Report 2009 –

Banking Sector Liquidity

Monetary Policy Instruments of the National Bank of Poland

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Glossary

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 excess of funds in the central current account of the state budget. In 2009, the limit for the Ministry of Finance's deposits placed with the NBP counted per daily balance was: PLN 3.5 billion in the period from 1 January until 19 April, PLN 7.0 billion in the period from 20 April until 24 May, PLN 3.5 billion in the period from 25 May until 31 July and PLN 3.0 billion in the period from 1 August until 31 December.

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 2009: the total amount of sale of foreign currencies by the NBP to the Ministry of Finance may not exceed an equivalent of EUR 4,300 million, the total amount of foreign currencies purchased by the NBP from the Ministry of Finance may not exceed an equivalent of EUR 4,300 million, whereas the accumulated absolute difference between the amount of foreign currencies sold and purchased as at the year-end may not exceed an equivalent of EUR 1,300 million.

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.

Co-operation between the Swiss National Bank, the European Central Bank and the National Bank of Poland in order to provide the market with liquidity in Swiss francs. The Swiss National Bank (SNB) and the European Central Bank (ECB) announced that they would participate in EUR/CHF foreign exchange swaps supplying the market with Swiss francs against euros. The operations were carried out with a term of 7-days at fixed rate. The National Bank of Poland (NBP) participated in weekly foreign exchange swaps between the SNB and the Eurosystem. The SNB supplied Swiss francs to the NBP against euros, while the NBP supplied its counterparties with Swiss francs against zlotys. The last foreign exchange swap operation in CHF/PLN was carried out on 26 October 2009.

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.

Early redemption of the NBP bonds – on 8 January 2009, the NBP Management Board passed Resolution No 1/1/OK/2009 on early redemption by the National Bank of Poland of 10-year floating interest rate bonds issued on 28 February 2002 with the redemption date set at 1 March 2012. Early redemption of bonds was carried out on 22 January 2009 through Krajowy Depozyt Papierów Wartościowych S.A. On the same day, the NBP provided the banking system with the amount of PLN 8,221 million, where PLN 7,816 million accounted for the nominal value of bonds and PLN 405 million for interest due to the holders of the bonds.

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. These transactions are collateralised with securities accepted by the NBP.

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. From the beginning of 2009 the average level of the banks' current account was published only after the tender for the NBP bills was closed as the operations were carried out without predetermining the pool of the NBP bills offered. As of 20.02.2009, when the NBP commenced tenders for the NBP bills with announcing the volume of supply thereof, information on the average balance of the current account of banks started to be published on the website 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. In 2009 repo operations had maturities of 91 and 182 days.

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 concerned 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.

Executive Summary

In 2009, the monetary policy of the National Bank of Poland was pursued in accordance with the *Monetary Policy Guidelines for the Year 2009*. The key objective of the policy, similarly to the previous years, was to maintain inflation in a mid-term horizon at 2.5% while supporting the sustainable economic growth.

The short-term interest rate is the monetary policy's primary instrument. Setting out 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 2009, the Monetary Policy Council decided on four occasions to decrease the NBP basic interest rates, including the reference rate, within the corridor for fluctuations in short-term market rates of +/- 1.5 percentage points. At the end of 2009, the reference rate stood at 3.50%, the deposit rate at 2.0% and the lombard rate at 5.0%. Those went down by 150 basis points year-on-year.

The NBP manages the banking sector liquidity and implements the adopted monetary policy guidelines by carrying out open market operations. In 2009, the main open market operations consisted in issuing on a regular basis 7-day NBP bills. The yield of those securities was determined at the level of the NBP reference rate.

In 2009, the NBP also carried out fine-tuning operations under the framework of the "Confidence Package" in the form of repo transactions providing the banking sector with zloty liquidity. Furthermore, foreign exchange swap operations were carried out with the aim of granting banks access to liquidity in foreign currency while absorbing at the same time zloty liquidity.

Access to all open market operations was granted to the banks complying with the terms and conditions set out by the NBP, whereas access to main operations was also granted to the Bank Guarantee Fund. In 2009, 15 banks which were the most active in the money market and the FX market had the status of a Money Market Dealer.

In 2009, short-term liquidity of the banking sector, calculated as the balance of main operations, repo operations, foreign exchange swap operations and standing facilities on average amounted to PLN 23,940 million, as compared with PLN 10,964 million in 2008. This means an increase in annual average liquidity by PLN 12,976 million.

In January 2009, under the framework of structural operations, the NBP decided to provide the banking sector with liquidity by early redemption of the NBP bonds in the amount of PLN 7,816 million.

In the year 2009, commercial banks made use of standing facilities put at their disposal, which facilitated current liquidity management. Banks were able to cover liquidity shortages using marginal lending facilities and to deposit excess funds with the NBP using deposit facility.

Table 1. Main open market operations, repo operations, FX swaps and standing facilities in 2001 – 2009 (annual average in PLN millions)

Period	NBP bills	Repos	FX swaps	Standing facilities		
				Deposit facility	Marginal lending facility	Balance (deposit-credit)
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

Source: NBP

Reserve requirement system was an additional instrument used by the NBP to limit the fluctuations in short-term interest rates and support the stabilisation of the banking sector liquidity. Under the reserve requirement system banks were obliged to maintain on their accounts with the NBP, over the reserve maintenance period, an average balance of funds at a level not lower than the required reserve.

During the period from 1 January until 29 June 2009, the reserve requirement ratio was 3.5%. As of 30 June 2009, the Monetary Policy Council cut the reserve requirement ratio by 50 basis points to 3%, which resulted in a lower level of the required reserve and increased banking sector liquidity.

The year 2009 was characterised by greater volatility of the market interest rates as compared with the previous year. The market interest rates substantially fluctuated and, at the same time, they were decreasing and approaching the NBP deposit rate. At the same time, the average absolute deviation of the POLONIA rate from the reference rate increased in 2009 (89 basis points as compared to 32 basis points in 2008).

Table 2. Market rates in 2001 – 2009

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 mln)
		O/N	SW	2W	1M	POLONIA	
2009	3,77	69	23			89	27
2008	5,72	30	16			32	38
2007	4,40	19	9			23	36
2006	4,06	10	6			16	35
2005	5,34	21	6			29	28
2004	5,79	40		10			24
2003	5,67	28		7			25
2002	8,82	90			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 a uniform basis of 365 days per year
Source: NBP

In 2009, the measures taken by the NBP were accompanied by successive increases in the banking sector liquidity as a result of autonomous factors, i.e. factors remaining beyond the central bank's control. An increase in liquidity was specifically stimulated by such factors as the balance of purchase and sale of foreign currencies and currency in circulation.

1. Banking Sector Liquidity

1.1 Liquidity Development in 2009

In 2009, the situation in the interbank market in Poland was affected by the continuing disturbances in major global financial markets. As in the fourth quarter of 2008, banks were less willing to grant unsecured loans in the interbank money market. Banks preferred keeping their surplus funds with the central bank on current accounts or using the deposit facility, which guaranteed security and instant access to their funds. In consequence, they limited the demand for the NBP bills in weekly tenders.

In 2009, with the aim of mitigating the consequences of disturbances, the NBP continued to use instruments providing banks with easier access to additional liquidity in zloty and foreign currencies (i.e. repo operations and foreign exchange swaps) under the "Confidence Package".

In the context of a considerable increase in the amount of currency in circulation in the fourth quarter of 2008 (by PLN 11,133 million) and rise in banks' required reserves (by PLN 1,446 million), in early 2009 the banking sector liquidity remained at a low level.

In order to increase the level of PLN funds available to banks, on 22 January 2009 the NBP redeemed bonds in the nominal amount of PLN 7,816 million, which resulted in a long-term increase in the banking sector liquidity.

Moreover, as of 30 June 2009 the Monetary Policy Council decided to reduce the reserve requirement ratio by 0.5 percentage point, from 3.5% to 3%, which released liquidity of PLN 3,319 million.

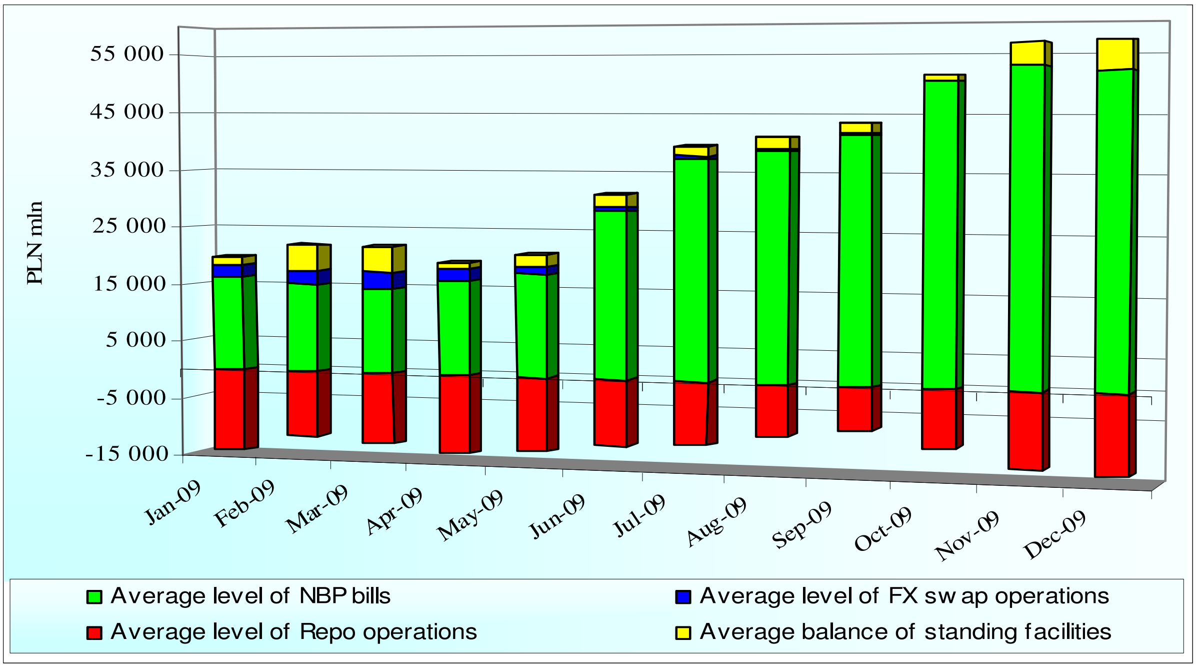
The second half of 2009 witnessed an unprecedented increase in the banking sector's liquidity. This was caused by the purchase by the NBP of foreign currencies from the European Union budget funds and the purchase of foreign currencies from the Ministry of Finance foreign currency account with the NBP (in 2009, the NBP purchased foreign currencies for the total amount of PLN 47,144 million, thereby increasing the zloty liquidity available to banks).

A gradual decrease in the currency in circulation was a factor increasing the banking sector liquidity. In December 2009, the annual change of currency in circulation was negative and stood at -1.4%.

As mentioned above, in 2009, the NBP carried out repo operations under the "Confidence Package", which increased the zloty liquidity of the banking sector. The annual average level of those operations was PLN 11,456 million. Simultaneously, FX swaps were carried out, which provided the banking sector with liquidity in foreign currency (and absorbed zloty liquidity). An average level of the swap operations stood at PLN 1,076 million in 2009.

The described factors resulted in successive growth of the banking sector short-term liquidity (in 2009, the average level of short-term liquidity amounted to PLN 23,940 million, which represented an increase by PLN 12,976 million year-on-year).

Figure 1. Short-term liquidity of the banking sector in 2009



Source: NBP

Absorbing surplus liquidity, the NBP issued 7-day bills under the main open market operations. In 2009, an average level of the NBP bills was PLN 31,873 million. However, that level could have been higher, considering the fact that in numerous tenders banks' demand for the NBP bills was smaller than the supply predetermined based on the forecast for the banking sector liquidity. This was connected with the continued preference of banks to use the deposit facility with the NBP. The average level of this instrument throughout the year amounted to PLN 2,461 million.

The average level of the marginal lending facility was PLN 14 million.

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

	Average level of NBP bills	Average level of repo operations	Average level of FX swaps	Average level of overnight deposits	Average level of marginal lending facility	**Short-term banking sector liquidity**
2009	1	2	3	4	5	**1+2+3+4+5**
I	**16 269**	**-14 120**	**2 169**	**1 471**	**-141**	**5 649**
II	**15 283**	**-11 362**	**2 296**	**4 378**	**0**	**10 595**
III	**14 759**	**-12 116**	**2 794**	**4 448**	**-1**	**9 885**
IV	**16 330**	**-13 390**	**2 108**	**915**	**-3**	**5 960**
V	**17 677**	**-12 560**	**1 246**	**2 076**	**0**	**8 439**
VI	**28 610**	**-11 260**	**635**	**2 121**	**-6**	**20 100**
VII	**37 413**	**-10 603**	**555**	**1 605**	**0**	**28 971**
VIII	**38 729**	**-8 712**	**555**	**1 797**	**0**	**32 368**
IX	**41 412**	**-7 261**	**498**	**1 547**	**-3**	**36 193**
X	**50 274**	**-9 777**	**147**	**862**	**0**	**41 506**
XI	**52 803**	**-12 870**	**10**	**3 832**	**0**	**43 775**
XII	**52 108**	**-13 432**	**0**	**4 998**	**0**	**43 675**
on average *	**31 873**	**-11 456**	**1 076**	**2 461**	**-14**	**23 940**

**/ - yearly average figures over the required reserve maintenance period*
„+" – denotes the absorption of liquidity from the banking sector
„-" – denotes the supply of zloty liquidity to the banking sector
Source: NBP

As a reaction to the changes in the interbank market's liquidity situation in specific months of 2009, the NBP modified the way of conducting open market operations. In the first weeks of 2009, regular open market operations were carried out without announcing the supply value (the NBP had ceased to announce the pool in the fourth quarter of 2008), and the value of the NBP bills issued was corresponded with the demand reported by banks. In the second half of February 2009, the NBP again started to announce the supply of the NBP bills issued. As the situation was becoming more stable in the global financial markets and in the interbank market in Poland, the pool was determined at levels which allowed to better balance the funds maintained by banks on their current accounts with the NBP against the level of the reserve requirement.

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 2009, 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 34,196 million (in 2008 foreign currencies of the value of PLN 22,643 million were purchased, respectively);

- exchange for PLN of some funds deposited in the Ministry of Finance’s foreign currency account with the NBP – in the amount of PLN 11,050 million;
- services provided to the central government entities whose accounts are maintained with the NBP – in the amount of PLN 1,432 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 351 million;
- exchange for PLN of some proceeds from bonds issued on foreign markets – in the amount of PLN 116 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 12,209 million (as compared to PLN 12,426 million in 2008),
- sale of foreign currencies to the Ministry of Finance for the servicing of the State Treasury’s foreign debt – in the amount of PLN 6,061 million,
- services provided to the central government entities whose accounts are maintained with the NBP in the amount of PLN 3,007 million.

FX operations carried out by the central bank under the purchase and sale of foreign currencies in 2009

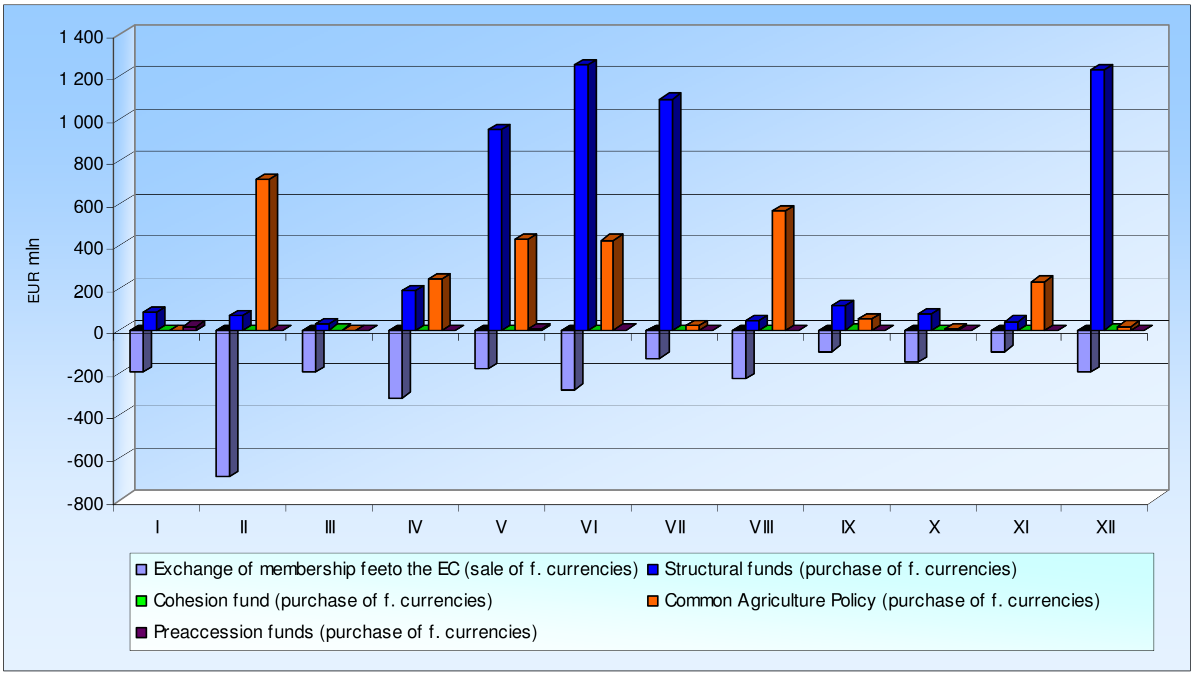
Transactions related to the membership in the European Union

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 specific member states of the European Union. 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 2009, similarly to the previous years, the funds being part of the Common Agricultural Policy (CAP) were exchanged for zloty as a whole and the structural funds in more than 95% at the central bank. In the case of the Cohesion Fund, 99% of funds were supplied by the NBP in the foreign currency. It means that in the following phase those funds were exchanged into PLN by commercial banks or payments under specific projects were made in EUR. However, 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 membership fee (paid in zloty to the EU budget). Such a conversion makes it easier for EC to transfer funds to accounts with other central banks of member states, and further to the aid accounts. In 2009, the transactions of converting the membership fee into EUR represented an equivalent of EUR 2,780 million.

Figure 2. Foreign currency transactions related to the EU membership in 2009



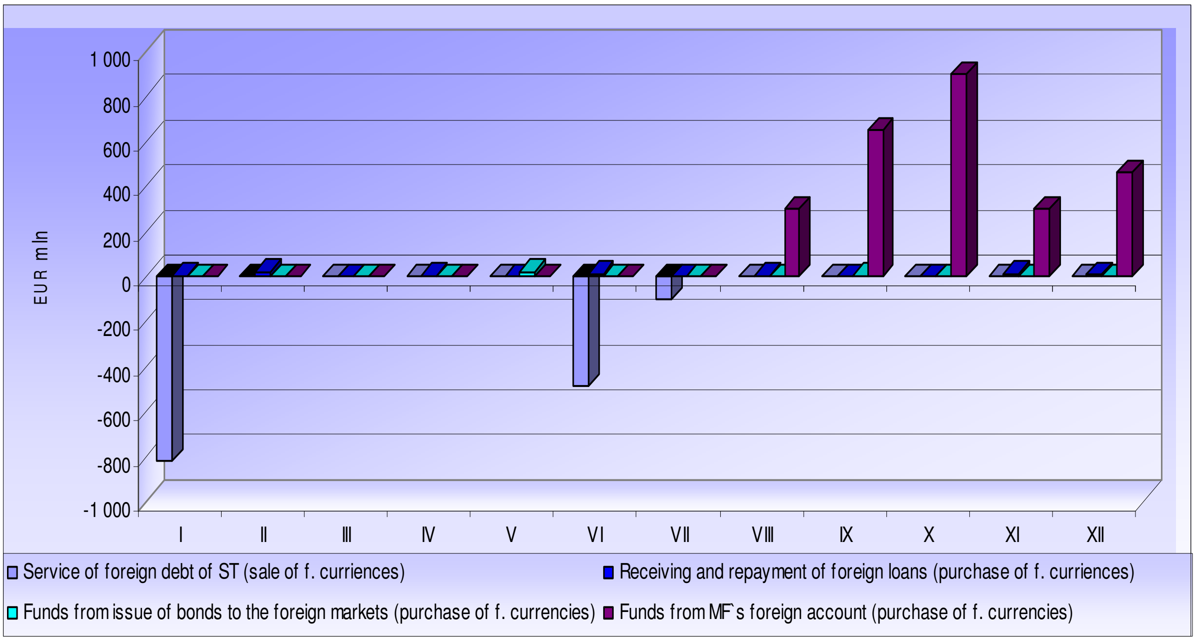
"+" – denotes reduction of liquidity
"-" – denotes increase in the banking sector liquidity
Source: NBP

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 (which consist in the purchase and sale of foreign currencies by the NBP). The value of transactions was PLN 11,517 million and PLN 6,061 million, respectively.
The State Treasury's liabilities were repaid to foreign creditors in a large part from the funds deposited in the foreign currency account of the Ministry of Finance with the NBP (EUR 3,300 million). The account was mostly credited with the proceeds from the issue of Treasury bonds onto foreign markets (the total amount represented an equivalent of EUR 5,976 million). In addition, the foreign currency account of the Ministry of Finance was supplied with funds originating from the loans taken from international financial organisations of EUR 2,555 million.
A part of the Ministry of Finance liabilities was covered with foreign currencies purchased by the central bank (EUR 1,422 million).

The funds deposited in the foreign currency account were used to cover the liabilities towards the creditors of the Paris Club (EUR 671 million), the London Club (EUR 38 million) and also State Treasury foreign bonds (EUR 1.957 million), foreign loans, shares and other (EUR 634 million).

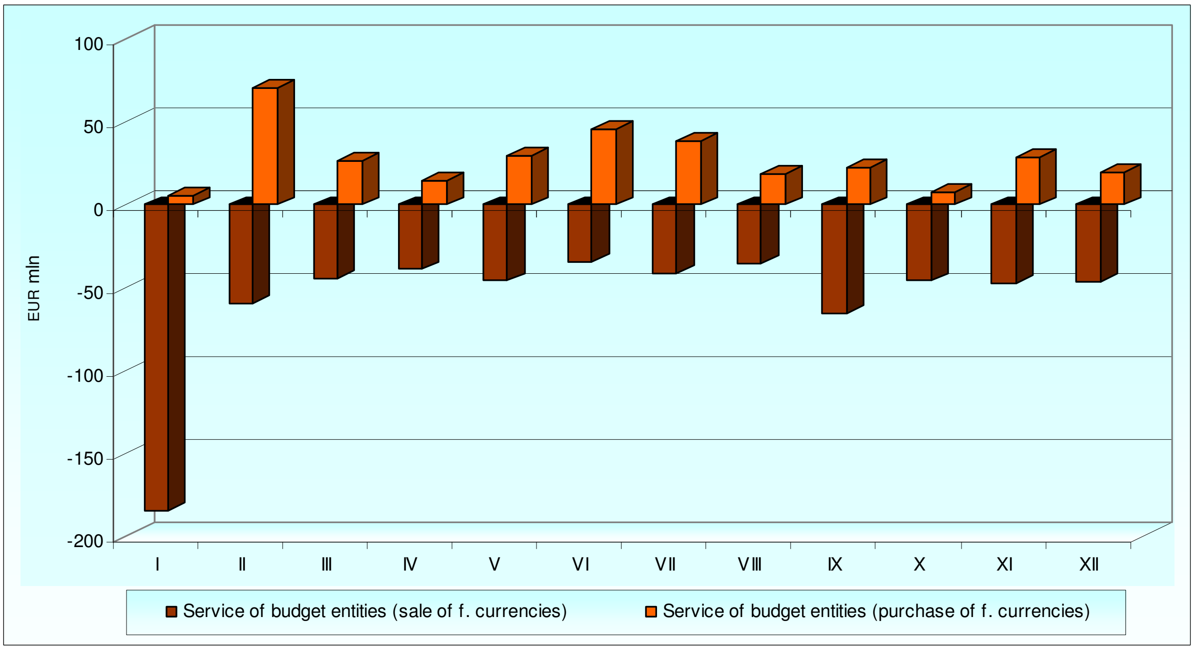
Figure 3. Foreign currency transactions of the Ministry of Finance at the NBP in 2009



"+" – denotes reduction in liquidity
"-" – denotes an 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 which were allowed to purchase or sell foreign currencies at the central bank under the bank account agreement.

Figure 4. Other foreign currency transactions carried out at the NBP in 2009



"+" – denotes reduction of liquidity
"-" – denotes increase in the banking sector liquidity
Source: NBP

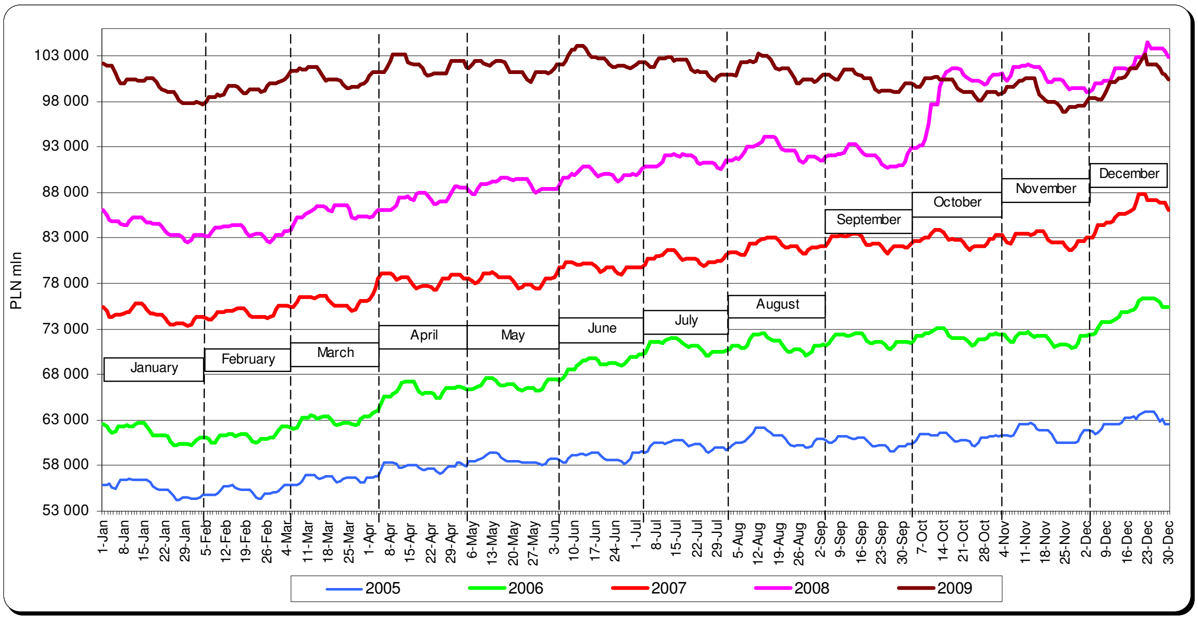
1.2.2 Currency in Circulation

In 2009, similarly to the previous years, the currency in circulation was influenced by the changes in factors of a seasonal nature (an increase in the currency level before official holidays and vacations). It needs to be mentioned that significant disturbances in long-term seasonal trends were also noted. Some extraordinary changes in the currency level which took place in the preceding year were reflected in the form of the so-called *base effect*[1].

A very high currency in circulation increase in 2008 resulted in a considerable decrease in demand for currency in 2009, compared with the past years. In 2009, the cash resources outside the banking sector decreased by 1.1%, which represented a visible disturbance in the trends and seasonal fluctuations in the currency in circulation, characteristic for the past years.

In 2009, the currency in circulation level amounted to PLN 100,673.0 million, which means an increase in the average level by PLN 9,346.0 million or by 10.2% year-on-year.

Figure 5. Currency in circulation in 2005 – 2009



Source: NBP

Throughout 2009, a systematic decrease in the annual growth rate in the currency in circulation was observed (during the period from January until September from 18.3% to 9.1%), which was noticeable especially in the last quarter of the year and a negative level of that ratio at the year end (i.e. in October: 1.8%, in November: -1.9%, in December: -1.4%).

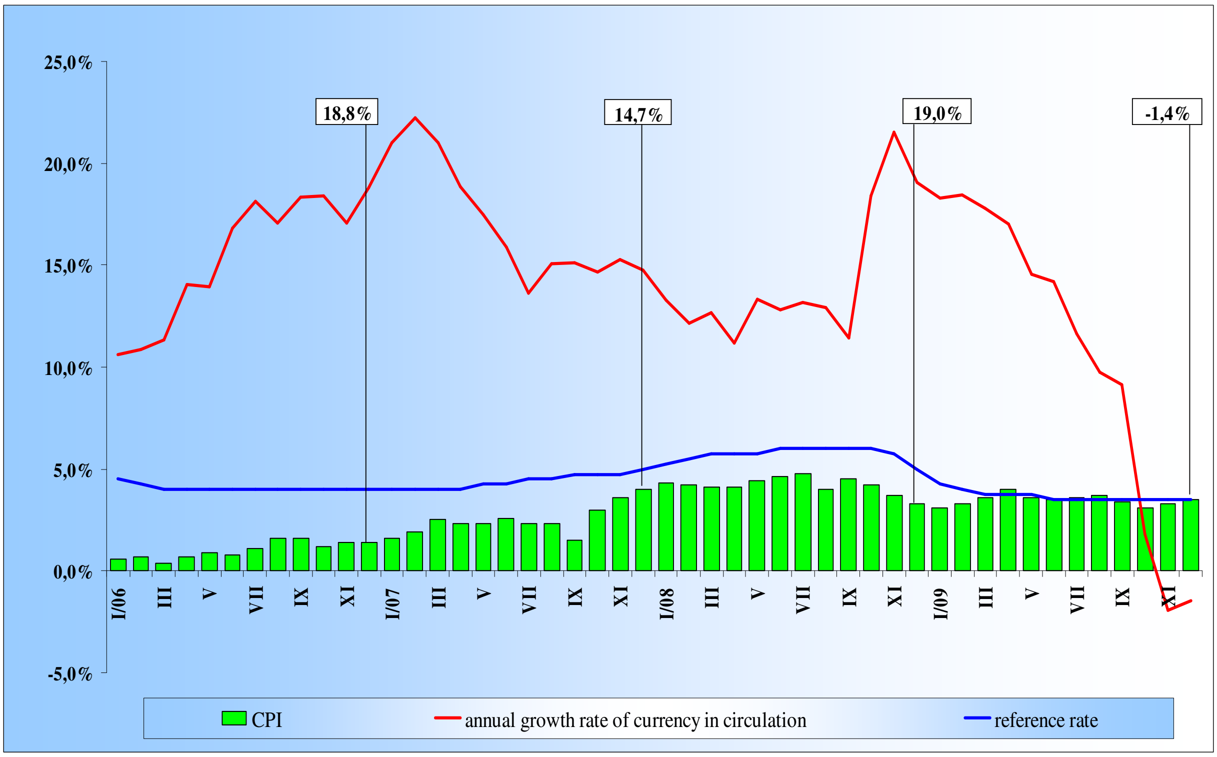
In December 2009, the increase in currency in circulation was higher year-on-year and amounted to PLN 1,422.1 million (in 2008 it stood at PLN 939.8 million). The December growth in cash was of a

[1] Cash withdrawals in mid-October 2008 for the amount exceeding PLN 8 billion, connected with the crisis situation in that period in international financial markets, resulted in the increase in average cash level over the month by nearly PLN 6 billion, which represents the largest growth over the last several years.

seasonal nature and was mostly caused by a higher demand for transactional cash (intensive shopping before Christmas and payouts of additional bonuses for some groups of employees).

It needs to be noted that in 2009 the decrease in an annual growth rate in currency in circulation was accompanied by a gradual weakening of the annual growth rate in households' term deposits[2]. It resulted, among others, from the lower interest rates on private individuals' term deposits caused by systematic cuts of the basic interest rates by the central bank in the first half of 2009, and also from the economic decline stemming from the international economic crisis which also adversely affected the growth rate of investments in the Polish economy. Throughout specific months of 2009, a systematic decrease in the share of currency in circulation, both in M1 and M3 monetary aggregates could also be observe.

Figure 6. The currency in circulation growth rate against inflation and NBP reference rate changes in 2006 – 2009



Source: NBP

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

[2] The annual rate of growth of households' term deposits with the original maturity up to 2 years went down from 49.8% in December 2008 to 5.3% in December 2009.

1.2.3 The Public Sector Deposits held with the Central Bank

The public sector deposits placed with the central bank include primarily funds held on current accounts and term deposits of the state budget and deposits of other budgetary units.

The level of public sector deposits was modelled by:

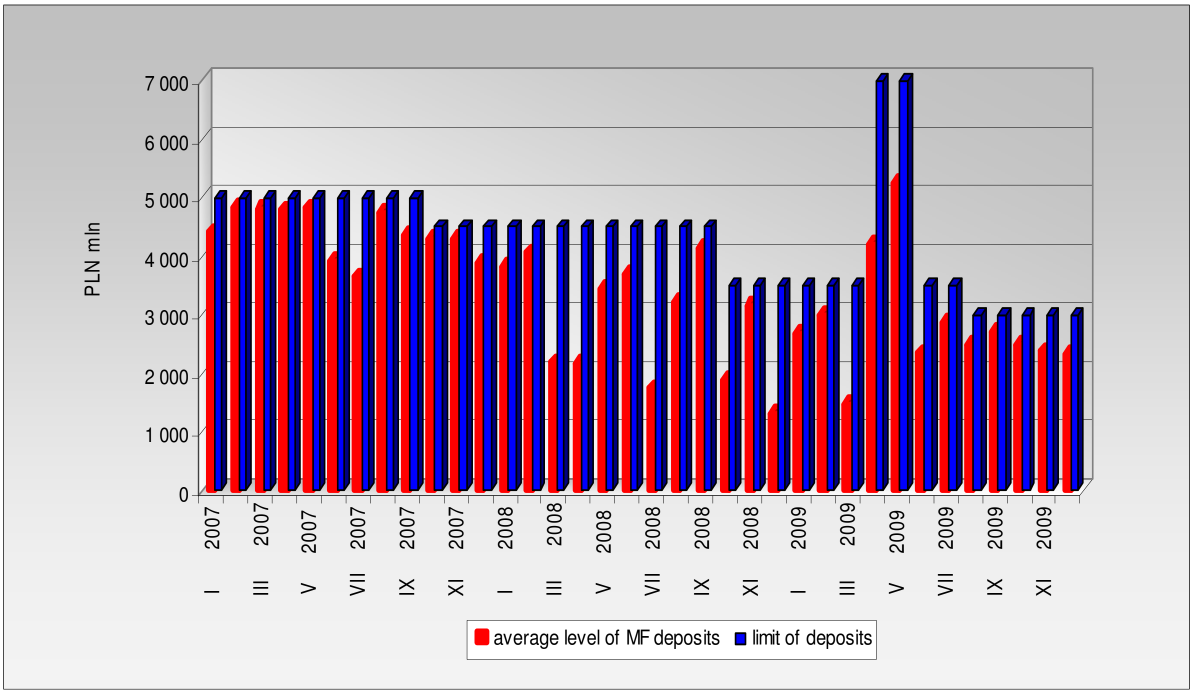
- changes in the volume of budgetary incomes and expenses,
- settlements due to issue and redemption of the State Treasury securities,
- payments resulting from the handling of other transactions connected with the state budget's borrowing needs,
- limits set out for the Ministry of Finance's PLN term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

An average level of the public sector deposits in 2009 stood at PLN 5,292 million, and represented a decrease by PLN 1,291 million year-on-year (PLN 6,582 million).
The level of public sector deposits held on the current accounts with the NBP demonstrated a downward trend in two consecutive years and reached PLN 2,316 million in 2009 (compared with PLN 3,430 million in 2008).

In 2009, 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 those deposits amounted to PLN 2,862 million). In 2009, the share of the Ministry of Finance's PLN term deposits in total budgetary deposits amounted to 53.3%, as compared with 43.3% in 2008.

The Ministry of Finance places on a temporary basis surplus funds of the state budget in the form of term deposits. Those funds were deposited with the National Bank of Poland for a period of 1 to 7 days, however the maturity of most deposits was 7 days.

Figure 7. The average level of the Ministry of Finance's term deposits with the NBP in consecutive months of 2007 – 2009



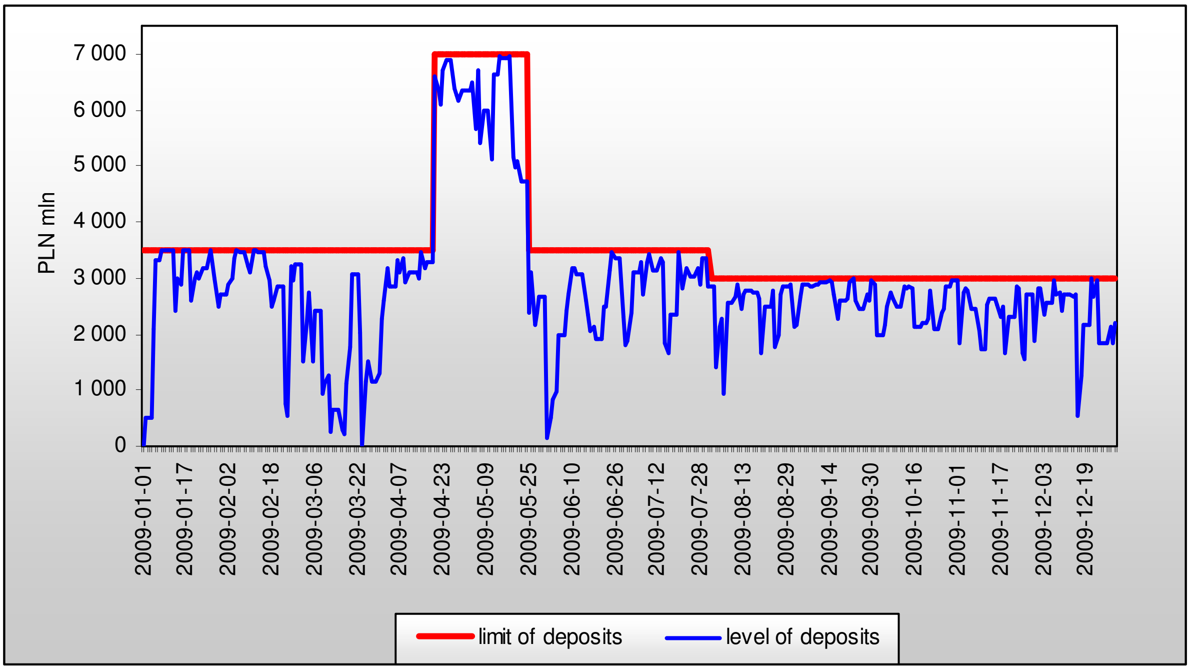
Source: NBP

An average level of the Ministry of Finance's term deposits with the NBP in the last years shows a downward trend (from PLN 4.4 billion in January 2007 to PLN 2.3 billion in December 2009). In the year 2009 (April and May) those rose on a temporary basis (to PLN 4.2 billion and PLN 5.2 billion, respectively), which was connected with a temporary increase in the limit for the Ministry of Finance's deposits with the NBP (to PLN 7.0 billion). Such a situation was created by the need to accumulate funds by the Ministry of Finance in connection with the redemption of treasury bonds (DS0509) on 25 May 2009.

From July until December 2009, the limit for deposits was being evidently used to a greater extent (more than 82.5%) compared with the past months (January – June 2009) for which the figure was 67.7%. The greater use of the limit in the second year-half was linked with the positive zloty liquidity position of the state budget.

In 2009, the Ministry of Finance maintained the funds whose average yearly value was PLN 2,862 million (reduced by PLN 29 million year-on-year) in zloty deposit accounts with the NBP. 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 2009, the value of deposits accounted for 78.5% of the set daily limit (in 2008 the ratio was approx. 67.5%).

Figure 8. The use of the limit for the Ministry of Finance's deposits with the NBP in 2009



Source: NBP

In 2009, similarly to the previous year, some surplus funds of the state budget were deposited on the interbank market through Bank Gospodarstwa Krajowego. Transactions concluded with the banks performing the function of the State Treasury Securities Dealer were conditional buy-sell-back transactions. Those transactions were collateralised with both treasury bills and treasury bonds. In addition, in 2009, the Ministry of Finance continued to deposit surplus funds in the interbank market of uncollateralised term deposits. The Ministry of Finance had also the possibility to deposit surplus funds through Bank Gospodarstwa Krajowego as a deposit facility with the NBP. Such activities were conducted throughout the year, especially at the year end (in November and December 2009).

The Ministry of Finance provided the banking sector with the largest funds in January and during the period from August until November 2009. It is worth to point out that in 2009 the average level of the Ministry of Finance's deposits with commercial banks was only 20% 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 the 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 2009 those deposits decreased by nearly 60.8% and amounted to PLN 255 million (annual average), which means a decrease by PLN 155 million year-on-year.

2. Monetary Policy Instruments

2.1 Interest Rates

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 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 out the fluctuation band for the overnight interest rate in the interbank market.

In 2009, the Monetary Policy Council cut the NBP basic interest rates, including the reference rate, on four occasions. At the end of 2009, the reference rate stood at 3.50%, which represented a decrease by 150 basis points year-on-year. A similar scale of reductions applied to the deposit and lombard rates.

Table 4. The NBP basic rates in 2009

In effect from	Reference rate	Lombard rate	Deposit rate	Calculation
28.01.2009	4,25%	5,75%	2,75%	annually
26.02.2009	4,00%	5,50%	2,50%	annually
26.03.2009	3,75%	5,25%	2,25%	annually
25.06.2009	3,50%	5,00%	2,00%	annually

Source: NBP

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.

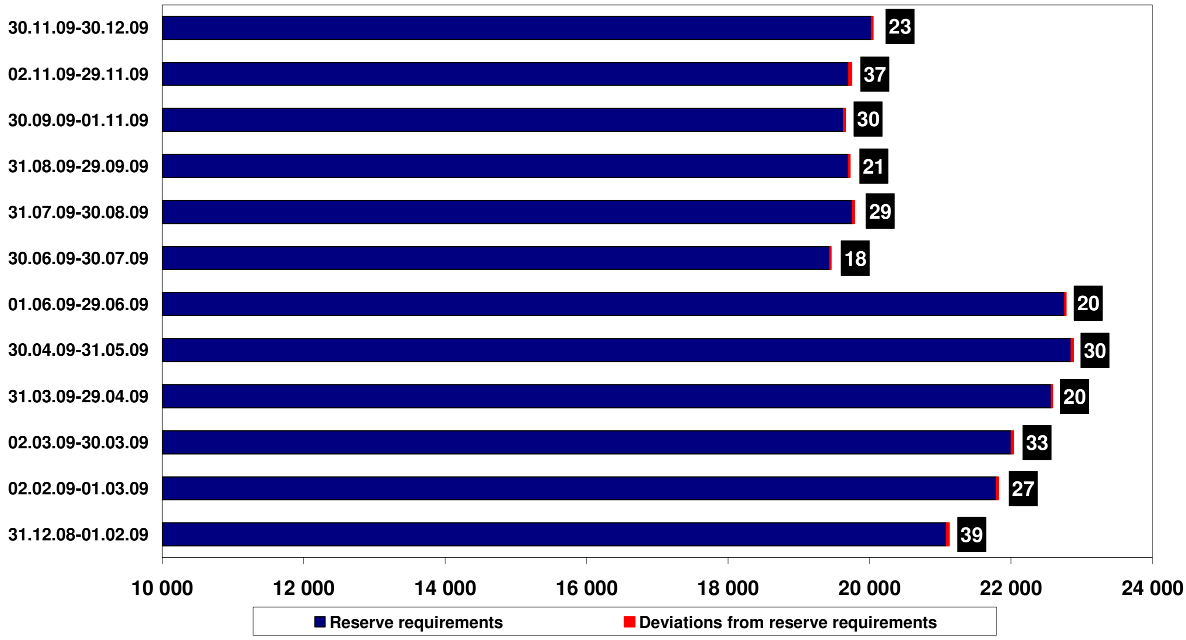
From 1 January until 29 June 2009, the reserve requirement ratio was 3.5%. As of 30 June 2009, the Monetary Policy Council reduced the reserve requirement ratio by 50 basis points, to 3.0% (in 2009, the reserve ratio on funds obtained from sell-buy-back of securities did not change and stood at 0.0%).

The MPC decision to reduce the reserve requirement ratio resulted in a considerable decrease, commencing from the second year-half, of the banks' required reserves – the amount of reserve required in July 2009 went down as compared with June by PLN 3.319 million, by 14.6%, with similar levels of deposits on which the reserves were calculated.

The required reserves as at 31 December 2009 amounted to PLN 20,148 million and went down by PLN 941 million, by 4.5% (the level of deposits constituting the basis for the reserve calculation to which the positive reserve ratio is applied, rose in that period by 11.9%) as compared with 31 December 2008.

The funds of the required reserve maintained by banks on their accounts with the NBP bore interest at 0.9 of the NBP rediscount rate. In 2009, the average interest rate on the reserve requirement funds was 3.63%.

Figure 9. Changes in the required reserves and deviations from the reserve requirement in 2009 (in PLN millions)



Source: NBP

In all the reserve maintenance periods an insignificant deviation of the average level on banks' accounts in relation to the reserve requirement was positive (on average PLN 27 million, 0.13%). In specific periods the surplus ranged from PLN 18 million in July (0.09%) to PLN 39 million in January (0.18%). The following factors worked in favour of minimising the differences between the reserve maintained and required in specific reserve periods:

- remuneration of banks account only up to amount of the required reserve,
- the use by banks of instruments making it easier for them to manage funds in accounts with the NBP (technical credit facility, standing deposit facility and standing credit facility).

Injection of additional liquidity by the National Bank of Poland (earlier redemption of NBP bonds and reduction of reserve requirement ratio) as well as proper asset management enabled the banks to maintain the reserve requirements at the level demanded in each reserve maintenance period, which occurred for the first time since the introduction of the reserve requirement instrument in 1989.

The fact that commercial banks maintained surplus of financial funds in 2009 was the consequence of the crisis situation in international markets that had began already in 2008. In the context of the banks' reluctance to excessively invest and as a result of the decisions of parent banks on the obligatory adherence to prudential norms in respect of liquidity management and liquidity standards imposed by the Polish Financial Supervision Authority, banks were less willing to purchase the NBP bills. At the same time, the banks were using to a greater extent deposit facility, which enabled banks to invest free funds on an overnight basis, i.e. shorter than investments in the 7-day NBP bills.

2.3 Open Market Operations

In 2009, the following open market operations represented the key instrument used in order 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;
- structural operations – in the form of early redemption of the NBP bonds.

2.3.1 Main Operations

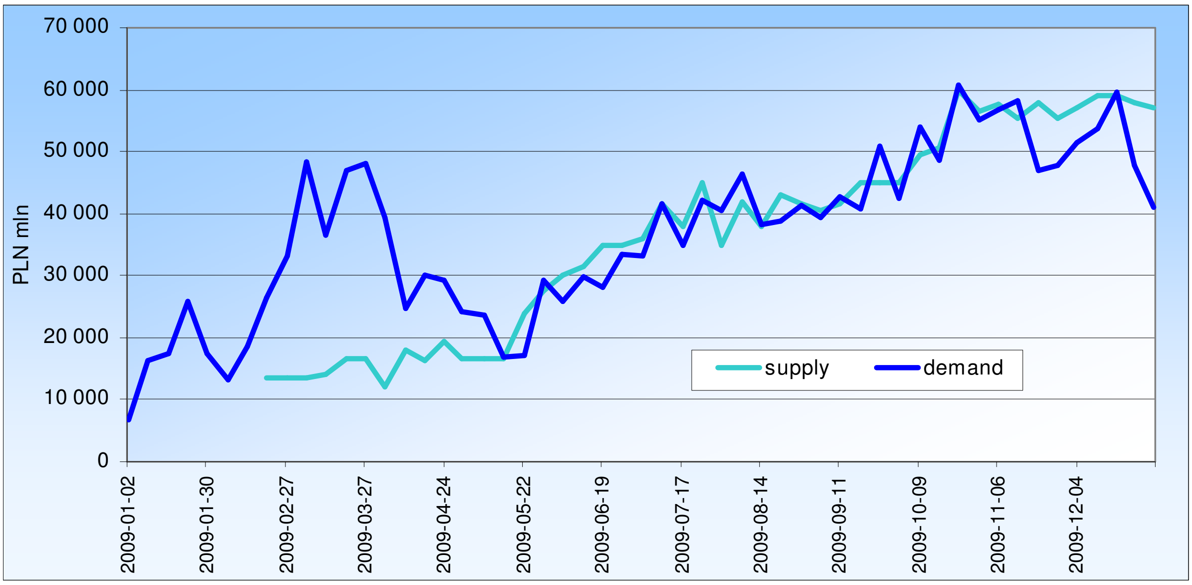
In 2009, the NBP carried out main open market operations which consisted in issuing the NBP bills with a 7-day maturity. The NBP bills were issued on a regular basis, once a week, on Fridays[3]. As in the previous year, the Bank Guarantee Fund as well as all banks that were members of the SORBNET system, had 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 2009, the average level of issue of the NBP bills amounted to PLN 31,873 million, which represented an increase by PLN 20,343 million as compared with the average level of issuance in 2008. In the context of the persisting crisis in financial markets, during the period from 1 January until 19 February 2009 the main operations carried out by the NBP were announced without specifying volume of supply. In that period the purchase offers received from banks amounted to PLN 115,624 million and equalled the value of offers accepted by the central bank.

As of 20 February 2009 the NBP started to announce the volume of the NBP bills supply in weekly tenders again. Until the end of 2009, the nominal value of the NBP bills offered for sale totalled PLN 1,695,700 million. During that period the banks' demand for the central bank's securities amounted to PLN 1,960,854 million. The NBP accepted offers for the purchase of the NBP bills in the amount of PLN 1,708,878 million.

[3] Except for operations carried out on 30 April, 24 December and 31 December, when the tenders for the NBP bills were arranged on Thursdays. The maturity of the NBP bills was usually 7 days. The NBP issued bills with other maturities only on four occasions (twice 6-day and twice 8-day).

Figure 10. Demand and supply for the NBP bills in 2009



Source: NBP

From the beginning of 2009 until the second decade of May, a considerable surplus in the banking sector demand compared with the announced supply was observed. Afterwards until November the demand and supply figures remained at a similar level. At the year-end banks, fearing that some difficulties may occur as regards settlement of transactions, submitted bids for the NBP bills less than offered by the central bank.

2.3.2 Fine-tuning Operations

The beginning of 2009 was characterised by a rather limited liquidity of the banking sector and continued distrust between counterparties in the interbank market. In view of the foregoing, the NBP still carried 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 securities accepted by the NBP.

As of May 2009, the list of collaterals accepted by the NBP in repo operations was supplemented with securities other than treasury debt deposited with the National Depository for Securities. Furthermore, in order to meet the expectations of banks, the NBP extended the list of eligible collateral in repo operations accepting EUR-denominated securities issued by the government of the Republic of Poland.

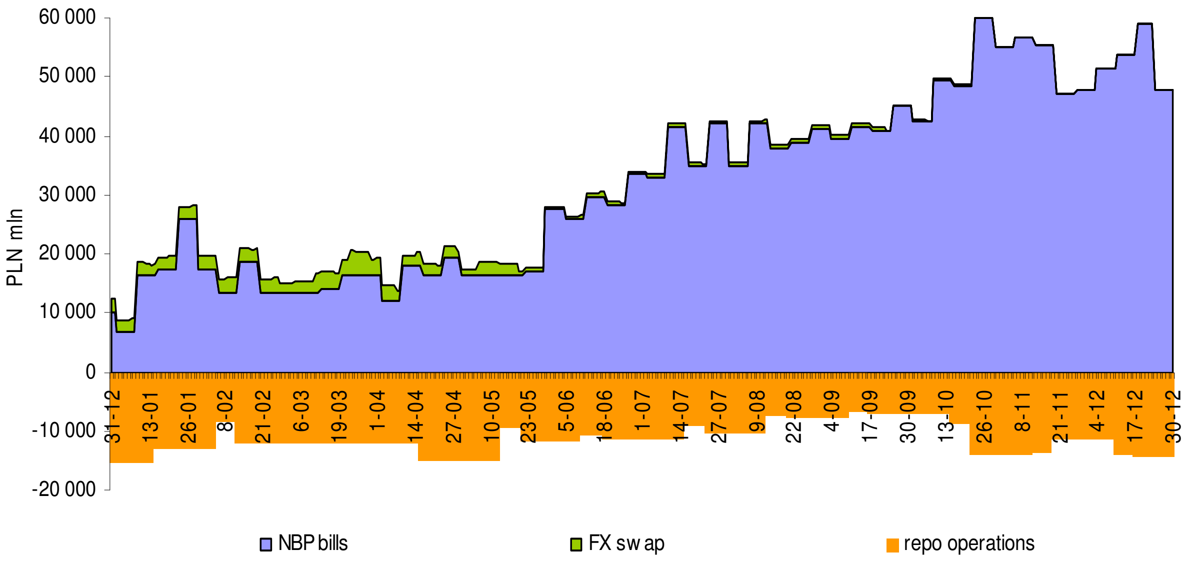
Further changes were introduced in the second quarter of 2009. Securities with a coupon paid before maturity of a repo operation were accepted as a collateral.

Another important change was the introduction of "*netting*", a solution where - on the one hand - banks were able to use securities from a maturing operation as a collateral for a new one, and - on the other hand - they were able to make cash settlements with the NBP in net amounts calculated on the basis of those operations.

In the first four months of 2009, the NBP carried out repo operations with a 3-month maturities once a month. Beginning from May, banks additionally participated in tenders for 6-month repo operations. The central bank did not announce the supply in the terms of tenders. The transactions were settled within the t+2 period.

In 2009, the average level of repo operations was PLN 11.456 million, which represented an increase by 437% compared to 2008, when its value reached PLN 2,135 million.

Figure 11. Operations carried out by the NBP in 2009



Source: NBP

2.3.3 Structural Operations

The aim of structural operations is to change the banking sector liquidity on a long-term basis. At the turn of 2008 and 2009, the level of the banking sector liquidity was low. Providing and absorbing the banking sector liquidity operations were carried out on a parallel basis.

In order to increase the liquidity level, the Management Board of the NBP decided to redeem the NBP bonds in the amount of PLN 7,816 million on 22 January 2009, prior to their maturity. As a result of that decision the long-term structure of the banking sector liquidity changed.

2.4 Standing Facilities

Standing facilities which include deposit facility and marginal lending facility contribute to stabilising the liquidity level in the interbank market and mitigating the scale of fluctuations of short-term market rates. Commercial banks carry out those operations on their own initiative, depositing surplus of funds with the NBP (deposit facility) and covering their shortage of liquidity with the marginal lending facility.

Deposit facility

In 2009, banks placed with the NBP overnight deposits for a total amount of PLN 898.9 billion. These were higher by 72.8% as compared to the O/N deposits placed in 2008. The daily value of the overnight deposits placed by banks ranged between PLN 10.0 million and PLN 23.5 billion. The average daily level of the overnight deposit[4] was PLN 2,460.6 million, which represented an increase by 73.1% year-on-year. The largest amounts placed using deposit facility in the first quarter of 2009, in connection with a relatively low liquidity level and the uncertainty in the interbank market. The deposit growth over the last two months of 2009 was driven by the fears about the settlement of funds at the year-end and at the turn of 2009 and 2010. The largest amounts were deposited with the NBP on the last days of the reserve maintenance periods.

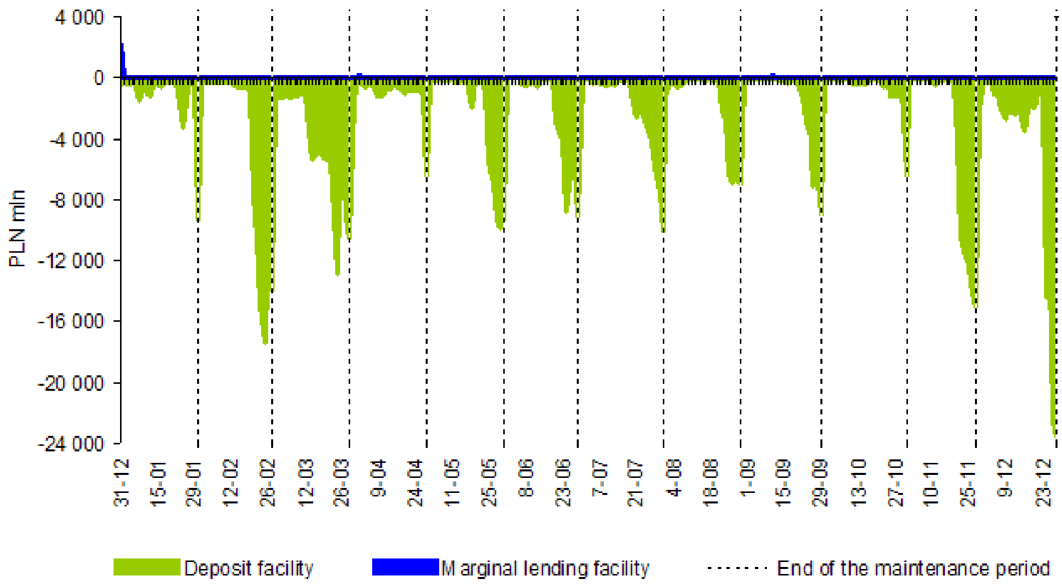
Marginal lending facility

In 2009, when supplementing the liquidity on their current accounts with the NBP, banks were able to make use of the marginal lending facility (lombard credit) collateralised with securities[5]. As a consequence of market overliquidity and the fact that banks were keeping funds on their current accounts or placing them as deposit facility, marginal lending facility was used to an insignificant extent.

In 2009, the total amount of lombard credit was amounted to PLN 2.7 billion annually and represented 45.0% of the amount of the lombard credit taken by banks in 2008 (PLN 5.2 billion). Specific amounts were settled during the periods of the reserve requirement maintenance, thus the daily use of lombard credit was PLN 13.8 million, compared to PLN 14.3 million in 2008.[6]

[4] Averaged data were given per the required reserve maintenance periods.
[5] As of 2 July 2009 (Resolution No 51/2009 of the Management Board of the NBP) the marginal lending facility granted by the NBP may also be collateralised with debt securities denominated in foreign currencies; the detailed list of those securities is published on the NBP website.
[6] Averaged data were given per the required reserve maintenance periods.

Figure 12. Using of deposit facility and lombard credit over the required reserve maintenance periods



Source: NBP

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 2009, 43 commercial banks had access to the intraday credit facility (in 2008 – 42 banks). The use of that facility rose by 7.2% as compared to 2008. Daily injection of liquidity to banks with the use of this instrument ranged between PLN 12.4 billion and PLN 29.5 billion, while the average daily amount of credit was PLN 15.8 billion (an increase by 6.8% in relation to 2008). Over the year one bank repaid the intraday credit facility on the following operating day, with the amount of credit totalling PLN 31.0 million.

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 incurred and repaid on the same business day. This facility is collateralised with the Treasury bonds being subject of SPW fixing (formely: MTS-CeTO fixing), and priced in compliance with the binding Eurosystem standards. As in two previous years, intraday facility in euro was used by only one bank. In 2009, the usage of this facility rose by 55.4% compared with 2008, whereas a daily injection of funds in euro to the bank ranged from EUR 0.9 million to EUR 3.4 million.

3. Polonia Rate as an Effect of Developments in the Interbank Market

In line with the Monetary Policy Guidelines, in 2009 the NBP strived, through open market operations, specifically the main ones, to influence the liquidity conditions in the banking sector so as to enable the POLONIA rate to run close to the NBP reference rate[7].

Compared to the previous years, the efficiency of the NBP influence on liquidity conditions in 2009 was limited. This primarily resulted from less active participation of banks in main open market operations (as compared to the pre-crisis period), which was reflected in the so-called *underbidding*[8].

The lower activity of banks in tenders for main operations was related to their preference for maintaining current liquidity surpluses. Banks' altered preferences in respect of liquidity position management were mostly based on prudence grounds. From the time the crisis escalated in the global financial markets, as marked by the collapse of *Lehman Brothers* investment bank in September 2008, banks drastically reduced mutual limits for transactions concluded in the market for unsecured interbank deposits. Thus, managing their own liquidity positions they had to factor in a greater risk of impediments to satisfying their current liquidity needs on the interbank market. It resulted in a strong shift of banks' preferences towards managing their liquidity positions based on overnight transactions. In consequence, the depositing of surplus funds for longer term (both in the market and with the central bank) was limited[9].

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 strived to maintain bigger amounts in current accounts with the central bank (above the level of required reserve). Maintaining larger amounts in their current accounts, banks were able to meet, at an earlier stage, their obligation to maintain the reserve with the NBP at the required level. This phenomenon, called *frontloading*, was characteristic in the discussed period of operational systems of numerous central banks that use the mechanism of averaged reserve requirement.

The averaged reserve requirement and no remuneration on the funds held with the NBP above the reserve requirement level encouraged banks to deposit accumulated surplus funds with the central bank using the NBP's deposit facility in the last few days of the reserve maintenance periods. This instrument enabled similar flexibility in the management of the accumulated liquidity surplus as in the

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[7] The Monetary Policy Guidelines for 2009, p. 15

[8] A situation where banks' demand at the tender of monetary policy operations is lower than the supply offered by the central bank.

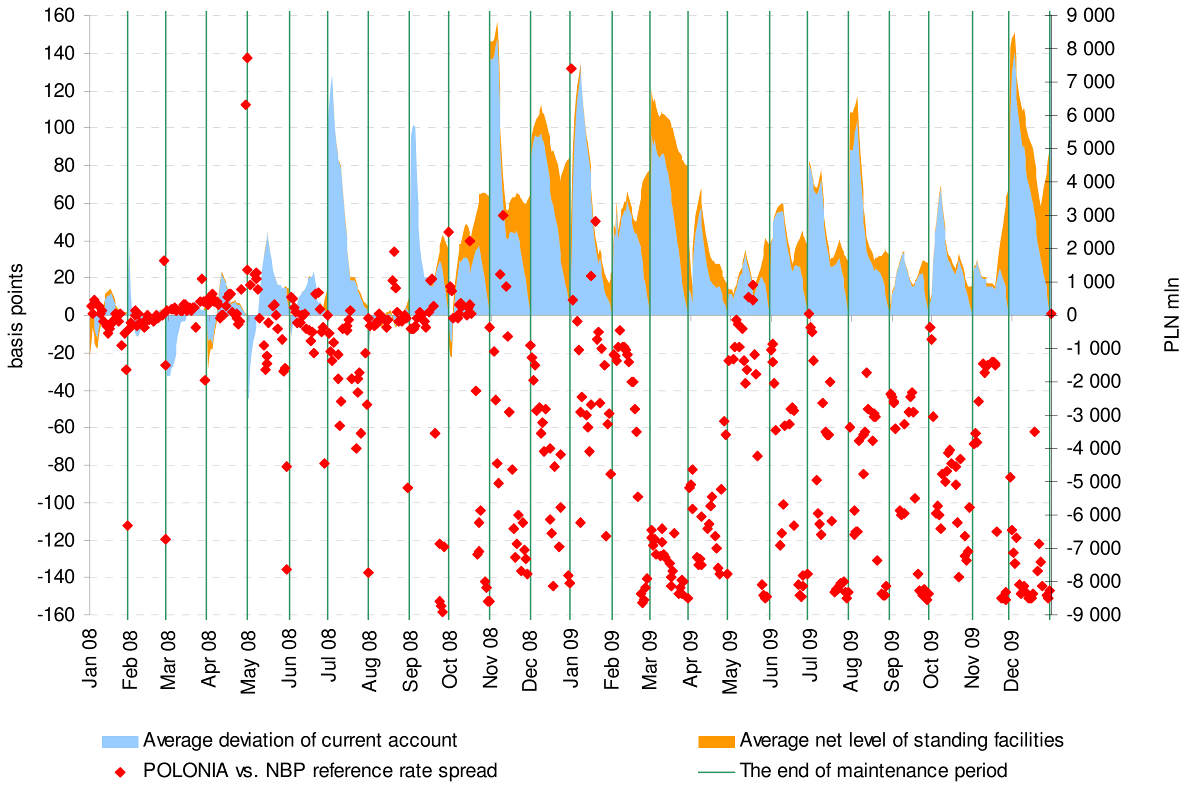
[9] This was reflected in a considerable decrease in turnover noted by the NBP and the shortening of maturities of unsecured deposits placed on the interbank market.

case of frontloading. At the same time, it enabled banks to earn on accumulated funds (1.5 percentage points below the yield offered by the NBP under the issue of NBP bills).

As a result of the underbidding observed in the tenders for main operations, stemming from banks' preference to manage liquidity on an overnight basis, banks maintained on average level current liquidity surpluses in the required reserve maintenance periods. Therefore, banks deposited funds on the interbank market for the shortest periods and remunerated lower than the NBP reference rate. They also placed overnight deposits with the NBP, which remunerated at the level of the NBP deposit rate. Hence, the POLONIA rate remained basically below the NBP reference rate.

In 2009, similar trends were observed in the interbank markets of the euro area, the United Kingdom and countries with the banking sector liquidity conditions similar to those prevailing in Poland (e.g. Hungary).

Figure 13. Volatility of the POLONIA rate against the deviation of the aggregated level of banks' current accounts with the NBP from the required reserve level, considering the use of NBP standing facilities

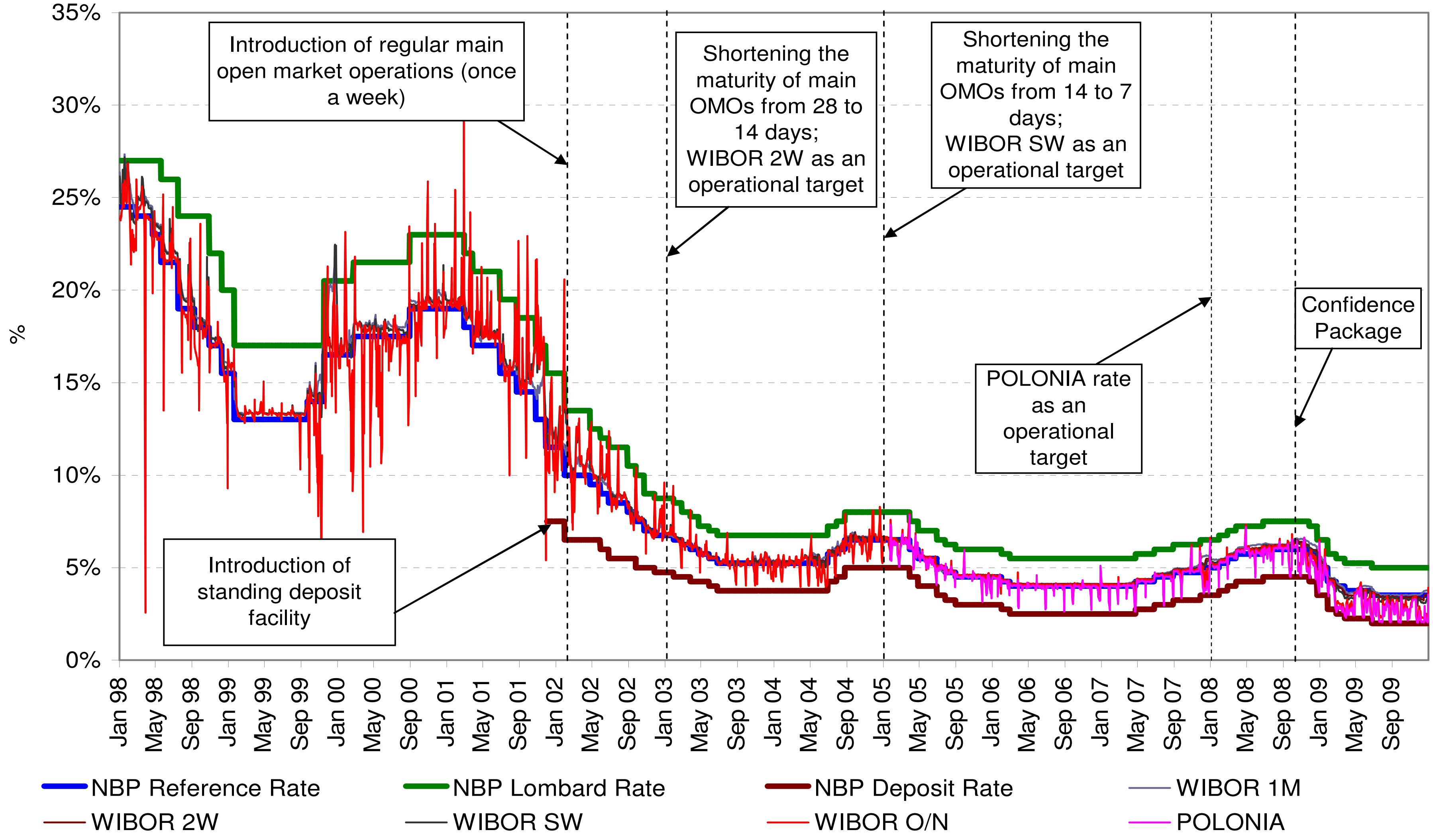


Source: NBP

As a result of all the abovementioned factors, the average deviation of the POLONIA rate from the NBP reference rate in the year 2009 was 89 basis points (as compared with 32 basis points in 2008).[10]

[10] The calculation was made by adjusting the NBP reference rate on the 365-day basis.

Annex 1. Changes in the level of fluctuations of the shortest interest rates in the interbank market against changes in open market operations in 1998-2009



Annex 2. NBP monetary policy instruments in 1990 - 2009

Item	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
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

	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	02-01-2009	09-01-2009	7	0,00	6 700,80	6 700,80	5,00%
2	09-01-2009	16-01-2009	7	0,00	16 303,10	16 303,10	5,00%
3	16-01-2009	23-01-2009	7	0,00	17 462,50	17 462,50	5,00%
4	23-01-2009	30-01-2009	7	0,00	25 839,46	25 839,46	5,00%
5	30-01-2009	06-02-2009	7	0,00	17 433,74	17 433,74	4,25%
6	06-02-2009	13-02-2009	7	0,00	13 297,58	13 297,58	4,25%
7	13-02-2009	20-02-2009	7	0,00	18 587,03	18 587,03	4,25%
8	20-02-2009	27-02-2009	7	13 500,00	26 322,65	13 500,00	4,25%
9	27-02-2009	06-03-2009	7	13 500,00	33 097,14	13 500,00	4,00%
10	06-03-2009	13-03-2009	7	13 500,00	48 371,70	13 500,00	4,00%
11	13-03-2009	20-03-2009	7	14 000,00	36 494,99	14 000,00	4,00%
12	20-03-2009	27-03-2009	7	16 500,00	47 015,74	16 500,00	4,00%
13	27-03-2009	03-04-2009	7	16 500,00	47 995,03	16 500,00	3,75%
14	03-04-2009	10-04-2009	7	12 000,00	39 470,06	12 000,00	3,75%
15	10-04-2009	17-04-2009	7	18 000,00	24 623,08	18 000,00	3,75%
16	17-04-2009	24-04-2009	7	16 200,00	29 970,84	16 200,00	3,75%
17	24-04-2009	30-04-2009	6	19 500,00	29 190,13	19 500,00	3,75%
18	30-04-2009	08-05-2009	8	16 500,00	24 253,40	16 500,00	3,75%
19	08-05-2009	15-05-2009	7	16 500,00	23 664,90	16 500,00	3,75%
20	15-05-2009	22-05-2009	7	16 500,00	16 735,20	16 500,00	3,75%
21	22-05-2009	29-05-2009	7	24 000,00	17 166,86	17 166,86	3,75%
22	29-05-2009	05-06-2009	7	27 500,00	29 269,80	27 500,00	3,75%
23	05-06-2009	12-06-2009	7	30 000,00	25 813,43	25 813,43	3,75%
24	12-06-2009	19-06-2009	7	31 500,00	29 739,77	29 739,77	3,75%
25	19-06-2009	26-06-2009	7	35 000,00	28 159,27	28 159,27	3,75%
26	26-06-2009	03-07-2009	7	35 000,00	33 422,84	33 422,84	3,50%
27	03-07-2009	10-07-2009	7	36 000,00	33 056,59	33 056,59	3,50%
28	10-07-2009	17-07-2009	7	41 500,00	41 516,11	41 500,00	3,50%
29	17-07-2009	24-07-2009	7	38 000,00	34 776,58	34 776,58	3,50%
30	24-07-2009	31-07-2009	7	45 000,00	42 029,48	42 029,48	3,50%
31	31-07-2009	07-08-2009	7	35 000,00	40 403,88	35 000,00	3,50%
32	07-08-2009	14-08-2009	7	42 000,00	46 370,21	42 000,00	3,50%
33	14-08-2009	21-08-2009	7	38 000,00	38 268,94	38 000,00	3,50%
34	21-08-2009	28-08-2009	7	43 000,00	38 854,51	38 854,51	3,50%
35	28-08-2009	04-09-2009	7	41 500,00	41 200,96	41 200,96	3,50%
36	04-09-2009	11-09-2009	7	40 500,00	39 488,36	39 488,36	3,50%
37	11-09-2009	18-09-2009	7	41 500,00	42 596,40	41 500,00	3,50%
38	18-09-2009	25-09-2009	7	45 000,00	40 806,17	40 806,17	3,50%
39	25-09-2009	02-10-2009	7	45 000,00	50 873,99	45 000,00	3,50%
40	02-10-2009	09-10-2009	7	45 000,00	42 506,66	42 506,66	3,50%
41	09-10-2009	16-10-2009	7	49 500,00	53 890,06	49 500,00	3,50%
42	16-10-2009	23-10-2009	7	50 500,00	48 585,00	48 585,00	3,50%
43	23-10-2009	30-10-2009	7	60 000,00	60 722,88	60 000,00	3,50%
44	30-10-2009	06-11-2009	7	56 500,00	54 965,99	54 965,99	3,50%
45	06-11-2009	13-11-2009	7	57 500,00	56 848,08	56 848,08	3,50%
46	13-11-2009	20-11-2009	7	55 500,00	58 321,67	55 500,00	3,50%
47	20-11-2009	27-11-2009	7	58 000,00	47 004,38	47 004,38	3,50%
48	27-11-2009	04-12-2009	7	55 500,00	47 719,61	47 719,61	3,50%
49	04-12-2009	11-12-2009	7	57 000,00	51 315,84	51 315,84	3,50%
50	11-12-2009	18-12-2009	7	59 000,00	53 759,41	53 759,41	3,50%
51	18-12-2009	24-12-2009	6	59 000,00	59 736,51	59 000,00	3,50%
52	24-12-2009	31-12-2009	7	58 000,00	47 849,96	47 849,96	3,50%
53	31-12-2009	08-01-2010	8	57 000,00	40 984,42	40 984,42	3,50%
	Total in 2009:			**1 695 700,00**	**1 960 853,69**	**1 708 878,38**	

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

*** - from 2 January 2009 till 13 February 2009 NBP bills were sold without pool*

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)	Min. Rate	Aver. Rate	Max. Rate	Discount Rate (%)
1	2009-Jan-13	2009-Apr-16	91	without pool	682,3	682,25	5,25	5,33	5,35	10,00%
2	2009-Feb-10	2009-May-14	91	without pool	8800,1	8800,05	4,50	4,50	4,60	10,00%
3	2009-Mar-10	2009-Jun-10	90	without pool	2589,4	2589,40	4,25	4,29	4,40	10,00%
4	2009-Apr-14	2009-Jul-16	91	without pool	3507,35	3507,35	4,00	4,01	4,10	10,00%
5	2009-May-12	2009-Aug-13	91	without pool	3236,39	3236,39	4,00	4,01	4,07	4,50%
6	2009-May-19	2009-Nov-19	182	without pool	2307,17	2307,17	4,10	4,13	4,28	4,50%
7	2009-Jun-09	2009-Sep-10	92	without pool	1583,53	1583,53	4,00	4,03	4,09	4,50%
8	2009-Jun-16	2009-Dec-17	182	without pool	758,22	758,22	4,12	4,13	4,13	4,50%
9	2009-Jul-14	2009-Oct-15	91	without pool	1292,96	1292,96	3,75	3,76	3,80	4,50%
10	2009-Jul-21	2010-Jan-21	182	without pool	1092,82	1092,82	3,86	3,86	3,86	4,50%
11	2009-Aug-11	2009-Nov-12	91	without pool	514,07	514,07	3,75	3,77	3,85	4,50%
12	2009-Aug-18	2010-Feb-18	182	without pool	61,88	61,88	3,85	3,88	3,95	4,50%
13	2009-Sep9-08	2009-Dec-10	91	without pool	745,99	745,99	3,75	3,76	3,77	4,50%
14	2009-Sep-15	2010-Mar-18	182	without pool	480,66	480,66	3,85	3,89	3,90	4,50%
15	2009-Oct-13	2010-Jan-14	91	without pool	2739,57	2739,57	3,75	3,76	3,85	4,50%
16	2009-Oct0-20	2010-Apr-22	182	without pool	5201,95	5201,95	3,85	3,85	3,86	4,50%
17	2009-Nov-10	2010-Feb-11	91	without pool	305,06	305,06	3,75	3,75	3,76	4,50%
18	2009-Nov-17	2010-May-20	182	without pool	21,48	21,48	3,85	3,85	3,85	4,50%
19	2009-Dec-08	2010-Mar-11	91	without pool	3467,71	3467,71	3,75	3,76	3,76	4,50%
20	2009-Dec-15	2010-Jun-17	182	without pool	1157,36	1157,36	3,85	3,86	3,87	4,50%

** - payment date T+2 (only on 9 June T+1)*

*** - in 2009 banks were supplied to the amount of notified demand (without pool)*

Annex 5. Banks – Money Market Dealers in 2009

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 2009:

1. Powszechna Kasa Oszczędności BP S.A.
2. Bank Handlowy w Warszawie S.A.
3. ING Bank Śląski S.A.
4. Bank BPH S.A.
5. Bank Zachodni WBK S.A.
6. Bank Gospodarstwa Krajowego
7. BRE Bank S.A.
8. Bank Millenium S.A.
9. Bank PEKAO S.A.
10. Kredyt Bank S.A.
11. ABN AMRO Bank (Polska) S.A.
12. Societe Generale S.A. Branch in Poland
13. Deutsche Bank Polska S.A.
14. Bank Gospodarki Żywnościowej S.A.
15. BNP Paribas S.A. Branch in Poland

Annex 6. Daily information (as at the month-end)

Items	XII 2008	I 2009	II 2009	III 09	IV 09	V 09	VI 09	VII 09	VIII 09	IX 09	X 09	XI 09	XII 09
(PLN mln)													
CENTRAL BUDGET:													
revenues	258 030,48	30 152,36	48 514,24	68 495,30	92 540,84	112 836,18	135 835,73	161 990,43	185 777,16	205 060,33	228 101,29	253 640,03	278 088,68
expences	278 931,66	24 905,99	52 105,12	77 028,29	104 725,04	127 548,63	151 082,11	175 138,03	199 060,65	223 988,27	249 654,95	275 346,85	298 910,21
deficit(-)/surplus(+)	-20 901,18	5 246,37	-3 590,88	-8 532,99	-12 184,20	-14 712,45	-15 246,38	-13 147,59	-13 283,49	-18 927,94	-21 553,65	-21 706,82	-20 821,53
central budget funds	10 529,57	1 513,35	1 567,70	1 048,26	976,07	991,75	943,34	883,58	999,67	1 010,93	1 027,92	1 354,24	4 932,91
MF foreign currency account	0,00	2,01	3 635,90	3 701,29	2 274,03	4 655,53	1 688,73	7 351,55	11 941,20	10 881,28	10 491,86	9 844,85	886,10
MF zloty term deposits	0,00	2 720,00	3 250,00	2 260,00	6 340,00	2 670,00	1 800,00	2 860,00	2 870,00	2 970,00	2 940,00	1 880,00	3 000,00
CURRENCY IN CIRCULATION	102 134,71	97 861,04	100 045,68	99 988,56	102 436,83	101 218,43	101 673,44	100 900,21	100 412,21	99 099,20	99 043,31	97 561,17	100 344,81
CURRENT ACCOUNT	24 075,23	17 264,39	14 204,22	23 317,39	23 493,60	13 789,94	23 971,44	24 708,37	19 882,65	20 002,76	14 332,52	26 058,04	36 223,47
balance deviation from required reserve	2 986,20	287,75	613,35	751,93	649,99	636,32	4 532,22	4 946,80	183,03	372,38	373,53	6 032,12	16 075,29
REFINANCING LOAN	3 797,78	1 481,55	1 488,34	1 380,90	1 387,71	1 394,75	1 287,77	1 294,33	1 300,89	1 194,63	1 200,72	1 206,61	1 101,49
marginal lending	2 317,74	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	18 098,49	14 005,61	13 872,29	12 707,44	14 206,21	12 622,14	14 307,74	15 119,87	17 200,94	15 316,17	29 471,44	18 497,16	16 343,88
DEPOSIT FACILITY	501,00	9 386,67	13 938,95	1 353,00	142,00	9 257,39	110,00	1 145,00	100,00	100,00	6 444,25	2 035,00	1 329,00
OPEN MARKET OPERATIONS*/	-5 039,33	4 257,79	1 300,40	4 428,31	1 603,21	15 859,70	22 030,19	24 728,92	33 590,32	37 746,23	41 063,66	36 311,97	26 455,93
repo (-)	15 252,63	13 175,95	12 199,60	12 071,69	14 896,79	11 640,30	11 392,65	10 271,08	7 610,64	7 253,77	13 902,33	11 407,64	14 528,49
NBP money market bills 7 days (+)	10 213,30	17 433,74	13 500,00	16 500,00	16 500,00	27 500,00	33 422,84	35 000,00	41 200,96	45 000,00	54 965,99	47 719,61	40 984,42
POLONIA	6,39%	3,46%	2,65%	2,88%	3,56%	2,30%	3,56%	2,95%	3,13%	3,48%	2,52%	2,68%	3,56%
turnover	677,00	3 362,00	700,00	1 545,00	1 350,00	2 687,00	3 115,00	1 810,00	2 740,00	3 303,00	2 229,00	2 165,00	1 906,00
WIBOR													
O/N	6,53%	4,08%	3,07%	3,10%	3,59%	2,53%	3,66%	3,24%	3,30%	3,35%	2,76%	2,91%	3,92%
T/N	5,64%	4,28%	3,50%	3,15%	3,61%	3,70%	3,68%	3,29%	3,36%	3,39%	3,06%	2,94%	3,65%
SW	5,46%	4,42%	4,00%	3,39%	3,54%	3,75%	3,61%	3,42%	3,40%	3,37%	3,32%	3,27%	3,56%
2W	5,48%	4,46%	4,06%	3,56%	3,56%	3,83%	3,66%	3,47%	3,45%	3,43%	3,41%	3,39%	3,59%
1M	5,61%	4,56%	4,20%	3,70%	3,69%	4,01%	3,78%	3,55%	3,52%	3,53%	3,52%	3,54%	3,76%
3M	5,88%	4,86%	4,51%	4,17%	4,30%	4,62%	4,44%	4,17%	4,18%	4,18%	4,18%	4,19%	4,27%
12M	5,98%	4,94%	4,57%	4,31%	4,61%	5,03%	4,82%	4,53%	4,49%	4,49%	4,48%	4,48%	4,53%
WIBID													
O/N	6,23%	3,78%	2,78%	2,80%	3,29%	2,23%	3,36%	2,94%	3,00%	3,06%	2,46%	2,61%	3,62%
T/N	5,34%	4,00%	3,20%	2,85%	3,31%	3,41%	3,38%	2,99%	3,06%	3,09%	2,76%	2,64%	3,35%
SW	5,26%	4,22%	3,80%	3,19%	3,34%	3,55%	3,41%	3,22%	3,20%	3,17%	3,12%	3,07%	3,36%
2W	5,28%	4,26%	3,86%	3,36%	3,36%	3,64%	3,46%	3,27%	3,25%	3,23%	3,21%	3,19%	3,39%
1M	5,41%	4,36%	4,00%	3,50%	3,49%	3,81%	3,58%	3,35%	3,32%	3,33%	3,32%	3,34%	3,56%
3M	5,68%	4,66%	4,31%	3,97%	4,10%	4,42%	4,24%	3,97%	3,98%	3,98%	3,98%	3,99%	4,07%
12M	5,78%	4,74%	4,37%	4,11%	4,41%	4,83%	4,62%	4,33%	4,29%	4,29%	4,28%	4,28%	4,33%
USD/PLN (fix)	2,9618	3,4561	3,6758	3,5416	3,2859	3,1812	3,1733	2,9525	2,8675	2,8852	2,8595	2,7538	2,8503
EUR/PLN (fix)	4,1724	4,4392	4,6578	4,7013	4,3838	4,4588	4,4696	4,1605	4,0998	4,2226	4,2430	4,1431	4,1082
EUR/USD	1,4087	1,2845	1,2672	1,3275	1,3341	1,4016	1,4085	1,4091	1,4297	1,4635	1,4838	1,5045	1,4413
official reserve assets (as at the end of the month)													
mln PLN	184 165,2	204 779,90	227 516,40	216 926,60	210 588,60	216 024,00	212 987,60	211 185,70	217 406,40	225 520,60	239 275,90	234 349,20	226 859,2
mln EUR	44 138,9	46 129,90	48 846,30	46 141,80	48 037,90	48 448,90	47 652,50	50 759,70	53 028,50	53 408,00	56 393,10	56 563,70	55 221,1
(-purchase) sale of foreign currency	518,87	4 549,93	-689,71	844,59	-386,38	-5 139,91	-4 198,16	-3 728,90	-2 733,96	-2 881,76	-3 407,69	-1 998,05	-6 149,19

*/ - 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.