

Annual Report 2010

Banking Sector Liquidity

Monetary Policy Instruments of the National Bank of Poland

Table of Contents

EXECUTIVE SUMMARY.....	5
1. BANKING SECTOR LIQUIDITY.....	9
1.1. LIQUIDITY DEVELOPMENTS IN 2010.....	9
1.2. THE IMPACT OF AUTONOMOUS FACTORS ON CHANGES IN BANKING SECTOR LIQUIDITY.....	12
1.2.1. <i>Purchase and Sale of Foreign Currencies by the NBP</i>	12
1.2.2. <i>Currency in Circulation</i>	15
1.2.3. <i>Public Sector Deposits held with the Central Bank</i>	16
2. MONETARY POLICY INSTRUMENTS.....	19
2.1. INTEREST RATE.....	19
2.2. RESERVE REQUIREMENT.....	19
2.3. OPEN MARKET OPERATIONS.....	21
2.3.1. <i>Main Operations</i>	21
2.3.2. <i>Fine-tuning Operations</i>	22
2.3.3. <i>Structural Operations</i>	23
2.4. STANDING FACILITIES.....	23
2.5. OTHER OPERATIONS.....	25
3. POLONIA RATE.....	27
4. GLOSSARY.....	31
<i>Annex 1. Volatility of the shortest inter-bank interest rates in the interbank market against changes in open market operations in 1998-2010</i>	35
<i>Annex 2. NBP monetary policy instruments in 1990 – 2010</i>	36
<i>Annex 3. Tenders for the NBP bills in 2010</i>	37
<i>Annex 4. Tenders for repo operations</i>	38
<i>Annex 5. Agreements with the Ministry of Finance</i>	38
<i>Annex 6. Banks – Money Market Dealers in 2010</i>	39
<i>Annex 7. Daily information (as at the month-end)</i>	40

Executive Summary

In 2010, the monetary policy of the National Bank of Poland was pursued in accordance with the *Monetary Policy Guidelines for the Year 2010*. The key objective of the policy, similarly to the previous years, was to maintain inflation at 2.5% in a mid-term horizon while supporting the sustainable economic growth.

The short-term interest rate is the monetary policy's primary instrument. By setting the NBP basic interest rates, the Monetary Policy Council determines the profitability of the monetary policy instruments. Changes in the NBP reference rate set the course of the monetary policy and affect the market rates. The deposit rate and the lombard rate determine the fluctuation band for overnight interest rates in the interbank market, symmetric to the reference rate.

In 2010, the NBP basic interest rates stabilized within the corridor for fluctuations in short-term market rates of +/- 1.5 percentage points. The reference rate stood at 3.50%, the deposit rate at 2.0% and the lombard rate at 5.0%.

As of 1 January 2010, the MPC introduced a new basic interest rate, i.e. bill discount rate, to stand at 4.0% p.a.

The NBP manages the banking sector liquidity and implements the adopted monetary policy guidelines by carrying out open market operations. In 2010, the main open market operations involved the issuance of 7-day NBP bills, on a regular basis. The yield on those securities was determined at the level of the NBP reference rate.

In 2010, the NBP also carried out fine-tuning operations under the framework of *Confidence Package* in the form of repo transactions providing the banking sector with zloty liquidity. No foreign exchange swap operations were carried out with the aim of granting banks access to liquidity in foreign currency while at the same time absorbing zloty liquidity.

Access to all open market operations was granted to the banks complying with the terms and conditions set by the NBP, whereas access to main operations was also granted to the Bank Guarantee Fund. In 2010, sixteen commercial banks most active in the money market and foreign currency markets had the Status of a Money Market Dealer.

In 2010, short-term liquidity of the banking sector, determined as the balance of main operations, fine-tuning operations (including repo operations), foreign exchange swap operations and standing facilities averaged PLN 70,907 million, as compared with PLN 23,940 million in 2009. Thus, the annual average liquidity rose by PLN 46,967 million. In 2010 there was a steady increase in short-term banking sector liquidity as compared to 2009.

In the year 2010, commercial banks made use of standing facilities put at their disposal, which facilitated current liquidity management. Banks were able to cover liquidity shortages via marginal lending facilities and to deposit excess funds with the NBP via deposit facility.

Table 1. Main open market operations, repo operations, FX swaps and standing facilities in 2001 – 2010 (annual average in PLN millions)

Period	NBP bills	Repos	FX swaps	Standing facilities		
				Deposit facility	Marginal lending facility	Balance (deposit-credit)
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	-89
2001	14 701			715	234	481

- the values are quoted in annualized terms in the reserve maintenance periods

Source: NBP

The reserve requirement system was an additional instrument used by the NBP in order to moderate the fluctuations of short-term interest rates and stabilize the banking sector liquidity. Thereby the banks were obliged to maintain an average balance of funds in their accounts with the NBP in the reserve maintenance period at a level not lower than the amount of the required reserve.

From 1 January to 30 December 2010, the reserve requirement ratio was 3.0%. As of 31 December 2010, the Monetary Policy Council increased the reserve requirement ratio by 50 basis points to 3.5%, which resulted in a higher level of the required reserve and decreased banking sector liquidity. Following the MPC decision, the reserve requirement ratio resumed its level effective before 29 June 2009.

The year 2010 featured lower volatility of the market interest rates as compared with 2008 Q4 and 2009. There was also a decrease in the volatility of the POLONIA rate, measured by standard deviation. The average absolute POLONIA's deviation from the reference rate was 69 bps in 2010 versus 89 bps in 2009, while its volatility stood at 38 bps versus 51 bps.

In order to curb the volatility of POLONIA rate in 2010 the NBP carried out two fine-tuning operations, by issuance the NBP bills with 2-day and 3-day maturity.

Table 2. Market rates in 2001 – 2010

Period	Average reference rate (%)	Deviation of rates from reference rate in basis points (annual average)					Average deviation of bank's current accounts from required reserve (PLN millions)
		O/N	SW	2W	1M	POLONIA	
2010	3,50	49	17	10	7	69	16
2009	3,77	69	23	14	11	89	27
2008	5,72	30	16	19	30	32	38
2007	4,40	19	9	11	16	23	36
2006	4,06	10	6	6	7	16	35
2005	5,34	21	6	6	9	29	28
2004	5,79	40	11	10	15		24
2003	5,67	28	8	7	9		25
2002	8,82	90	60		32		43
2001	16,13	142			42		151

- average reference rate was weighted by its duration

- deviations of rates from the reference rate were calculated on uniform basis of 365 days per year

Source: NBP

In 2010, the NBP conducted its activities in conditions of a steady increase in the banking sector liquidity as a result of autonomous factors' impact. An increase in liquidity specifically stemmed from such factors as purchase of foreign currencies by the NBP and transfer of payment from the NBP's profit to the State Budget.

The principal factors conducive to reducing the level of liquidity included: an increase in currency in circulation, increase in required reserve of banks (due to the expansion of deposit being the reference for the determination of the level of required reserve) and an increase in public sector deposits maintained in the accounts with the National Bank of Poland.

Whereas the banking sector continued to accumulate surplus liquidity, domestic financial markets showed a steady recovery and banks reduced their demand for repo operations pursued under the framework of *Confidence Package*, the NBP gradually limited their scope¹.

¹ Foreign exchange swap operations were available but they were not conducted in 2010.

1. Banking Sector Liquidity

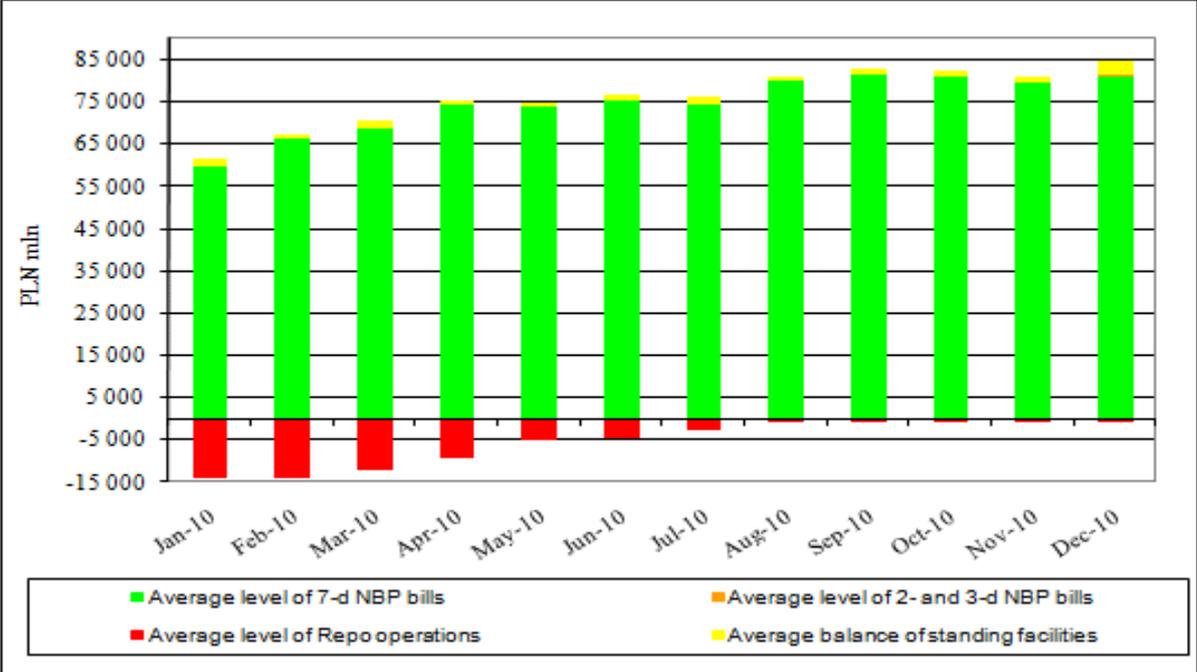
1.1. Liquidity Developments in 2010

In 2010, as in the preceding year, the banking sector in Poland conducted its operations in the context of the credit and liquidity crisis prevailing in major global financial markets. As an indirect result of turmoil in the foreign markets, the banks operating in Poland were less prone to offer uncollateralised loans and maintained lower loan exposure limits for their counterparties. Due to a large share of foreign capital in the Polish banking sector and participation of banks in financial groups, banks adjusted their operations primarily within the framework of those groups and only later they took into account the liquidity situation in the Polish money market. Banks preferred to keep their surplus funds in current accounts with the central bank or use the deposit facility, which guaranteed security of their funds. In consequence, they limited their demand for the NBP bills in weekly tenders.

Since the NBP launched in 2008 additional instruments under the *Confidence Package*, **short-term banking sector liquidity** was defined as the issue of the NBP bills and also included the volume of liquidity providing operations (REPO operations), foreign exchange swaps and standing facilities.

In 2010 there was a steady rise in short-term liquidity of the banking sector, to average PLN 70,907 million in 2010 as compared with PLN 23,940 million in 2009. The following figure shows the development of short-term liquidity in 2010 in average monthly terms.

Figure 1. Short-term liquidity of the banking sector in 2010 (PLN millions)



Source: NBP

In 2010, banking sector liquidity grew primarily due to the purchase by the NBP of foreign currencies from the funds originating from the European Union budget (structural funds and Common Agricultural Policy) and purchase of foreign currencies from the Ministry of Finance's foreign currency account maintained with the NBP. Between January and December 2010 the NBP purchased foreign currencies for a total of PLN 55,229 million, which increased the zloty funds in the money market.

On 29 July 2010, a payment from the NBP 2009 profit was transferred to the State Budget in the amount of PLN 3,957 million, what caused the growth of the banking sector liquidity.

On the other hand, the principal factors conducive to reducing the level of surplus liquidity in 2010 included an increase in currency in circulation (3.8% in December year-on-year) and expansion in the required reserve of banks.

Some part of liquidity decline resulted from the expansion in public sector deposits maintained in the accounts with the National Bank of Poland (term deposits of the Ministry of Finance and some other ministries, current account of the State Budget).

As mentioned above, in 2010, the NBP carried out repo operations under the *Confidence Package*, which increased the zloty liquidity of the banking sector (by PLN 5,097 million on average). At the same time, no FX swaps, providing the banking sector with liquidity in foreign currency (and absorbing zloty liquidity) were carried out.

In order to absorb surplus liquidity the central bank issued the NBP bills with a 7-day maturity as part of main open market operations, and bills with 2 and 3-day maturity as part of fine-tuning operations. In 2010, the average level of the NBP bills stood at PLN 74,968 million, of which average level of main operations and fine-tuning operations was PLN 74,920 million and PLN 48 million, respectively.

Whereas in a number of tenders banks' demand for the NBP bills was smaller than the supply predetermined in accordance with the forecast of the banking sector liquidity, in 2010 the banks used deposit facility with the NBP, which averaged PLN 1,036 million over the year.

In situation, when banks purchased the NBP bills in amount less than offered in the tender, surplus liquidity persisting in the interbank market caused that the POLONIA rate was below the NBP reference rate. Higher deviations between the short-term market rate (O/N) and the reference rate was observed in the second half of 2010.

In 2010, a rapid increase in banking sector overliquidity coincided with a steady recovery in the domestic financial markets. This led to a situation where banks' demand faded away for the REPO operations conducted under the *Confidence Package*². The NBP gradually limited the scope of these operations.

The NBP has discontinued operations with a 6-month maturity - as of April - , and with a 3-month maturity - as of October.

² FX swaps were not conducted in 2010, although they were available.

**Table 3. Changes in short-term liquidity – type of NBP operations
(average, in PLN millions)**

	Average level of the NBP bills (7 days)	Average level of the NBP bills (2 and 3 days)	Average level of repo operations	Average level of overnight deposits	Average level of marginal lending facility	Short-term banking sector liquidity
2010	1	2	3	4	5	1+2+3+4+5
I	60 003	0	-13 816	1 504	0	47 692
II	66 637	0	-13 750	454	-4	53 337
III	69 066	0	-11 763	1 179	0	58 482
IV	74 424	0	-9 147	362	0	65 639
V	74 212	0	-5 067	573	0	69 718
VI	75 714	0	-4 228	891	-1	72 376
VII	74 851	0	-2 493	1 142	0	73 499
VIII	80 279	0	-705	438	0	80 012
IX	81 585	0	-396	1 044	0	82 233
X	81 240	0	-154	1 042	0	82 129
XI	79 794	0	-75	1 071	0	80 791
XII	81 365	567	-14	2 597	-1	84 513
on average *	74 920	48	-5 097	1 036	0	70 906

**/- yearly average figures over required reserve maintenance period*

**/- balance of NBP bills for December comprises bills with 7-day and shorter maturity*

„+” - denotes the absorption of zloty liquidity from the banking sector

„-” - denotes the supply of zloty liquidity to the banking sector

Source: NBP

1.2. The Impact of Autonomous Factors on Changes in Banking Sector Liquidity

1.2.1. Purchase and Sale of Foreign Currencies by the NBP

In 2010, transactions of purchase and sale of foreign currencies by the NBP were a factor which affected the banking sector liquidity the most.

Purchase of foreign currencies by the NBP was related to:

- use of European Union funds - in the amount of PLN 37,259 million (in 2009 foreign currencies of the value of PLN 34,196 million were purchased);
- exchange for PLN of some funds deposited in the Ministry of Finance's foreign currency account with the NBP – in the amount of PLN 16,703 million;
- services provided to the central government entities, whose accounts are maintained with the NBP – in the amount of PLN 892 million,
- exchange of funds originating from loans granted by international financial organisations and repayments of loans granted to governments of other states - in the amount of PLN 367 million;
- exchange for PLN of some proceeds from bonds issued on foreign markets – in the amount of PLN 9 million;

Sale of foreign currencies by the NBP was a result of:

- exchange for foreign currency of the membership fee paid into the account of the European Commission (EC) – in the amount of PLN 15,185 million (as compared to PLN 12,209 million in 2009),
- services provided to the central government entities whose accounts are maintained with the NBP – in the amount of PLN 2,463 million.

FX operations carried out by the central bank under the purchase and sale of foreign currencies in 2010

Transactions related to the membership in the European Union

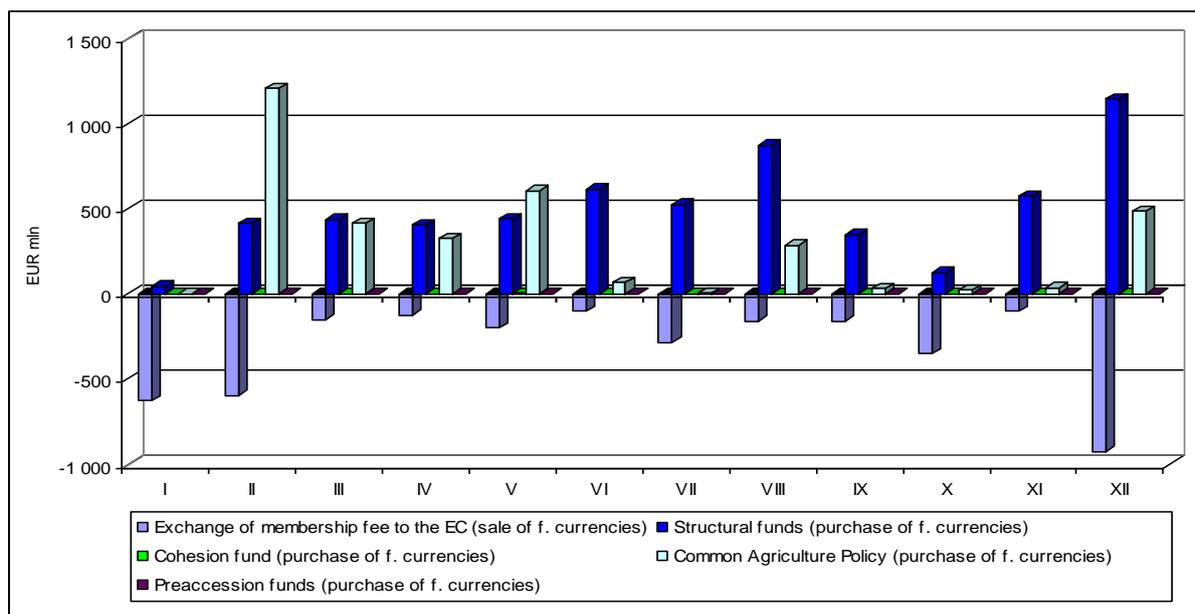
The EU funds, deposited in the accounts with the NBP, are at the disposal of the Ministry of Finance. Those funds are earmarked for programmes and projects relating to the regional development in order to equalize the economic differences between individual EU member states. The accounts into which the European Commission (EC) transfers EU funds are maintained in euro. The majority of funds are used by the end beneficiary in PLN, upon their conversion into the domestic currency by the NBP.

In 2010, similarly to the previous years, the funds being a part of the Common Agricultural Policy (CAP) were exchanged for zloty as a whole and the structural funds in more than 99% with the central

bank. In the case of the Cohesion Fund, over 99% of funds were supplied by the NBP in the foreign currency. Accordingly, in the following phase the funds were exchanged into PLN by commercial banks or payments under specific projects were made in EUR. It needs to be emphasised that the CAP funds and the structural funds represent a vast majority of the funds obtained from the EU budget.

The sale of foreign currencies by the NBP concerned the conversion of Poland's membership fee (paid in zloty to the EU budget). Such a conversion facilitates the EC to transfer funds to accounts with other central banks of member states, and further to the aid fund accounts. In 2010, the transactions of converting the membership fee into EUR represented an equivalent of EUR 3,780 million.

Figure 2. Foreign currency transactions related to the EU membership in 2010



„+” - denotes reduction in the banking sector liquidity

„-” - denotes increase in the banking sector liquidity

Source: NBP

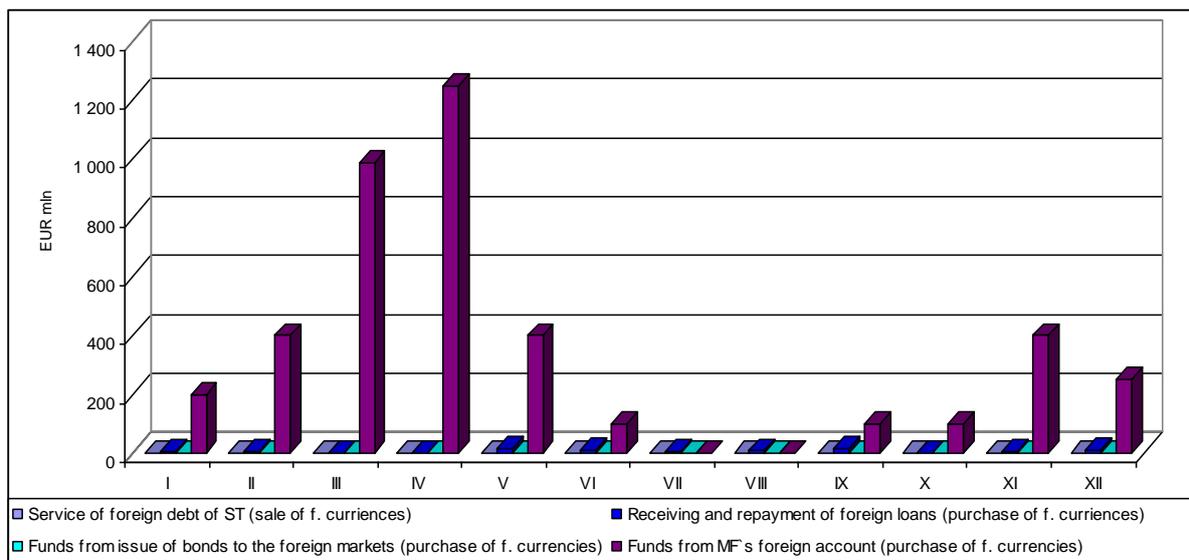
Foreign operations of the State Treasury

The banking sector liquidity was influenced by the operations related to servicing the State Treasury's foreign liabilities and receivables (whereby the NBP purchased and sold foreign currencies). In 2010, the Ministry of Finance did not purchase foreign currencies at the NBP, as the State Treasury's foreign liabilities were settled with the funds of the MF's foreign currency account with the central bank. The account was mostly provided with currencies originating from the issue of bonds for foreign markets (equivalent to EUR 6,812 million) and loans contracted from international financial institutions (amount equivalent to EUR 1,725 million).

In 2010, the transactions involving the sale of foreign currencies by the MF to the NBP (purchase of foreign currencies by the central bank) in the equivalent of PLN 17,079 million (i.e. EUR 4,281 million) accounted for a large share of their value.

The funds deposited in the foreign currency account covered the liabilities towards the creditors of the Paris Club (EUR 21 million), the London Club (EUR 9 million), and State Treasury foreign bonds (EUR 3,364 million), foreign loans, shares and other (EUR 738 million).

Figure 3. Foreign currency transaction of the Ministry of Finance at the NBP in 2010



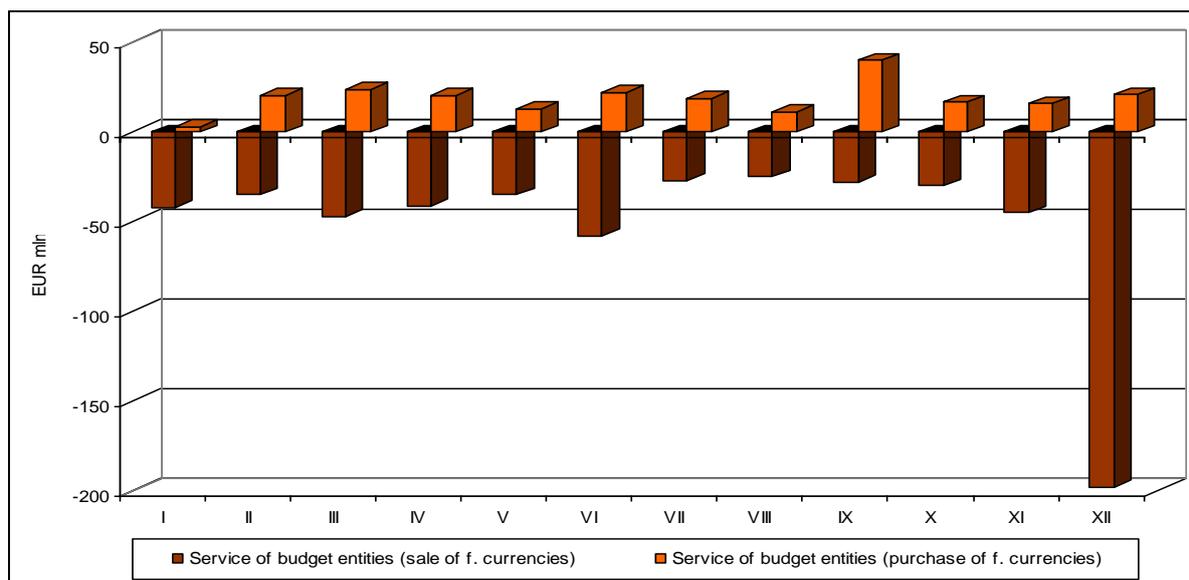
„+” – denotes reduction in the banking sector liquidity

„-” – denotes increase in the banking sector liquidity

Source: NBP

Apart from foreign currency operations related to servicing foreign liabilities and receivables of the State Treasury and transactions involving the use of EU funds, the central bank carried out foreign currency operations with entities authorised to purchase or sell foreign currencies at the central bank under the bank account agreement. In 2010, the value of such transactions, whereby the NBP purchased foreign currencies, amounted to equivalent of PLN 892 million, while the sale of foreign currencies by the central bank under this category of agreements amounted to equivalent of PLN 2,463 million.

Figure 4. Other foreign transaction carried out at the NBP in 2010



„+” – denotes reduction in the banking sector liquidity

„-” – denotes increase in the banking sector liquidity

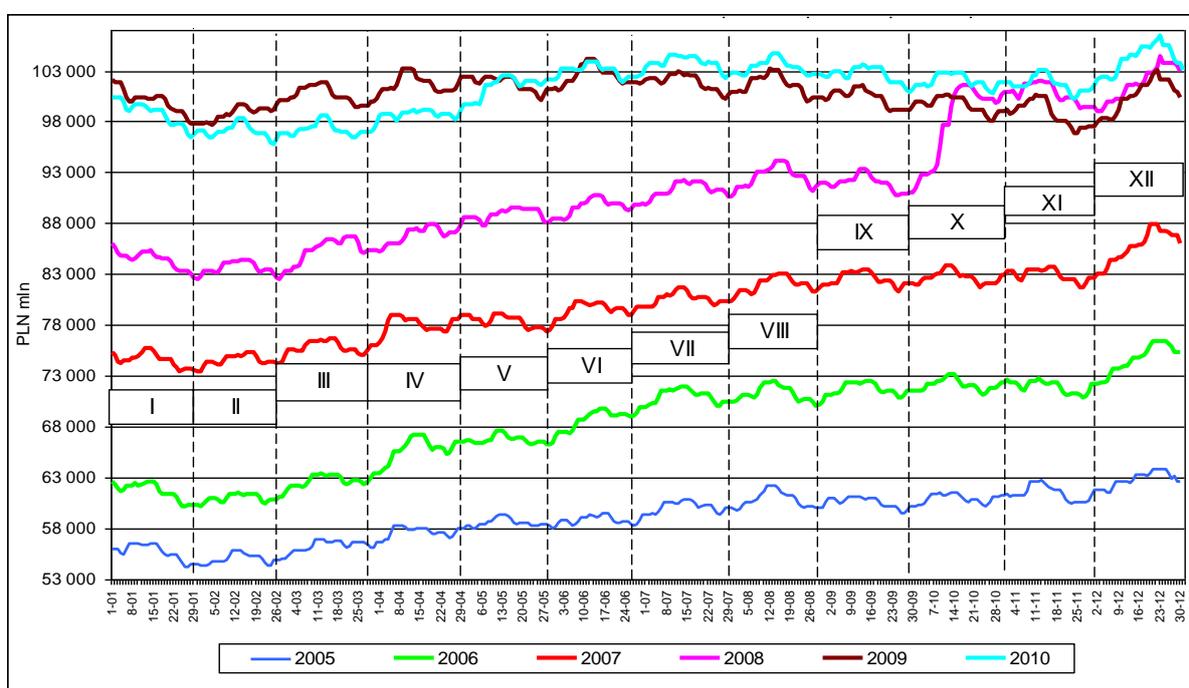
Source: NBP

1.2.2. Currency in Circulation

In 2010, similarly to the previous years, currency in circulation reflected the changes in factors of a seasonal nature (an increase in the currency level before official holidays and vacations). Following intensive disturbances relating to long-term seasonal trends during the crisis, in 2010 the balance of currency in circulation returned to classical trends observed in the preceding years.

In 2010, the level of currency in circulation averaged PLN 101,157 million, i.e. the average level increased by merely PLN 479 million or by 0.48% year-on-year. In contrast, the corresponding figure year earlier was 10.2 %.

Figure 5. Currency in circulation 2005 – 2010

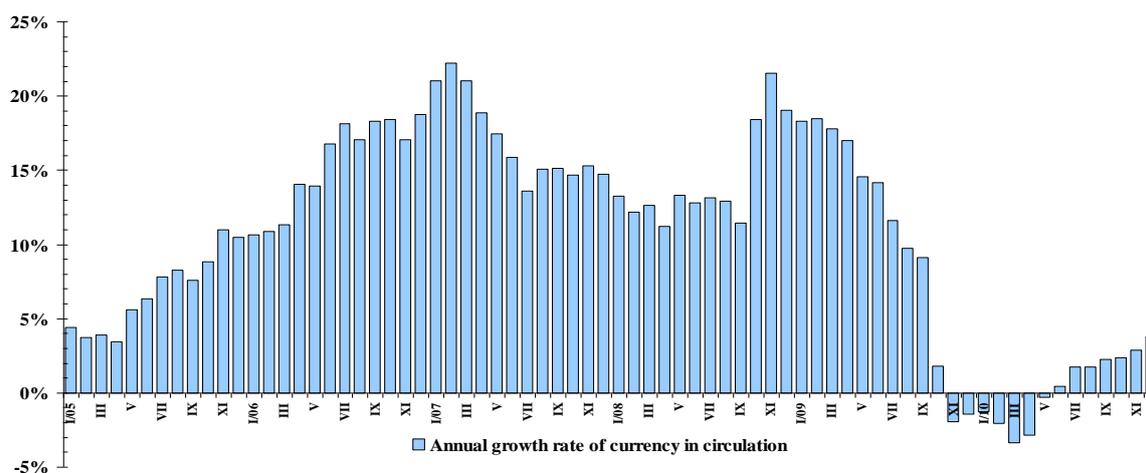


Source: NBP

Between January and May 2010 the annual growth of currency in circulation systematically decreased, while from June 2010 regular increases has been noticed (in December 2010 this ratio stood at 3.8 % year-on-year).

In December 2010, currency in circulation increased by PLN 2,387 million on average, which was similar to the pre-crisis levels (in 2009 it stood at PLN 1,422 million). The December growth in currency in circulation had seasonal nature and resulted from a higher demand for transactional cash (intensive shopping before Christmas and payouts of additional bonuses for some groups of employees).

Figure 6. Growth rate of currency in circulation in 2005 - 2010



Source: NBP

In addition, the rate of growth of cash was adversely affected by the development of non-cash payments.

1.2.3. Public Sector Deposits held with the Central Bank

The public sector deposits placed with the central bank include primarily funds held in current accounts and term deposits of the State Budget and deposits of other budgetary units.

The level of public sector deposits was the result of:

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

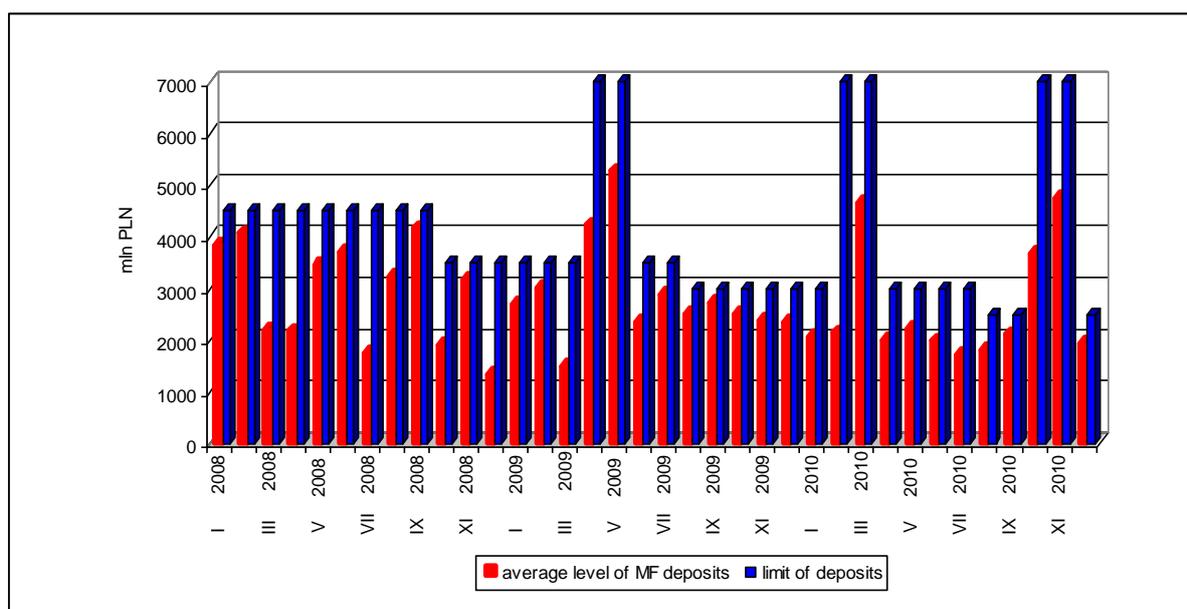
The averaged level of the public sector deposits in 2010 stood at PLN 5,850 million, i.e. rose by PLN 558 million year-on-year (PLN 5,292 million previous year).

Following 3 years of a steady decline, the public sector deposits maintained in the current accounts with the NBP have featured a rising path. In 2010, these stood at PLN 3,184 million (against PLN 2,316 million in 2009).

In 2010, the Ministry of Finance's term deposits with the NBP represented the largest item in the PLN structure of the public sector deposits (on average throughout the year MF term deposits amounted to PLN 2,565 million). In 2010, the share of the Ministry of Finance's PLN term deposits in total budgetary deposits amounted to 43.8%, compared with 53.3% in 2009.

The Ministry of Finance invests surplus funds of the State Budget on a temporary basis in the form of PLN term deposits. Those funds were deposited with the National Bank of Poland for a period of 1 to 7 days. The deposits placed for 7 days accounted for less than 60% of all the deposits.

Figure 7. Average level of the Ministry of Finance's term deposit with the NBP in consecutive months of 2008 – 2010



Source: NBP

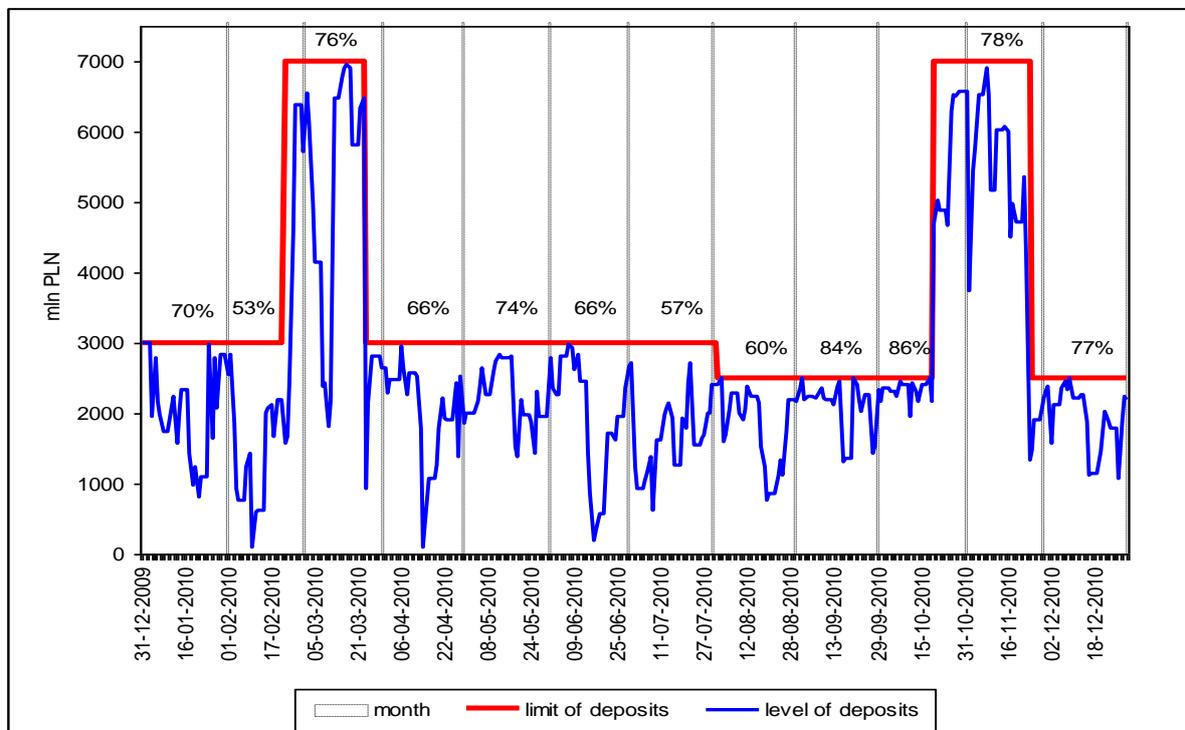
The average level of the Ministry of Finance's term deposits with the NBP in recent years has shown a downward trend (from PLN 3,8 billion in January 2008 to PLN 1,9 billion in December 2010). In the year 2010 (March, October and November) they rose on a temporary basis (to PLN 4,6 billion, PLN 3,7 billion and PLN 4,7 billion, respectively), which stemmed from a temporary increase in the limit for the Ministry of Finance's deposits with the NBP (to PLN 7,0 billion). Such a situation reflected the need to accumulate PLN funds by the Ministry of Finance on the occasion of the redemption of treasury bonds on 25 March 2010 (PS0310) and on 25 November 2010 (DS0509).

In 2010 Q1, the deposit limit was used in approximately 68%. As of Q2 the usage rose to near 74% for the three consecutive quarters. The highest use was reported in September – 83.9%, and in October 85.9%. The greater use of the limit in the second half of the year was linked with the positive zloty liquidity position of the State Budget.

In 2010, the Ministry of Finance maintained funds in zloty deposit accounts with the NBP whose average yearly value was PLN 2,565 million (PLN 297 million less than in 2009). The decrease in the value of the Ministry of Finance's deposits with the NBP is related to the decrease in the daily limit for

those deposits. In 2010, the value of deposits accounted for 72.2% of the set daily limit (in 2009 the ratio was approximately 78.5%).

Figure 8. The use of the limit for Ministry of Finance's deposits with the NBP in 2010



Source: NBP

In 2010, similarly to the previous year, some surplus funds of the State Budget were deposited on the interbank market through Bank Gospodarstwa Krajowego, for the average amount of PLN 6,132 million annually. Transactions concluded with the banks performing the function of the State Treasury Securities Dealer were in the form of conditional buy-sell-back transactions. They were collateralised with both treasury bills and treasury bonds. In addition, in 2010, the Ministry of Finance continued to deposit surplus funds in the interbank market of uncollateralised term deposits. The Ministry of Finance could also deposit surplus funds through Bank Gospodarstwa Krajowego as a deposit facility with the NBP (such activities were conducted in January, June, July, November and December 2010).

The Ministry of Finance transferred most funds to the banking sector in May and in the period from August to December 2010. It is worth pointing out that in 2010 the average level of the Ministry of Finance's deposits with commercial banks was nearly 50% higher year-on-year.

Pursuant to *Resolution No. 71/2005 of the Management Board of the NBP of 23 December 2005 on terms and conditions of accepting term deposits in PLN by the NBP, the maintenance periods and the interest rules*, other ministries (in addition to the Ministry of Finance) continued to deposit their surplus funds with the NBP. In 2010 those deposits developed on a similar level as in the preceding year to average PLN 98 million, i.e. decrease by PLN 2 million year-on-year.

2. Monetary Policy Instruments

2.1. Interest Rate

A primary instrument of the monetary policy is represented by the short-term interest rate, also referred to as 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 stem from the course of the monetary policy pursued by the central bank. Furthermore, the NBP deposit and lombard rates set the fluctuation band of the overnight interest rate in the interbank market.

In 2010, the Monetary Policy Council abstained from changing the NBP basic interest rates. Over 2010, the reference rate stood at 3.50%, the lombard rate at 2.00% and the deposit rate at 5.00 % .

2.2. Reserve Requirement

In order to stabilize the level of short-term interest rates, the NBP used the averaged reserve requirement system. It means that the banks were obliged to maintain an average balance of funds on their accounts with the NBP in the reserve maintenance period at a level not lower than the amount of the required reserve.

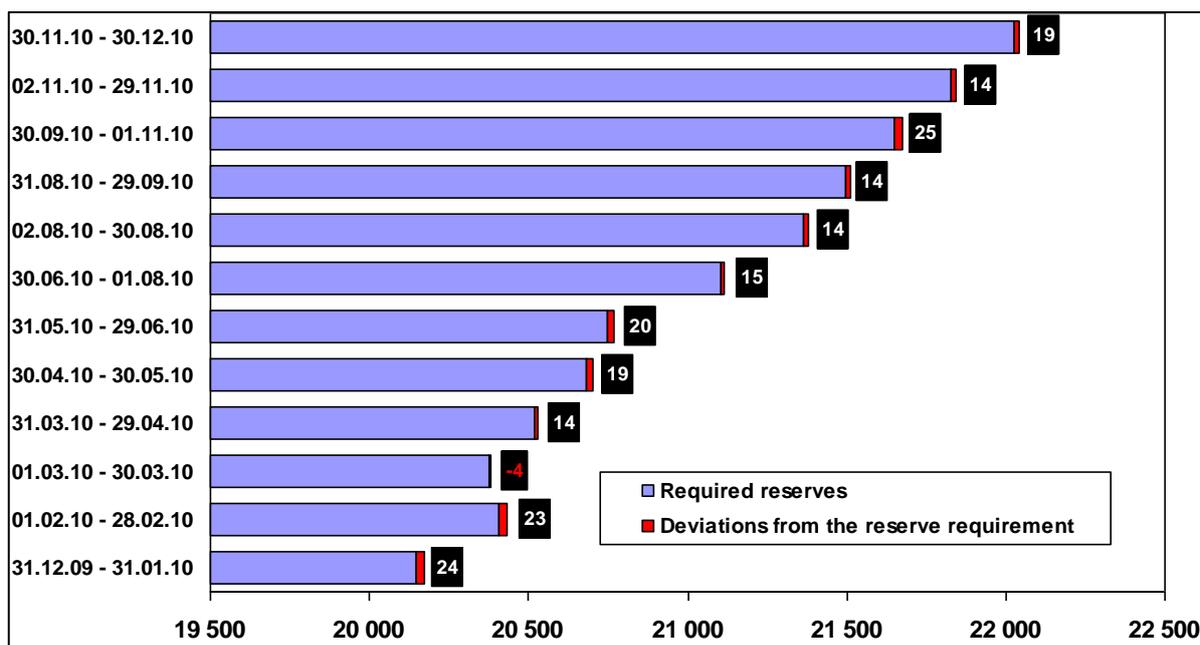
From 1 January to 30 December 2010, the main reserve requirement ratio was 3.0%. As of 31 December 2010, the Monetary Policy Council increased the reserve requirement ratio by 50 basis points, to 3.5% (the MPC resolution no. 9/2010 of 27 October 2010). Thereby, the main reserve requirement ratio returned to the level valid until 29 June 2009.

The required reserve ratio on funds obtained from sell-buy-back of securities stabilised at 0% in 2010.

Following the increase in the rate up to 3.5%, the required reserve as at 31 December 2010 stood at PLN 25,948 million, i.e. grew by PLN 3,922 million over the preceding reserve maintenance period which ended on 30 December 2010 (then the rate was 3.0%) and by PLN 5,799 million, i.e. by 28.8% over 31 December 2009.

The funds of the required reserve maintained by banks on their accounts with the NBP were remunerated at 0.9 of the NBP rediscount rate. In 2010, the average interest rate on the reserve requirement funds was 3.375%.

Figure 9. Changes in the required reserves and deviations from the reserve requirement in 2010 (in PLN millions)



Source: NBP

In 2010 the mean balance in the bank accounts deviated from the reserve requirement by PLN 16 million (0.08%) on average, i.e. was much below the average deviation in 2009 amounting to PLN 27 million. In all the reserve maintenance periods (except March) there was a minor surplus of the average level in banks' accounts in relation to the reserve requirement amounting on average from PLN 14 million in April (0.07%) to PLN 25 million in October (0.11%). A slight funds' deficit of PLN 4 million was recorded in March 2010 in the banks' account versus the required reserve, as 2 commercial banks had defaulted on their commitment to maintain the required reserve.

The maintaining minimal differences between the maintained and required reserve in specific reserve periods were result of:

- adequate asset management at banks,
- the use of instruments facilitating funds management in accounts with the NBP by banks (intraday credit facility, deposit facility and marginal lending facility).
- remuneration of reserve funds only up to the amount of the required reserve.

In 2010 noticed 7 cases of infringing the obligation to maintain the required reserve by banks - 6 of them occurred at commercial banks and 1 at a cooperative bank.

2.3. Open Market Operations

In 2010, the following open market operations represented the key instrument used to shape market interest rates:

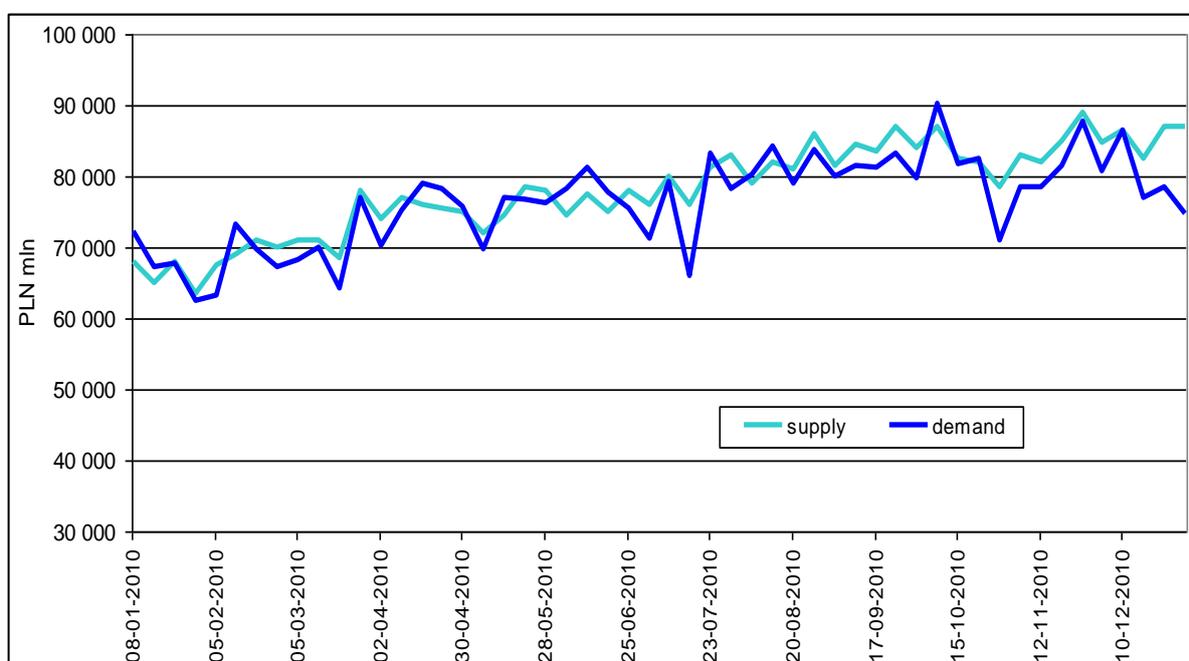
- main operations – in the form of a regular issue of the NBP bills;
- fine-tuning operations – in the form of repo operations and the issue of short-term NBP bills.

2.3.1. Main Operations

In 2010, the NBP carried out main open market operations, which consisted in issuing the NBP bills with a 7-day maturity. The NBP bills were issued on a systematic basis, once a week, on Fridays³. As in the previous year, the Bank Guarantee Fund as well as all banks that were members of the SORBNET system, operated an account in the Register of Securities with the NBP and were equipped with the ELBON application had access to main open market operations. Tenders for the NBP bills had a settlement period of t+0, and the yield equal to the NBP reference rate.

In 2010, the level of issue of the NBP bills averaged PLN 74,920 million, i.e. increased by PLN 43,047 million as compared with the average level of issuance in 2009. In 2010, the central bank offered for sale the NBP bills of PLN 4,052,500 million in the main operations. In that period the purchase offers received from banks amounted to PLN 3,973,352 million, while the value of offers accepted by the central bank amounted to PLN 3,934,342 million.

Figure 10. Demand and supply of the NBP bills in 2010



* - the figure includes only the values related to demand and supply of the NBP bonds with 7-day maturity.
Source: NBP

³ Since the timetable of open market operations was re-scheduled at the end of 2009, on 31 December 2009 the first issue of the NBP bills with 8-day maturity was conducted during the required reserve maintenance period in January 2010.

Whereas the cumulated values of supply and demand were on the similar levels in 2010, commercial banks and central bank had very different assessments of liquidity conditions in individual tenders. Hence, both overbidding and underbidding tended to occur. Within the year 2010 the ratio of commercial banks' demand in the individual tenders in comparison to the supply offered by the central bank fluctuated between 0.91 and 1.06. At the year-end banks, in anxiety of difficulties as regards settlement of transactions, submitted bids for the NBP bills were below the level offered by the central bank.

2.3.2. Fine-tuning Operations

Since the beginning of 2010 the banking sector continued to increase liquidity in condition of persisting distrust between counterparties in the interbank market. In view of the situation, the NBP continued to carry out, as part of the fine-tuning operations, repo transactions with the aim to provide the banking sector with liquidity. Those were long-term refinancing operations collateralised with eligible securities accepted by the NBP.

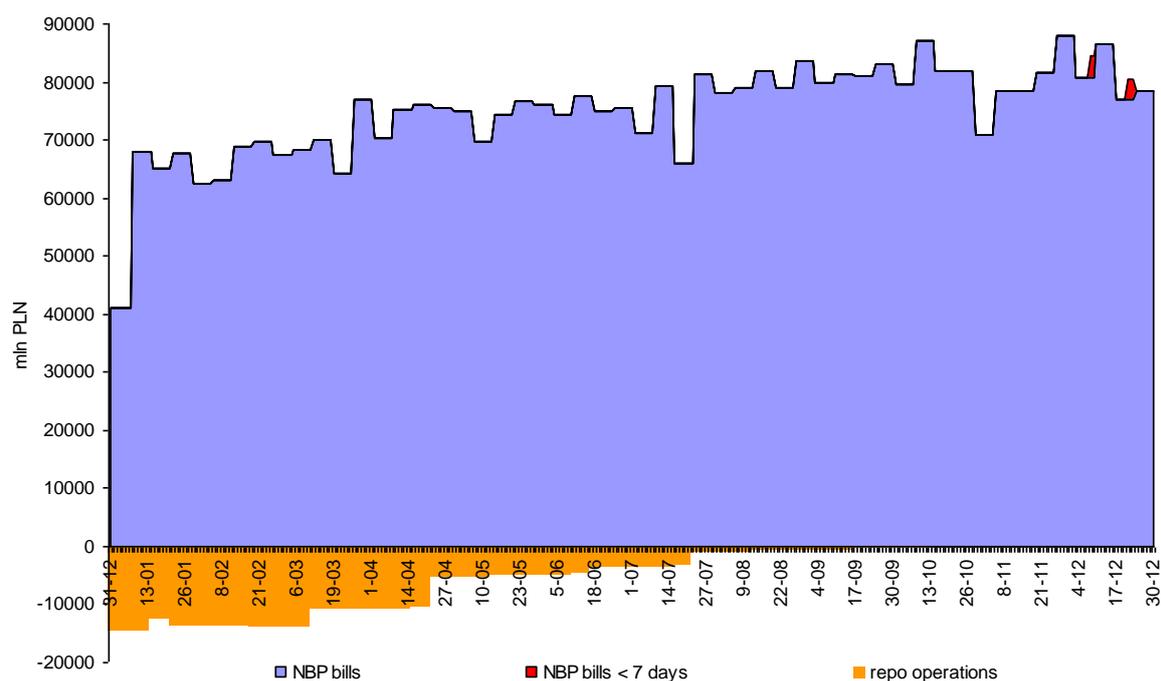
In 2010 Q1, the NBP conducted REPO operations with a 91-day maturity (every second Tuesday of a month) and with a 182-day maturity (every third Tuesday of a month). The transactions were settled within the t+2 period. As of the operations of 9 February 2010, liquidity providing operations were conducted with a pool, i.e. every time the NBP indicated the upper acceptable value of offers. As of Q2 the central bank conducted no operations with a 182-day maturity. In 2010 Q2 and Q3, three-month operations were continued. Furthermore, the NBP ceased to accept debt securities issued by the government of the Republic of Poland denominated in euro to collateralise liquidity providing operations. Given the continuously high liquidity in the banking sector the central bank terminated liquidity providing REPO operations in 2010 Q4.

Notwithstanding the above, the NBP maintained the changes introduced to the collateral system of operations providing the banking sector with PLN liquidity.

In 2010, the level of repo operations averaged PLN 5,097 million, i.e. decreased by 56% as compared to 2009, when its value reached PLN 11,456 million.

At the end of 2010, the NBP conducted two fine-tuning operations in order to absorb banking sector liquidity. On those occasions the NBP bills were issued with 2-day maturity (December 8th) and 3-day maturity (December 21st). The NBP determined the value of supply on those tenders. Commercial banks' demand ranged from 0.31 to 0.36 of an offer. The average level of the operations stood at PLN 48 million in 2010.

Figure 11. Operations carried out by the NBP in 2010



Source: NBP

2.3.3. Structural Operations

The aim of structural operations is to change the banking sector liquidity on a long-term basis. In 2010 the NBP conducted no such operations.

2.4. Standing facilities

Commercial banks carry out those operations on their own initiative in order to stabilise the interbank liquidity level and keep short-term market interest rates within the corridor set by the main interest rates of the NBP. With these operations banks could locate surplus liquidity at the NBP as a deposit facility and cover their short-term liquidity needs with use of marginal lending facility (with O/N maturity).

The lombard rate set the maximum price of NBP money, while also indicating the upper level of interbank market rates fluctuations with the deposit rate constituting the lower level for their fluctuations.

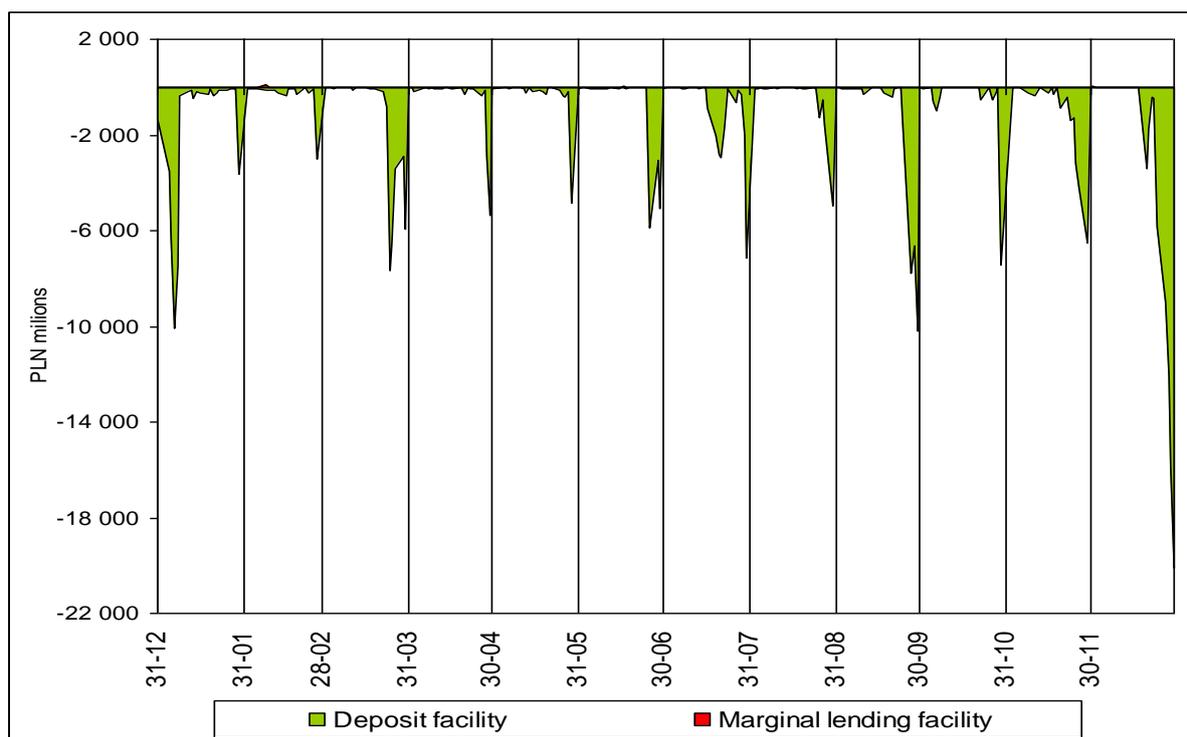
Deposit facility

In 2010, overnight deposits placed by banks with the NBP totalled PLN 378.2 billion. They were lower by 58% as compared to the O/N deposits placed in 2009. The average daily value of the deposit facilities placed by banks ranged between PLN 0.2 million and PLN 20.1 billion. The daily level of this category averaged PLN 1,036.1 million, against PLN 2,460.6 million year-on-year. Banks placed the largest funds on the last days of the required reserve maintenance periods.

Marginal lending facility

In 2010, when supplementing the liquidity in their current accounts with the NBP, banks were able to make use of marginal lending facility (lombard credit) collateralised with securities. The using of lombard credit totalled PLN 182.4 million annually against PLN 5.0 billion in 2009. Its daily use averaged PLN 0.5 million against PLN 13.8 million in 2009.⁴

Figures 12. Using of deposit facility and lombard credit over the required reserve maintenance period



Source: NBP

⁴ The averaged data were given per the required reserve maintenance periods.

2.5. Other operations

Intraday credit facility

Intraday credit facility is an instrument which facilitates banks' liquidity management during the business day as well as interbank settlements at the NBP. It is a non-interest bearing facility collateralised with securities that is taken and repaid on the same operating day. In 2010, daily injection of liquidity to banks with the use of this instrument ranged between PLN 14.3 billion and PLN 28.0 billion. The use of this facility rose by 29.4% as compared to 2009.

Intraday credit facility in euro

Intraday credit facility in euro is an instrument that ensures the liquidity of settlements in the SORBNET – EURO system. It is a facility collateralised with eligible T-bonds accepted by ECB that is taken and repaid on the same operating day. In 2010, daily injection of funds in euro to the bank ranged from EUR 2.3 million to EUR 3.5 million. The use of this facility rose by 67.9% as compared to 2009.

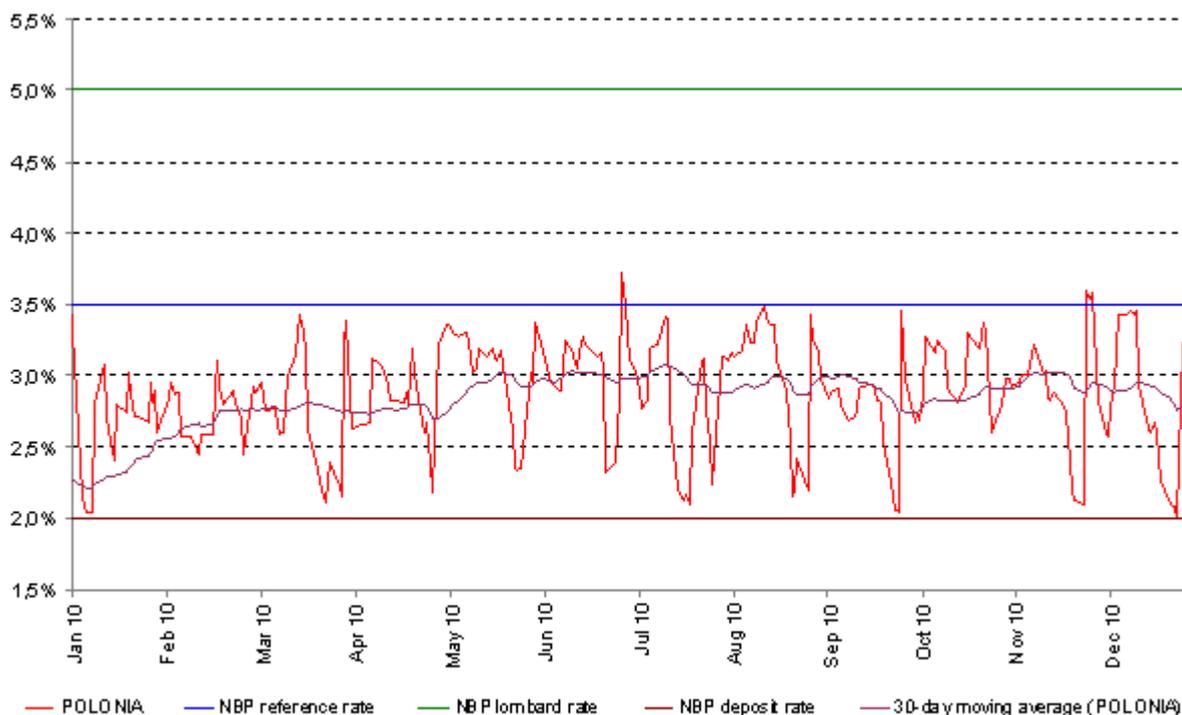
3. Polonia rate

In line with the *Monetary Policy Guidelines*, in 2010 the NBP strove - through open market operations - to make the POLONIA rate⁵ run close to the NBP reference rate.

As it was in 2009, the impact of open market operations on liquidity conditions in 2010 was limited. This reflected the persisting crisis-related phenomena, which affected the efficiency of open market operations conducted by the NBP. Those conditions limited the central bank's ability to determine the POLONIA rate close to the NBP reference rate.

Although the crisis-related phenomena continued in the first half-year of 2010, the domestic banking sector followed a path of gradual recovery. Thus, the banks moderated their preference to maintain daily excess of liquidity (in overnight term), underbidding occurred with less intensity⁶ in main open market operations and recourse to deposit facility was considerably reduced. Such conditions resulted in lower spread between the POLONIA rate and the NBP reference rate as well as greater stability of the mentioned market rate. Significant declines in the POLONIA rate were observed at the end of required reserve maintenance periods, as banks were conservative as regards the scale of participation in the last main operation for a given maintenance reserve period.

Figure 13. POLONIA rate and NBP rates in 2010



Source: NBP

⁵ POLONIA (eng. *Polish Overnight Index Average*) - average *overnight* market rate weighted by the volume of transactions in the market of uncollateralised interbank deposits. The NBP publishes the rate on the Reuters information service (NBPS) every day at 5.00 p.m.

⁶ A situation where banks' demand in the monetary policy operations tenders is lower than the supply offered by the central bank.

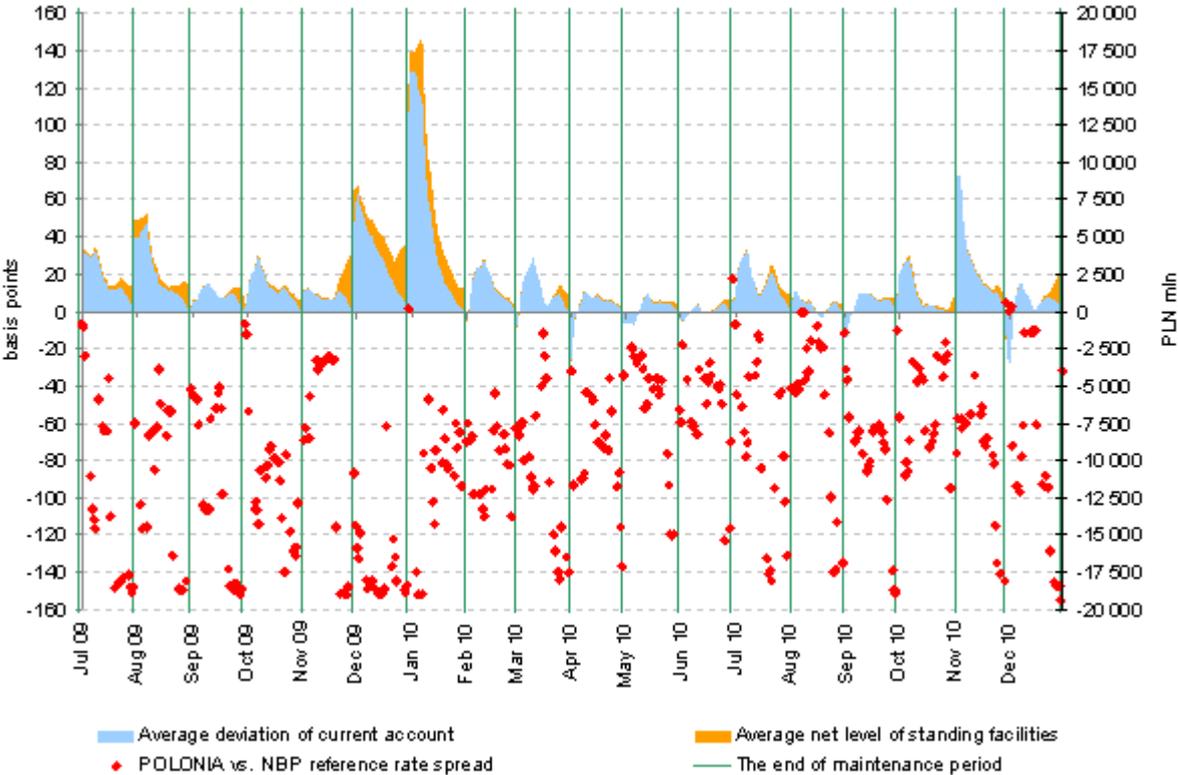
Improvement of the conditions in the banking sector observed in the first half-year 2010 was discontinued in the more recent months. As of July 2010 in some required reserve maintenance periods banks exhibited higher preference to maintain liquidity excess in the NBP accounts. This was reflected in a growth of both frequency and scale of the underbidding (i.e. the difference between the supply offered by the NBP in main open market operations and banks' total demand).

The underbidding could stem from the following factors:

- a) banks managed their own liquidity positions more prudently and preferred the overnight term. In effect, they did not place all the surplus in NBP bills of a longer (7-day) maturity, but kept liquidity buffers instead,
- b) the size of interbank loan limits mutually imposed by banks. The limits combined with the banks' preference to manage liquidity in the overnight term led to a situation where the interbank market continued to underperform. Contrary to a standard situation (i.e. prior to the financial crisis) when notifying the demand in main open market operations, banks accounted for the risk that no funds would be available via the interbank market, should liquidity shortage occur,
- c) rapid growth of liquidity surplus in the banking sector, resulting i.a. from large sales of foreign currencies by the MF in the NBP. In this context, banks could interpret the levels of main operations announced by the NBP as inadequate (too high) to the actual liquidity conditions (banks were not in possession of knowledge relative to the purchase of foreign currencies conducted by the central bank). Only *ex post* – in accordance with information on the liquidity conditions in the banking sector published by the NBP – could banks verify their own assessment of liquidity situation in the banking sector,
- d) large surplus funds held by the Minister of Finance, in 2010 on numerous occasions they exceeded PLN 10 billion (with the total amount of banking sector surplus liquidity at the end of 2010 exceeding PLN 80 billion). The funds were placed with commercial banks, most of them also in the form of overnight deposits. Banks, involved in the main open market operations conducted by the NBP could assume that the MF would distribute surplus funds in the interbank market, though it was difficult for them to unambiguously indicate the exact entities and terms. Hence, with the reduced limits for interbank deposits, in the forecasts of their own liquidity position upon the maturity of a main operation they could not be sure to obtain the funds originating from the MF surplus funds,
- e) banks willingness to maintain the most liquid assets in their balance sheets and to evade the need to take recourse to NBP lombard loan in the reporting periods (so-called quarter-end, year-end effects). Therefore, in the final main operations in the months which ended a quarter, banks' demand tended to be lower than the supply of NBP bills offered by the central bank. In particular this affected the period ending a calendar year, essential in determining banks' liquidity ratios.

During the required reserve maintenance periods, additional liquidity, which was not absorbed in the form of NBP main operations, was maintained by banks with the use of two instruments offered by the NBP. At the beginning of reserve maintenance periods banks preferred to maintain bigger amounts in current accounts with the central bank (above the level of a required reserve). At the end of the reserve maintenance periods banks deposited accumulated surplus funds with the central bank via the NBP's deposit facility. While assessing the average recourse to this instrument in the reserve maintenance periods, it could be pointed out as an indicator of the scale of underbidding in the main open market operations in respective reserve maintenance periods.

Figure 14. Volatility of the POLONIA rate compared to the deviation of the aggregate level of banks' current accounts with the NBP from the required reserve level, taking into account the use of NBP standing facilities in 2009-2010



Source: NBP

The stabilisation of the conditions in the domestic banking sector in 2010 contributed to lower spread between the POLONIA rate and the NBP reference rate. The deviation ratios were in fact lower than the corresponding figures for the preceding year. The average absolute deviation of POLONIA rate from the NBP reference rate in 2010 was 69 bps as compared to the average of 89 bps in 2009, whereas the average volatility (measured by standard deviation) was respectively 38 bps vs. 51 bps.

4. Glossary

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

Confidence Package – a set of actions taken by the National Bank of Poland on 14 October 2008 with the aim of enabling banks to obtain funding in zloty for periods longer than one day and to obtain funding in foreign currencies and improving banks' ability to obtain zloty liquidity by extending the range of collaterals eligible for operations with the NBP.

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 the market rate quoted for that particular period.

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

Foreign exchange swaps - operations under which the 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.

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.

Main operations - operations used in the conditions of the banking sector liquidity surplus, consisting in the issue of the NBP bills, typically with 7-day maturity. They are basically conducted on a regular basis (once a week). During the tenders a fixed yield at the level of the NBP reference rate is binding. In the conditions of the banking sector liquidity shortage, the NBP may provide the banking sector with liquidity through repo transactions.

Money Market Dealers - banks that are the most active in the money and foreign exchange markets, with which the NBP enters into contracts on acting as the Money Market Dealer. Those banks have access to the main open market operations and to the fine-tuning operations. Money Market Dealers participate in the fixing of the WIBOR and the WIBID reference rate, provide the NBP with information concerning overnight transactions concluded on a given day which are the base for the POLONIA fixing.

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.

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 the NBP. It sets the ceiling for the growth in the overnight market rate.

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

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 reference rate determined by the Monetary Policy Council.

POLONIA rate - the POLONIA rate (*Polish Overnight Index Average*) was introduced by the 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 the NBP in the Reuters service on the NBPS page each day at 5.00 p.m.

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

Publication of information in the Reuters service - the NBP, by the Reuters service on the NBPM page, provided banks with information on the current market liquidity scenario, specifically concerning:

- banks' current accounts, deposit facility placed with the NBP and marginal lending facility (lombard credit) provided by the NBP, on a daily basis,
- level of required reserve during a specific reserve maintenance period,
- level of banks' current accounts during the required reserve maintenance period,
- forecasts of an average daily level of the current account in the period from the issue date of the NBP bills (within the confines of the main operations) until the day preceding their maturity. Information on the forecast average balance of the current account of banks is published on the website in the moment the decision on the value of bills offered by the NBP is taken.

On the NBPT page of the Reuters service information was also published on current auctions for NBP bills and repo operations. The outcome of tenders was posted on the NBPU page.

Repo operations - short- and long-term refinancing operations aimed at providing the liquidity of the banking sector collateralised with securities accepted by the NBP.

Reserve requirement - a monetary policy instrument used by the central bank, among others, to regulate the 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) on their accounts with the central bank.

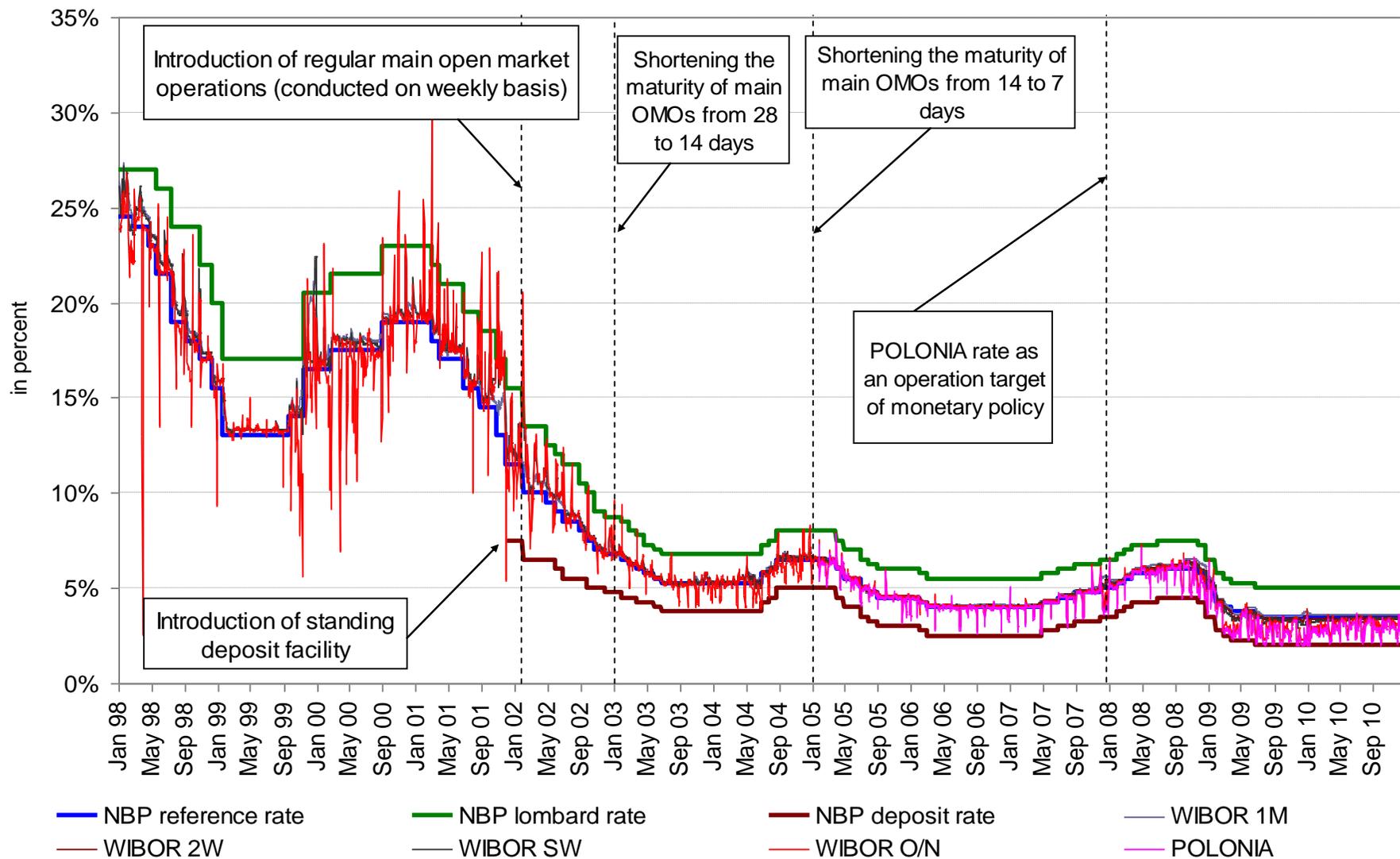
The obligation to maintain required reserve on accounts with the NBP concern banks, branches of credit institutions and branches of foreign banks operating in Poland. The required reserves are maintained in the averaged system. Banks are obliged to maintain an average balance of funds in their accounts with the NBP over the maintenance period at a level not lower than the value of the required reserve. The required reserve is calculated on the basis of returnable funds deposited in bank accounts

and the funds obtained from the sale of securities. The basis for the reserve's calculation does not include funds taken from another domestic bank, obtained from abroad for minimum two years and deposited in savings & credit accounts with building societies and in individual pension accounts. The required reserve is calculated and maintained in zloty. The value of the reserve calculated is diminished by banks by an equivalent of EUR 500 thousand.

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

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

Annex 1. Volatility of the shortest inter-bank interest rates in the interbank market against changes in open market operations in 1998-2010



Annex 2. NBP monetary policy instruments in 1990 – 2010

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

Annex 3. Tenders for the NBP bills in 2010

	Tender data	Maturity date	Maturity period (days)	Nominal value of sales offers (PLN mln)	Nominal value of offers to buy (PLN mln)	Nominal value of accepted offers (PLN mln)	Average yield on bills (annual 365/360)
1	08-01-2010	15-01-2010	7	68 000,00	72 267,04	68 000,00	3,50%
2	15-01-2010	22-01-2010	7	65 000,00	67 213,15	65 000,00	3,50%
3	22-01-2010	29-01-2010	7	68 000,00	67 704,66	67 704,66	3,50%
4	29-01-2010	05-02-2010	7	63 500,00	62 427,77	62 427,77	3,50%
5	05-02-2010	12-02-2010	7	67 500,00	63 172,22	63 172,22	3,50%
6	12-02-2010	19-02-2010	7	69 000,00	73 336,65	69 000,00	3,50%
7	19-02-2010	26-02-2010	7	71 000,00	69 864,33	69 864,33	3,50%
8	26-02-2010	05-03-2010	7	70 000,00	67 291,95	67 291,95	3,50%
9	05-03-2010	12-03-2010	7	71 000,00	68 268,22	68 268,22	3,50%
10	12-03-2010	19-03-2010	7	71 000,00	69 968,22	69 968,22	3,50%
11	19-03-2010	26-03-2010	7	68 500,00	64 326,22	64 326,22	3,50%
12	26-03-2010	02-04-2010	7	78 000,00	76 975,28	76 975,28	3,50%
13	02-04-2010	09-04-2010	7	74 000,00	70 318,30	70 318,30	3,50%
14	09-04-2010	16-04-2010	7	77 000,00	75 248,06	75 248,06	3,50%
15	16-04-2010	23-04-2010	7	76 000,00	78 888,26	76 000,00	3,50%
16	23-04-2010	30-04-2010	7	75 400,00	78 262,30	75 400,00	3,50%
17	30-04-2010	07-05-2010	7	75 000,00	75 751,10	75 000,00	3,50%
18	07-05-2010	14-05-2010	7	72 000,00	69 834,02	69 834,02	3,50%
19	14-05-2010	21-05-2010	7	74 500,00	76 965,00	74 500,00	3,50%
20	21-05-2010	28-05-2010	7	78 400,00	76 675,00	76 675,00	3,50%
21	28-05-2010	04-06-2010	7	78 000,00	76 165,04	76 165,04	3,50%
22	04-06-2010	11-06-2010	7	74 500,00	78 142,00	74 500,00	3,50%
23	11-06-2010	18-06-2010	7	77 500,00	81 179,52	77 500,00	3,50%
24	18-06-2010	25-06-2010	7	75 000,00	77 686,13	75 000,00	3,50%
25	25-06-2010	02-07-2010	7	78 000,00	75 551,23	75 551,23	3,50%
26	02-07-2010	09-07-2010	7	76 000,00	71 251,11	71 251,11	3,50%
27	09-07-2010	16-07-2010	7	80 000,00	79 176,99	79 176,99	3,50%
28	16-07-2010	23-07-2010	7	76 000,00	66 045,96	66 045,96	3,50%
29	23-07-2010	30-07-2010	7	81 300,00	83 238,00	81 300,00	3,50%
30	30-07-2010	06-08-2010	7	83 000,00	78 187,56	78 187,56	3,50%
31	06-08-2010	13-08-2010	7	79 000,00	80 373,46	79 000,00	3,50%
32	13-08-2010	20-08-2010	7	82 000,00	84 231,56	82 000,00	3,50%
33	20-08-2010	27-08-2010	7	81 000,00	79 035,05	79 035,05	3,50%
34	27-08-2010	03-09-2010	7	86 000,00	83 770,59	83 770,59	3,50%
35	03-09-2010	10-09-2010	7	81 500,00	79 876,02	79 876,02	3,50%
36	10-09-2010	17-09-2010	7	84 500,00	81 425,78	81 425,78	3,50%
37	17-09-2010	24-09-2010	7	83 500,00	81 160,80	81 160,80	3,50%
38	24-09-2010	01-10-2010	7	87 000,00	83 167,05	83 167,05	3,50%
39	01-10-2010	08-10-2010	7	84 000,00	79 716,56	79 716,56	3,50%
40	08-10-2010	15-10-2010	7	87 000,00	90 154,56	87 000,00	3,50%
41	15-10-2010	22-10-2010	7	82 500,00	81 841,73	81 841,73	3,50%
42	22-10-2010	29-10-2010	7	82 000,00	82 389,53	82 000,00	3,50%
43	29-10-2010	05-11-2010	7	78 400,00	70 964,66	70 964,66	3,50%
44	05-11-2010	12-11-2010	7	83 000,00	78 448,22	78 448,22	3,50%
45	12-11-2010	19-11-2010	7	82 000,00	78 514,56	78 514,56	3,50%
46	19-11-2010	26-11-2010	7	85 000,00	81 595,33	81 595,33	3,50%
47	26-11-2010	03-12-2010	7	89 000,00	87 859,20	87 859,20	3,50%
48	03-12-2010	10-12-2010	7	84 800,00	80 823,41	80 823,41	3,50%
49	08-12-2010	11-12-2010	2	10 000,00	3 636,11	3 636,11	3,50%
50	10-12-2010	17-12-2010	7	86 400,00	86 531,11	86 400,00	3,50%
51	17-12-2010	24-12-2010	7	82 500,00	77 023,22	77 023,22	3,50%
52	21-12-2010	24-12-2010	3	11 000,00	3 430,00	3 430,00	3,50%
53	24-12-2010	31-12-2010	7	86 300,00	78 428,28	78 428,28	3,50%
54	31-12-2010	07-01-2011	7	83 000,00	74 639,68	74 639,68	3,50%
	Total in 2010:			4 073 500,00	3 980 417,76	3 941 408,39	

* - date of payment for NBP bills on the tender date

* - under fine-tuning operations on 8 and 21 December 2010 NBP bills were sold with 2 and 3-d maturity, respectively.

Annex 4. Tenders for repo operations

	Tender date	Maturity date	Type of repo (in days)	Nominal value of offers to buy (PLN mln)	Nominal value of sales offers (PLN mln)	Nominal value of accepted offers (PLN mln)	Minimum rate (%)	Average rate (%)	Maximum rate (%)	Discount rate (%)
1	12-Jan-10	15-Apr-10	91	without pool	773,90	773,90	3,75	3,75	3,77	4,50
2	19-Jan-10	22-Jul-10	182	without pool	2263,04	2236,11	3,85	3,86	3,86	4,50
3	9-Feb-10	13-May-10	91	350	422,81	350,00	3,76	3,85	3,87	4,50
4	16-Feb-10	19-Aug-10	182	100	150,29	100,00	3,90	3,94	3,96	4,50
5	9-Mar-10	10-Jun-10	91	3000	480,25	480,25	3,75	3,77	3,88	4,50
6	16-Mar-10	16-Sep-10	182	400	643,26	400,00	3,85	3,88	3,96	4,50
7	13-Apr-10	15-Jul-10	91	400	426,34	400,00	3,80	3,89	3,95	4,50
8	11-May-10	12-Aug-10	91	250	228,30	228,30	3,78	3,90	3,95	4,50
9	8-Jun-10	9-Sep-10	91	100	71,05	71,05	3,76	3,83	3,85	4,50
10	13-Jul-10	14-Oct-10	91	100	39,01	39,01	3,78	3,80	3,81	4,50
11	10-Aug-10	10-Nov-10	90	100	87,61	87,61	3,80	3,80	3,80	4,50
12	7-Sep-10	9-Dec-10	91	100	49,49	49,49	3,78	3,79	3,80	4,50

* payment date T+2,

** in January 2010 banks were supplied to the amount of notified demand (without pool)

Annex 5. Agreements with the Ministry of Finance

Agreement on purchase and sale of foreign currencies – an agreement laying down the rules and terms and conditions of transactions concluded between the Ministry of Finance and the NBP which pertain to purchase and sale of foreign currencies.

The agreement set out the following limits on FX transactions in 2010: the total amount of sale of foreign currencies by the NBP to the Ministry of Finance may not exceed the equivalent of EUR 4,100 million, the total amount of foreign currencies purchased by the NBP from the Ministry of Finance may not exceed the equivalent of EUR 6,500 million, whereas the accumulated absolute difference between the amount of foreign currencies sold and purchased as at the year-end may not exceed the equivalent of EUR 4,100 million and the accumulated absolute difference between the amount of foreign currencies purchased and sold as at the year-end may not exceed the equivalent of EUR 4,300 million.

Agreement on PLN term deposits placed by the Ministry of Finance with the NBP – pursuant to the Public Finance Act, the Minister of Finance is competent to place interest bearing deposits with the National Bank of Poland or Bank Gospodarstwa Krajowego in the event of temporary surplus of funds in the central current account of the State Budget. In 2010, the limit for the Ministry of Finance's deposits placed with the NBP counted per daily balance was as follows: PLN 3.0 billion in the period from 1 January to 21 February, PLN 7.0 billion in the period from 22 February to 23 March, PLN 3.0 billion in the period from 24 March to 31 July, PLN 2.5 billion in the period from 1 August to 19 October, PLN 7.0 billion in the period from 20 October to 23 November, and PLN 2.5 billion in the period from 24 November to 31 December.

Annex 6. Banks – Money Market Dealers in 2010

As of 1 January 2006, access to main open market operations was granted to all banks which:

- participate in the SORBNET system,
- have accounts with the Register of Securities with the NBP,
- have the ELBON application.

The rules governing participation in the main open market operations are set forth in the *Regulations for the NBP operating accounts and securities deposit accounts and for the handling of securities operations and their registration on accounts and deposit accounts thereof* introduced by Resolution No 29/2003 of the Management Board of the NBP of 12 September 2003 (as amended).

At the same time, it was resolved that access to fine-tuning operations would be granted to banks which were most active in the money and foreign exchange markets with which the National Bank of Poland entered into contracts for performing the Money Market Dealer's function.

Additionally, the Money Market Dealers perform the following functions:

- participate in the fixing of WIBOR and WIBID reference rates,
- provide the NBP with information on overnight transactions concluded on a given day on the basis of which the POLONIA rate is fixed,
- provide the NBP with information and data concerning bank's current and forecasted financial liquidity and the situation in the money, foreign exchange and bond markets.

Candidates for the function of the Money Market Dealer undergone evaluation process by the NBP on the basis of standard criteria of the Dealer Activity Index (IAD), comprising:

- the bank's potential in terms of settlements and the offer,
- the bank's activity in the interbank deposit market,
- the bank's activity in the market of repo and sell/buy/back transactions,
- the bank's activity in the market of interest rate derivatives (FRA, IRS) and in the FX swap market.

Money Market Dealers in 2010:

- | | |
|--|---|
| 1. Powszechna Kasa Oszczędności BP S. A. | 9. Bank Polska Kasa Opieki S. A. |
| 2. Bank Handlowy w Warszawie S. A. | 10. Kredyt Bank S. A. |
| 3. ING Bank Śląski S. A. | 11. RBS Bank (Polska) S. A. |
| 4. Bank BPH S. A. | 12. Raiffeisen Bank Polska S. A. |
| 5. Bank Zachodni WBK S. A. | 13. Societe Generale S. A. Oddział w Polsce |
| 6. Bank Gospodarstwa Krajowego | 14. Deutsche Bank Polska S. A. |
| 7. BRE Bank S. A. | 15. Bank Gospodarki Żywnościowej S. A. |
| 8. Bank Millenium S. A. | 16. BNP Paribas S. A. Oddział w Polsce |

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

Items	XII 2009	I 2010	II 2010	III 2010	IV 2010	V 2010	VI 2010	VII 2010	VIII 2010	IX 2010	X 2010	XI 2010	XII 2010
(PLN mln)													
CENTRAL BUDGET:													
revenues	278 088,68	24 213,08	40 022,85	59 274,21	82 477,85	98 559,55	115 788,36	141 619,58	162 585,90	183 933,15	207 047,57	229 754,19	252 790,16
expenses	298 910,21	26 966,81	55 113,27	79 765,78	106 874,89	128 948,69	151 053,68	174 593,92	197 157,95	220 932,95	246 270,70	269 513,90	295 323,37
deficit (-) / surplus (+)	-20 821,53	-2 753,73	-15 090,42	-20 491,57	-24 397,05	-30 389,13	-35 265,32	-32 974,35	-34 572,06	-36 999,80	-39 223,14	-39 759,71	-42 533,21
central budget funds	4 932,91	2 717,71	3 250,50	938,26	959,84	992,07	959,59	985,83	1 082,22	1 055,84	1 077,79	1 408,26	1 305,15
MF foreign currency account	886,10	17 543,04	14 231,23	6 117,90	2 616,35	3 285,02	1 842,33	8 083,46	8 522,73	11 204,51	10 396,53	6 772,26	129,15
MF zloty term deposit	3 000,00	2 842,00	6 375,00	2 640,00	2 010,00	2 775,00	2 725,00	2 409,00	2 363,00	2 173,00	6 567,00	2 303,00	984,00
CURRENCY IN CIRCULATION	100 344,81	97 084,42	96 875,66	97 811,56	99 747,72	102 069,75	102 673,26	102 747,89	102 333,99	101 113,93	101 825,79	101 195,59	103 065,50
CURRENT ACCOUNT	36 223,47	17 253,97	15 095,41	17 329,85	19 914,38	20 200,79	21 752,23	14 417,30	20 059,27	22 790,68	22 399,78	19 183,67	36 562,97
balance deviation from required reserves %/	16 075,29	218,25	433,74	-3 187,24	-767,39	636,32	650,27	447,43	-1 435,96	1 141,65	-48,09	-2 841,42	10 615,42
REFINANCING LOAN	1 101,49	1 107,10	1 112,17	1 008,35	1 013,33	1 018,47	930,29	919,88	924,55	822,08	826,27	830,32	728,94
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
rediscout	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	16 343,88	19 632,54	19 116,06	19 059,90	20 680,30	22 803,11	20 738,76	20 487,54	22 665,38	19 574,24	20 626,61	23 226,42	14 340,31
DEPOSIT FACILITY	1 329,00	3 656,54	2 998,36	30,00	45,00	50,00	65,00	7 166,18	0,00	0,00	7 440,25	0,52	500,80
OPEN MARKET OPERATIONS **/	26 455,93	48 721,66	53 502,78	66 254,23	69 854,80	71 163,02	72 115,77	77 349,20	83 172,92	82 990,94	70 827,56	87 809,71	74 639,68
repo (-)	14 528,49	13 706,11	13 789,17	10 721,05	5 145,20	5 002,02	3 435,46	838,36	597,67	176,11	137,10	49,49	0,00
NBP money market bills 7 days (+)	40 984,42	62 427,77	67 291,95	76 975,28	75 000,00	76 165,04	75 551,23	78 187,56	83 770,59	83 167,05	70 964,66	87 859,20	74 639,68
POLONIA turnover	3,56%	2,61%	2,45%	3,23%	3,21%	3,02%	3,72%	2,24%	3,43%	3,45%	2,60%	3,59%	3,23%
WBOR	1 906,00	2 763,00	5 088,00	3 659,00	5 319,00	4 175,00	3 736,00	1 095,00	3 314,00	2 590,00	3 663,00	4 819,00	187,00
O/N	3,92%	2,94%	3,02%	3,55%	3,31%	3,24%	3,65%	2,71%	3,32%	3,49%	3,39%	3,51%	3,63%
T/N	3,65%	3,11%	3,13%	3,59%	3,33%	3,31%	3,64%	3,27%	3,34%	3,50%	3,41%	3,50%	3,61%
SW	3,56%	3,29%	3,32%	3,40%	3,35%	3,41%	3,50%	3,34%	3,43%	3,46%	3,45%	3,45%	3,48%
2W	3,59%	3,39%	3,42%	3,46%	3,41%	3,44%	3,52%	3,45%	3,47%	3,50%	3,50%	3,48%	3,51%
1M	3,76%	3,62%	3,63%	3,63%	3,61%	3,62%	3,64%	3,60%	3,60%	3,61%	3,62%	3,61%	3,66%
3M	4,27%	4,19%	4,15%	4,10%	3,86%	3,86%	3,87%	3,82%	3,81%	3,84%	3,85%	3,88%	3,95%
12M	4,53%	4,50%	4,45%	4,41%	4,26%	4,25%	4,25%	4,23%	4,24%	4,26%	4,26%	4,30%	4,37%
WBID	3,62%	2,64%	2,73%	3,25%	3,01%	2,95%	3,35%	2,41%	3,02%	3,19%	3,09%	3,21%	3,33%
O/N	3,35%	2,81%	2,83%	3,29%	3,03%	3,01%	3,34%	2,97%	3,04%	3,21%	3,11%	3,20%	3,31%
T/N	3,36%	3,09%	3,12%	3,20%	3,15%	3,21%	3,30%	3,14%	3,23%	3,26%	3,25%	3,25%	3,28%
SW	3,39%	3,19%	3,22%	3,26%	3,21%	3,24%	3,32%	3,25%	3,27%	3,30%	3,30%	3,28%	3,31%
2W	3,56%	3,42%	3,43%	3,43%	3,41%	3,43%	3,44%	3,40%	3,41%	3,41%	3,42%	3,41%	3,46%
1M	4,07%	3,99%	3,95%	3,90%	3,66%	3,66%	3,67%	3,62%	3,61%	3,64%	3,65%	3,68%	3,75%
3M	4,33%	4,30%	4,25%	4,22%	4,06%	4,05%	4,05%	4,03%	4,04%	4,06%	4,06%	4,10%	4,17%
12M													
USD/PLN (fix)	2,8503	2,9083	2,9251	2,8720	2,9305	3,3132	3,3946	3,0731	3,1583	2,9250	2,8873	3,1308	2,9641
EUR/PLN (fix)	4,1082	4,0616	3,9768	3,8622	3,9020	4,0770	4,1458	4,0080	4,0038	3,9870	3,9944	4,0734	3,9603
EUR/USD	1,4413	1,3966	1,3595	1,3448	1,3315	1,2305	1,2213	1,3042	1,2677	1,3631	1,3834	1,3011	1,3361
official reserve assets													
(as at the end of the month)													
in PLN millions	226 859,2	247 458,50	249 053,90	244 786,60	259 574,20	286 569,50	290 100,00	286 269,90	293 965,00	288 523,10	287 926,4	302 321,60	277 186,1
in EUR millions	55 221,1	60 926,40	62 626,70	63 380,10	66 523,40	70 289,30	69 974,40	71 424,60	73 421,50	72 366,00	72 082,50	74 218,50	69 991,2
(-purchase) sale of foreign currency	-6 149,19	1 716,51	-5 631,44	-6 466,18	-7 368,03	-5 031,61	-2 603,54	-955,39	-3 912,85	-1 345,82	466,92	-3 516,50	-3 080,48

*/ - Average deviation of current account from the reserve required calculated cumulative from the beginning of reserve requirement period.

**/ - Open market operations are reported as at nominal value. Balance of this position includes both NBP bills and SWAP operations minus Repo operations.