.00	72 645.10	72 645.10	1.5
17	26.04.2019	02.05.2019	6	81 000.00	71 489.00	71 489.00	1.5
18	02.05.2019	10.05.2019	8	72 500.00	65 040.00	65 040.00	1.5
19	10.05.2019	17.05.2019	7	79 500.00	80 335.00	79 500.00	1.5
20	17.05.2019	24.05.2019	7	77 000.00	73 796.30	73 796.30	1.5
21	24.05.2019	31.05.2019	7	82 500.00	79 362.10	79 362.10	1.5
22	31.05.2019	07.06.2019	7	77 500.00	76 380.60	76 380.60	1.5
23	07.06.2019	14.06.2019	7	78 000.00	68 238.00	68 238.00	1.5
24	14.06.2019	21.06.2019	7	80 000.00	67 804.99	67 804.99	1.5
25	21.06.2019	28.06.2019	7	85 000.00	79 542.00	79 542.00	1.5
26	28.06.2019	05.07.2019	7	94 000.00	66 163.10	66 163.10	1.5
27	05.07.2019	12.07.2019	7	83 000.00	75 578.40	75 578.40	1.5
28	12.07.2019	19.07.2019	7	79 000.00	76 365.00	76 365.00	1.5
29	19.07.2019	25.07.2019	7	83 000.00	81 057.00	81 057.00	1.5
30	26.07.2019	02.08.2019	7	83 000.00	77 027.90	77 027.90	1.5
31	02.08.2019	09.08.2019	7	82 000.00	78 605.50	78 605.50	1.5
32	09.08.2019	16.08.2019	7	88 500.00	89 499.40	88 500.00	1.5
33	16.08.2019	23.08.2019	7	81 500.00	74 977.16	74 977.16	1.5
34	23.08.2019	30.08.2019	7	98 000.00	90 533.20	90 533.20	1.5
35	30.08.2019	06.09.2019	7	109 000.00	88 736.05	88 736.05	1.5
36	06.09.2019	13.09.2019	7	89 500.00	86 508.80	86 508.80	1.5
37	13.09.2019	20.09.2019	7	88 000.00	84 302.90	84 302.90	1.5
38	20.09.2019	27.09.2019	7	94 000.00	85 772.80	85 772.80	1.5
39	27.09.2019	04.10.2019	7	107 500.00	81 692.66	81 692.66	1.5
40	04.10.2019	11.10.2019	7	91 000.00	86 069.76	86 069.76	1.5
41	11.10.2019	18.10.2019	7	91 000.00	82 462.57	82 462.57	1.5
42	18.10.2019	25.10.2019	7	93 000.00	88 785.69	88 785.69	1.5
43	25.10.2019	31.10.2019	6	93 000.00	91 628.61	91 628.61	1.5
44	31.10.2019	08.11.2019	8	86 500.00	80 469.07	80 469.07	1.5
45	08.11.2019	15.11.2019	7	89 000.00	83 027.97	83 027.97	1.5
46	15.11.2019	22.11.2019	7	88 000.00	77 598.57	77 598.57	1.5
47	22.11.2019	29.11.2019	7	95 000.00	89 242.12	89 242.12	1.5
48	29.11.2019	06.12.2019	7	108 000.00	84 850.97	84 850.97	1.5
49	06.12.2019	13.12.2019	7	90 000.00	81 873.70	81 873.70	1.5
50	13.12.2019	20.12.2019	7	92 000.00	83 418.89	83 418.89	1.5
51	20.12.2019	27.12.2019	7	91 000.00	80 668.97	80 668.97	1.5
52	27.12.2019	03.01.2020	7	98 000.00	64 985.65	64 985.65	1.5
	Total 2019			4 497 500.00	4 103 402.20	4 101 567.80	

* Day of payment for the NBP bills on the tender date.
Source: NBP.

Annex 4

Fine-tuning operations in 2019

No.	Tender date*	Maturity date	Maturity period (in days)	Nominal value of sales offers (PLN mn)	Nominal value of offers to buy (PLN mn)	Nominal value of accepted offers (PLN mn)	Average yield on bills annual 365/360 (%)
1	02.01.2019	04.01.2019	2	40 000,00	23 950,00	23 950,00	1.5
2	22.01.2019	25.01.2019	3	15 000,00	10 215,00	10 215,00	1.5
3	30.01.2019	31.01.2019	1	25 000,00	25 423,00	25 000,00	1.5
4	27.02.2019	28.02.2019	1	23 500,00	27 435,35	23 500,00	1.5
5	26.03.2019	29.03.2019	3	15 000,00	11 035,00	11 035,00	1.5
6	29.03.2019	01.04.2019	3	23 000,00	18 204,09	18 204,09	1.5
7	29.04.2019	30.04.2019	1	20 000,00	18 354,20	18 354,20	1.5
8	30.05.2019	31.05.2019	1	21 000,00	22 798,96	21 000,00	1.5
9	18.06.2019	21.06.2019	3	20 000,00	7 800,00	7 800,00	1.5
10	28.06.2019	01.07.2019	3	27 000,00	24 048,93	24 048,93	1.5
11	30.07.2019	31.07.2019	1	27 500,00	28 650,42	27 500,00	1.5
12	30.08.2019	02.09.2019	3	20 000,00	19 512,00	19 512,00	1.5
13	27.09.2019	30.09.2019	3	26 000,00	25 094,99	25 094,99	1.5
14	30.10.2019	31.10.2019	1	14 500,00	13 956,20	13 956,20	1.5
15	29.11.2019	02.12.2019	3	23 500,00	21 214,35	21 214,35	1.5
16	30.12.2019	31.12.2019	1	45 000,00	43 457,80	43 457,80	1.5
	Total 2019			386 000,00	341 150,29	333 842,56	

* Day of payment for the NBP bills on the tender date.

Source: NBP.

Annex 5

Agreements with the Ministry of Finance

The terms and conditions of transactions concluded between the MF and NBP relating to the purchase and sale of foreign currencies are defined under the **Agreement of 21 December 2015 regulating the operation of the bank account in foreign currencies as well as the sale and purchase of foreign currencies to service liabilities and receivables of the State Treasury**. The annex to the agreement determines maximum values of FX transactions on an annual basis. In 2019, the following amounts of limits were in force:

- the total sales of foreign currencies by NBP to the Ministry of Finance shall not exceed the equivalent of EUR 8.0 billion,
- the total amount of foreign currencies purchased by NBP from the Ministry of Finance shall not exceed the equivalent of EUR 17.0 billion,

whereas:

- the accumulated absolute difference between the amount of foreign currencies sold and purchased as at year-end shall not exceed the equivalent of EUR 8.0 billion,
- the accumulated absolute difference between the amount of foreign currencies purchased and sold as at year-end shall not exceed the equivalent of EUR 17.0 billion.

The agreement on the Ministry of Finance's PLN term deposits with NBP of 18 December 2006 – pursuant to the Public Finance Act, the Minister of Finance is authorised to make interest-bearing deposits with Narodowy Bank Polski or with another bank, in the case of a temporary surplus of funds on the central account of the State Budget. In 2019, the limit for the MF's term deposits placed with NBP, counted in terms of daily balances, was as follows:

- PLN 4.0 billion in the periods: from 18 January to 31 January and from 18 October to 3 November,
- PLN 3.5 billion in the periods: from 19 February to 28 February, from 19 March to 7 April, from 19 April to 8 May, from 20 May to 2 June, from 17 June to 30 June, from 19 July to 31 July, from 19 August to 1 September, from 19 September to 30 September, from 19 November to 1 December and from 18 December to 31 December,
- PLN 1.5 billion in the periods: from 1 January to 17 January, from 1 February to 18 February, from 1 March to 17 March, from 8 April to 18 April, from 9 May to 19 May, from 3 June to 16 June, from 1 July to 18 July, from 1 August to 18 August, from 2 September to 18 September, from 1 October to 17 October, from 4 November to 18 November and from 2 December to 17 December.

Annex 6

Money Market Dealers in 2019

The Money Market Dealers (MMD) System has been used by NBP since 1992. Narodowy Bank Polski selects entities for the function of MMD once a year. The MMD status is granted to a given entity upon concluding the agreement between the MMD and the NBP concerning the performance of the Money Market Dealer function.

In 2019, the banks with the MMD status represented the exclusive circle of the central bank's counterparties authorised to participate in fine-tuning open market operations, used irregularly, in the required reserve maintenance period, with maturities of up to seven days (excluding operations used on the last business day of the reserve maintenance period).

In 2019, the following entities acted as MMD (order by bank number):

1. Powszechna Kasa Oszczędności Bank Polski SA
2. Bank Handlowy w Warszawie SA
3. ING Bank Śląski SA
4. Santander Bank Polska SA
5. Bank Gospodarstwa Krajowego
6. mBank SA
7. Bank Millennium SA
8. Bank Polska Kasa Opieki SA
9. Deutsche Bank Polska SA
10. BNP Paribas Bank Polska SA⁷
11. Getin Noble Bank SA
12. Alior Bank SA.⁸

⁷ Until 29 March 2019, the bank operated as Bank BGŻ BNP Paribas SA.

⁸ From 24 June 2019 it performed the function of MMD.

Annex 7 Daily information (as at the month-end)

Items	XII 2017	I 2019	II 2019	III 2019	IV 2019	V 2019	VI 2019	VII 2019	VIII 2019	IX 2019	X 2019	XI 2019	XII 2019
PLN mn													
CENTRAL BUDGET:													
revenues	380 850.73	44 672.95	68 624.25	93 542.78	135 761.98	166 607.34	196 874.08	233 510.72	268 037.82	300 866.14	338 316.22	372 040.05	401 352.73
expenses	391 146.54	32 149.96	65 570.54	94 776.58	130 041.12	164 801.17	197 217.87	233 549.09	264 824.99	297 814.50	336 084.30	368 990.25	414 894.90
deficit (-) or surplus (+)	-10 295.81	12 522.98	3 053.72	-1 233.80	5 720.86	1 806.17	-343.78	-38.37	3 212.83	3 051.64	2 231.92	3 049.80	-13 542.17
central budget funds	122.95	6.60	7.94	7.12	5.16	5.44	6.46	6.14	5.56	5.27	5.47	6.50	483.64
MF foreign currency account	18 789.51	20 864.88	18 987.52	27 561.36	29 716.17	24 686.80	28 314.81	21 296.08	7 111.35	5 628.59	8 391.84	2 789.59	13 525.11
MF zloty term deposits in NBP	1 500.00	1 037.00	490.00	962.00	630.00	584.00	595.00	1 642.00	883.00	1 092.00	3 659.00	946.78	1 500.00
CURRENCY IN CIRCULATION	219 489.94	214 925.71	218 147.62	221 288.35	226 603.44	227 509.69	228 136.44	228 645.96	232 391.46	233 738.75	235 288.60	236 455.73	238 777.25
CURRENT ACCOUNT (including required reserve account)	61 390.26	46 079.05	46 862.40	32 555.33	46 190.53	46 901.47	26 600.09	48 326.04	24 714.22	52 443.74	48 687.51	25 433.46	50 655.94
Balance deviation from required reserve*	18 195.66	2 545.81	3 173.48	1 071.07	1 605.23	1 845.75	1 673.66	2 962.70	1 411.77	6 216.93	1 939.60	1 543.49	3 810.71
REFINANCING LOAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
marginal lending	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rediscount	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INTRADAY CREDIT	47 701.32	53 353.16	51 067.52	45 619.16	54 403.27	52 057.71	50 724.66	51 065.85	47 923.78	49 181.77	48 329.81	49 509.02	54 823.73
DEPOSIT FACILITY	11 552.20	5 295.02	1 960.67	3 725.39	568.61	547.44	6 207.25	302.66	3 877.60	2 471.02	2 304.88	4 425.64	14 754.21
OPEN MARKET OPERATIONS**	53 276.00	79 140.40	75 977.85	85 642.89	71 489.00	76 380.60	90 212.03	77 027.90	108 248.05	81 692.66	80 469.07	106 065.32	64 985.65
Repo (-)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NBP bills 7-days (+)	53 276.00	79 140.40	75 977.85	85 642.89	71 489.00	76 380.60	90 212.03	77 027.90	108 248.05	81 692.66	80 469.07	106 065.32	64 985.65
NBP bills < 7-days (+)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
POLONIA (%)	1.42	1.27	1.21	0.90	1.47	1.46	1.35	1.27	1.47	1.40	1.45	1.55	1.29
Turnover	290.00	320.00	267.40	190.00	845.00	155.00	12.20	950.00	1 366.00	495.00	300.00	20.00	350.00
WIBOR (%)													
O/N	1.54	1.46	1.46	1.52	1.57	1.55	1.54	1.52	1.55	1.54	1.59	1.52	1.50
T/N	1.55	1.52	1.55	1.54	1.57	1.57	1.56	1.55	1.57	1.56	1.60	1.59	1.52
S/W	1.54	1.52	1.55	1.55	1.56	1.57	1.57	1.57	1.59	1.59	1.58	1.58	1.55
2W	1.58	1.57	1.57	1.58	1.58	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.59
1M	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.63	1.63	1.63	1.63
3M	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.71	1.71	1.71
12M	1.87	1.87	1.87	1.87	1.87	1.86	1.86	1.86	1.85	1.84	1.84	1.84	1.84
WIBID (%)													
O/N	1.24	1.16	1.16	1.22	1.27	1.25	1.24	1.22	1.25	1.24	1.29	1.23	1.20
T/N	1.25	1.22	1.25	1.24	1.28	1.27	1.26	1.25	1.27	1.27	1.32	1.30	1.22
S/W	1.34	1.32	1.35	1.35	1.37	1.37	1.37	1.37	1.39	1.39	1.39	1.38	1.35
2W	1.38	1.37	1.37	1.38	1.38	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.39
1M	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.43	1.43	1.43	1.43
3M	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.51	1.51	1.51	1.51
12M	1.67	1.67	1.67	1.67	1.67	1.66	1.66	1.66	1.65	1.64	1.64	1.64	1.64
USD/PLN (fixing)	3.7597	3.7271	3.7853	3.8365	3.8291	3.8498	3.7336	3.8504	3.9717	4.0000	3.8174	3.9288	3.7977
EUR/PLN (fixing)	4.3000	4.2802	4.3120	4.3013	4.2916	4.2916	4.2911	4.2911	4.3236	4.3236	4.2617	4.3236	4.2585
EUR/USD	1.1437	1.1484	1.1391	1.1212	1.1207	1.1148	1.1388	1.1145	1.1039	1.0934	1.1164	1.1005	1.1213
OFFICIAL RESERVE ASSETS (as at the end of the month)	439 751.70	423 682.70	425 792.10	433 306.30	448 068.70	456 660.00	439 822.30	448 683.00	463 136.10	483 487.90	465 343.50	470 785.80	487 643.50
in PLN	102 267.80	98 986.70	98 745.80	100 738.40	104 418.10	106 407.90	103 438.90	104 561.30	105 632.70	110 546.90	109 192.00	108 887.50	114 510.60
in EUR	-5 771.65	3 775.27	-2 565.41	-1 383.29	-2 608.70	-5 149.69	365.10	-4 698.45	-12 819.35	-3 113.88	-817.41	-3 250.01	4 164.10

* Average deviation of the current account from the required reserve calculated cumulatively from the beginning of the reserve requirement period.

** Open market operations are reported at nominal value; the balance of this position includes NBP bills minus repo operations.

Source: NBP.

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