



Annual Report 2008



Sławomir Stanisław Skrzypek
President of the National Bank of Poland

This *Report* summarises the National Bank of Poland's activity during the second year of my term of office as NBP President. I trust that it will answer most of your questions concerning the operations of the NBP in 2008.

Elevated inflation – peaking at 4.8% in July and August 2008 – was the principal challenge facing the National Bank of Poland before the rapid deterioration brought about by the international financial crisis of September 2008. Nevertheless, this rise in inflation was chiefly stimulated by factors that were independent of domestic monetary policy, particularly the high prices of food and oil on global markets. Heightened inflation, predominantly driven by global price shocks, was observed in almost every country in the world in 2008. Against this background, Poland recorded a 1.7 percentage point deviation from the direct inflation target – the lowest in that group of countries whose central banks pursue the same strategy of direct inflation targeting as the NBP.

Significant hikes in administered prices exerted upward pressure on inflation in Poland in 2008. This growth was particularly evident in energy prices – specifically gas and electricity and gas – and services related to flat maintenance.

The Monetary Policy Council pursued a restrictive monetary policy in this context of elevated current and expected inflation. The MPC raised the interest rates on four occasions prior to June 2008 by a total of 1 percentage point.

The unexpected sharp deterioration of the economic climate in the wake of the global financial crisis observed since Q4 2008 required an easing of monetary policy. The Council lowered interest rates by 0.25 percentage points in October and a further 0.75 percentage points in December. In view of financial market turmoil, which rapidly spread to Poland, the National Bank of Poland decided to employ additional instruments to inject liquidity into the banking system. These were designed to stabilise the situation and restore confidence in the banking system. Tension in the interbank market began to gradually subside following the launch of the *Confidence Pact* in October 2008.

At the turn of 2008/2009, the NBP adopted a comprehensive report on the implications of introducing the euro in Poland. The analyses that were conducted indicate that joining the euro area should deliver long-term benefits whose size and scope will depend on being able to continually meet the Maastricht criteria. In this respect, it is essential that structural reforms be implemented, including public finance and labour market reform. The *Report* further indicated that entering the ERM II mechanism, which would pave the way for the introduction of the euro, should be postponed until the current financial market turmoil abates, due to the risk of a blowout in integration costs.

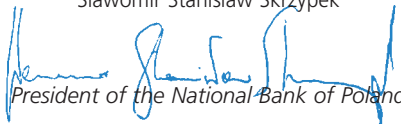
In 2008, the NBP also developed the *Strategy for the Management of the National Bank of Poland in the Years 2009–2012*, which sets out the long-term objectives of the Bank. Adopting this strategy is a major step for the NBP towards complying with the standards in force at the world's best managed central banks.

The yield on the investments of the official reserves kept by the NBP in 2008 was the highest it has been over recent years. The rate of return was 8.5% in the currency of the instruments. This sound performance reflects the efficiency of the NBP's long-term strategy of managing the official reserves.

NBP financial result developed at zero value in 2008. The NBP's profit and loss position is encumbered with the expense of having to provide for the risk of zloty exchange rate fluctuations. The aim of this provision is to moderate the prospective negative impact of losses incurred due to zloty exchange rate fluctuations on NBP earnings. The strong exchange rate volatility that has been observed recently is a source of considerable foreign exchange risk for the NBP.

To recapitulate, Poland has been able to prevent the destabilisation of its financial system thanks to the anti-crisis measures implemented by the National Bank of Poland. These measures contained the risk of pushing the Polish economy into recession and contributed to Poland achieving the highest GDP growth in the EU during the first six months of 2009. The NBP will continue its endeavours to minimise the adverse impact of the international financial and economic crisis on the Polish economy.

Sławomir Stanisław Skrzypek



President of the National Bank of Poland

CONTENTS

MONETARY POLICY COUNCIL	10
MANAGEMENT BOARD OF THE NATIONAL BANK OF POLAND	11
ORGANIZATION CHART OF THE NATIONAL BANK OF POLAND	12
SUMMARY	15
1. GOVERNING BODIES OF THE NBP	21
1.1. President of the National Bank of Poland	22
1.2. Monetary Policy Council	22
1.3. Management Board of the National Bank of Poland	24
1.4. Implementation of the <i>NBP Plan of Activity for the Years 2007–2009</i>	26
2. MONETARY POLICY	27
2.1. Monetary policy strategy in 2008	28
2.2. Monetary policy in 2008	30
2.3. Monetary policy instruments in 2008	39
2.3.1. Liquidity surplus in banking sector	40
2.3.2. Monetary policy tools	40
2.3.2.1. Interest rate	40
2.3.2.2. Open market operations	42
2.3.2.3. Reserve requirements	44
2.3.2.4. Standing facilities	45
2.3.2.5. Foreign exchange swaps	46
2.3.2.6. Other operations	47
3. ACTIVITIES FOR THE FINANCIAL SYSTEM STABILITY	49
3.1. Extension of the NBP's statutory tasks	50
3.2. Participation in the work of the Financial Stability Committee	50
3.3. Analyses and research for the needs of the financial system	51
3.4. Activities aimed at preventing disturbances in the interbank market	52
3.5. Cooperation with domestic institutions	53
3.6. International cooperation for financial stability	53
3.7. The participation of the National Bank of Poland in bank restructuring	54
4. THE ISSUE OF CURRENCY	55
4.1. Notes and coins in circulation	56
4.2. Issue of collector coins	56
4.3. Withdrawal of unfit notes and coins	57
4.4. Counterfeit Polish currency	57
4.5. Supply of notes and coins to banks	58
4.6. Exchange of currency which ceased to be legal tender	58
4.7. Work of the Commission for the Strategy of Introducing Euro Notes and Coin	58

5. MANAGEMENT OF THE OFFICIAL RESERVES	61
5.1. General principles for managing the official reserves	62
5.2. Financial risk management in the official reserve management process	62
5.3. Level of the official reserve assets	64
5.4. Foreign exchange reserves management strategy	65
5.5. Market environment in 2008	66
5.5.1. US government securities market	66
5.5.2. Euro-area government securities market	67
5.5.3. British government securities market	68
5.5.4. Australian interbank deposits market	69
5.5.5. Norwegian interbank deposits market	69
5.6. Return on foreign exchange reserves	70
5.7. Investment income	72
5.8. Activities aimed at increasing the return on foreign exchange reserves	72
6. FOREIGN EXCHANGE OPERATIONS	75
6.1. Register of entities conducting foreign exchange market operations	76
6.2. Foreign exchange decisions	76
6.3. Foreign exchange control	76
7. DEVELOPMENT OF THE PAYMENT SYSTEM	77
7.1. Integration with payment systems functioning in the European Union	78
7.2. Oversight of payment systems, authorisation and clearing systems and securities settlement systems	78
7.3. Regulatory activity regarding the payment system	79
7.4. Servicing banks' current accounts held at the NBP Head Office	80
7.4.1. Number of bank current accounts operated by the NBP in the SORBNET system	80
7.4.2. Operations performed on banks' current accounts held at the NBP in the SORBNET system	80
7.4.3. Number of bank current accounts operated by the NBP in the SORBNET-EURO system	83
7.4.4. Transactions executed on banks' current accounts held at the NBP in the SORBNET-EURO system	83
7.4.5. Number of bank current accounts operated by the NBP in the TARGET2-NBP system	85

7.4.6. Transactions executed in banks' current accounts held at the NBP in the TARGET2-NBP system	85
7.5. Bank records	86
7.6. Developing standards	86
7.7. Activity of the Payment System Council	87
7.8. Collaboration with the banking sector regarding other interbank projects	88
8. EDUCATION AND INFORMATION	89
8.1. Promotional activity	90
8.2. Publishing activity	90
8.3. Information activity	91
8.3.1. Liaising with the media and market analysts	91
8.3.2. NBP website	91
8.3.3. Examining petitions, complaints, requests and letters	91
8.4. Educational activity	91
8.4.1. The Program of Economic Education	92
8.4.2. Economic Education Portal – NBPortal.pl	92
8.5. NBP Central Library	92
9. SERVICES TO THE CENTRAL GOVERNMENT	95
9.1. Bank accounts operated at the NBP	96
9.1.1. Operating bank accounts	96
9.1.2. Categories of accounts operated by the NBP	97
9.2. Servicing international receivables and liabilities of central government	97
9.3. Organising trade in Treasury securities	97
9.3.1. Treasury securities tenders	97
9.3.2. Treasury Securities Dealer system	98
9.4. Public debt management activities	98
10. RESEARCH ACTIVITY	101
10.1. Research related to participation in the Exchange Rate Mechanism II (ERM II)	102
10.2. Enterprise and household survey	102
10.3. Other macroeconomic research	103
10.4. Development of analytical and research activity of the NBP	105
10.5. Works on the <i>Report on full membership of the Republic of Poland in the third stage of the Economic and Monetary Union</i>	106
10.6. Academic conferences and seminars organised by the NBP	107

11. STATISTICAL ACTIVITY	109
11.1. Responsibilities regarding monetary and financial statistics, the balance of payments and the international investment position	110
11.2. Harmonisation with ECB statistical requirements	111
11.2.1. Harmonisation of monetary and financial statistics	112
11.2.2. Harmonisation of quarterly financial accounts	112
11.2.3. Harmonisation of general government sector statistics	112
11.2.4. Harmonisation of real sector statistics	113
11.2.5. Harmonisation of the balance of payments statistics	113
12. LEGISLATIVE ACTIVITY	115
12.1. Legislative activity of NBP governing bodies	116
12.2. Participation of the NBP in the state authorities' work on draft normative and non-normative acts	116
12.3. Draft legislation pertaining to the operation of the banking system	118
12.3.1. Laws (adopted or at the stage of legislative preparation) developed at the National Bank of Poland	118
12.3.2. Other laws	118
12.4. Participation of the NBP in consulting Community laws and draft national legislation of the EU Member States and other documents	119
13. INTERNATIONAL ACTIVITY	121
13.1. Activities related to the performance of duties arising from Poland's membership in the European Union	122
13.1.1. Cooperation within the European System of Central Banks	122
13.1.2. The NBP's participation in the work of other Community bodies	122
13.2. Collaboration with international economic and financial institutions	123
13.2.1. The Organisation for Economic Co-operation and Development (OECD)	123
13.2.2. The World Bank Group and the International Monetary Fund	124
13.2.3. The European Bank for Reconstruction and Development	124
13.2.4. Coordination activity of the NBP regarding cooperation with international financial institutions	125
13.2.5. The Bank for International Settlements (BIS)	125
13.2.6. The International Bank for Economic Cooperation	123
13.3. Technical and training assistance for central banks	125
14. INTERNAL DEVELOPMENT OF THE NBP	127
14.1. Human resources management	128
14.1.1. NBP staffing	128
14.1.2. Developing staff qualifications	128
14.2. Organisational changes	128

14.3. Strategic management	129
14.4. Risk management	129
14.5. IT support to the banking system and the NBP	130
14.6. Safety and security	131
14.7. Internal audit	131
15. INDEPENDENT AUDITOR'S OPINION AND CONDENSED FINANCIAL STATEMENTS OF THE NATIONAL BANK OF POLAND AS AT 31 DECEMBER 2008	133
15.1. Independent auditor's opinion	134
15.2. Legal principles for maintaining accountancy records at the NBP	136
15.3. Basic accounting principles at the NBP	136
15.4. Information about significant events after the balance sheet date, not recognised in the financial statements	138
15.5. Certified auditor and its selection	139
15.6. Amendments to the accounting principles in the financial year 2008	139
15.7. Data comparability	140
15.8. The effect of GIBS dissolution on the economic and financial position and profit and loss account of the NBP	143
15.9. Movements in liabilities	145
15.9.1. Assets	146
15.9.1.1. Gold and gold receivables conforming to international standards of purity	149
15.9.1.2. Claims on non-residents denominated in foreign currency	149
15.9.1.3. Claims on residents denominated in foreign currency	150
15.9.1.4. Claims on other domestic monetary financial institutions related to monetary policy operations denominated in domestic currency	150
15.9.1.5. Other claims on other domestic monetary financial institutions denominated in domestic currency	151
15.9.1.6. Other assets	152
15.9.2. Liabilities	152
15.9.2.1. Notes and coins in circulation	156
15.9.2.2. Liabilities to other domestic monetary financial institutions related to monetary policy operations in domestic currency	156
15.9.2.3. Other liabilities to other domestic monetary financial institutions in domestic currency	157
15.9.2.4. Liabilities to other residents denominated in domestic currency	157
15.9.2.5. Liabilities to non-residents denominated in domestic currency	158
15.9.2.6. Liabilities to residents in foreign currency	158
15.9.2.7. Liabilities to non-residents in foreign currency	158
15.9.2.8. Liabilities to the IMF	159
15.9.2.9. Other liabilities	159
15.9.2.10. Provisions for future liabilities	160

15.9.2.11. Revaluation accounts	160
15.9.2.12. Capital and reserves	160
15.9.2.13. Financial result	161
15.9.3. Off-balance sheet items	161
15.10. Movements in the NBP profit and loss account	162
APPENDICES	169
APPENDIX 1 GDP and aggregate demand	170
APPENDIX 2 Prices of consumer goods and services	172
APPENDIX 3 Balance of payments	173
APPENDIX 4 Money and credit	177
APPENDIX 5 Inflation projections of the NBP	183
APPENDIX 6 Minutes of Monetary Policy Council decision-making meetings held in 2008	186
APPENDIX 7 Selected information about the banking sector	222
Appendix 8 List of open-to-public academic seminars and selected publications of the NBP	225
APPENDIX 9 Voting records of Monetary Policy Council members on motions and resolutions in 2008	227
STATISTICAL ANNEX	233
METHODOLOGICAL NOTES	260
LIST OF THE MOST IMPORTANT ABBREVIATIONS	268

Monetary Policy Council

Chairperson

Sławomir S. Skrzypek

Members:

Jan Czekaj

Dariusz Filar

Stanisław Nieckarz

Marian Noga

Stanisław Owsiak

Mirosław Pietrewicz

Andrzej Sławiński

Halina Wasilewska-Trenkner

Andrzej Wojtyna

Management Board of the National Bank of Poland

Chairman

Sławomir S. Skrzypek

*appointed at the request of the President of the Republic of Poland
by the Sejm on 10 January 2007*

Members:

Piotr Wiesiołek

1st Vice President of the NBP
(from 6 March 2008)

Witold Koziński

Vice President of the NBP
(from 24 October 2008)

Zbigniew Hockuba (from 2 November 2007)

Paweł Samecki (from 13 December 2004)

Jakub Skiba (from 2 November 2007)

Zdzisław Sokal (from 13 March 2007)

Jerzy Stopyra (from 25 March 2004)

Dismissed in 2008:

Jerzy Pruski, 1st Vice President of the NBP*

Krzysztof Rybiński, Vice President of the NBP**

Anna Trzecińska***

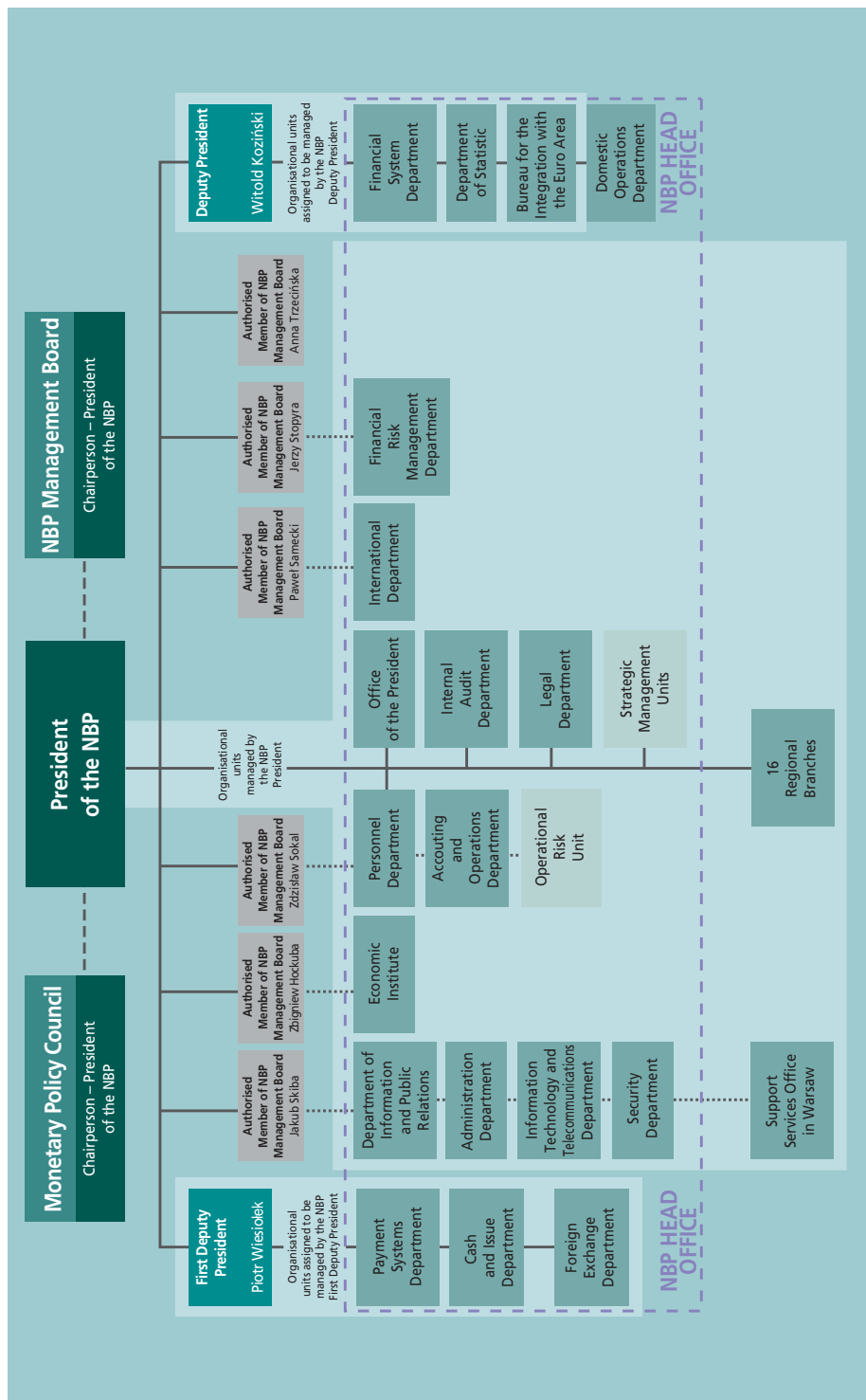
* After resigning from the post on 24 January 2008, he was dismissed on 19 February 2008.

** After resigning from the post on 2 January 2008, he was dismissed on 19 February 2008.

*** After resigning from the post on 12 November 2008 she was dismissed on 30 December 2008.

Organization chart of the National Bank of Poland

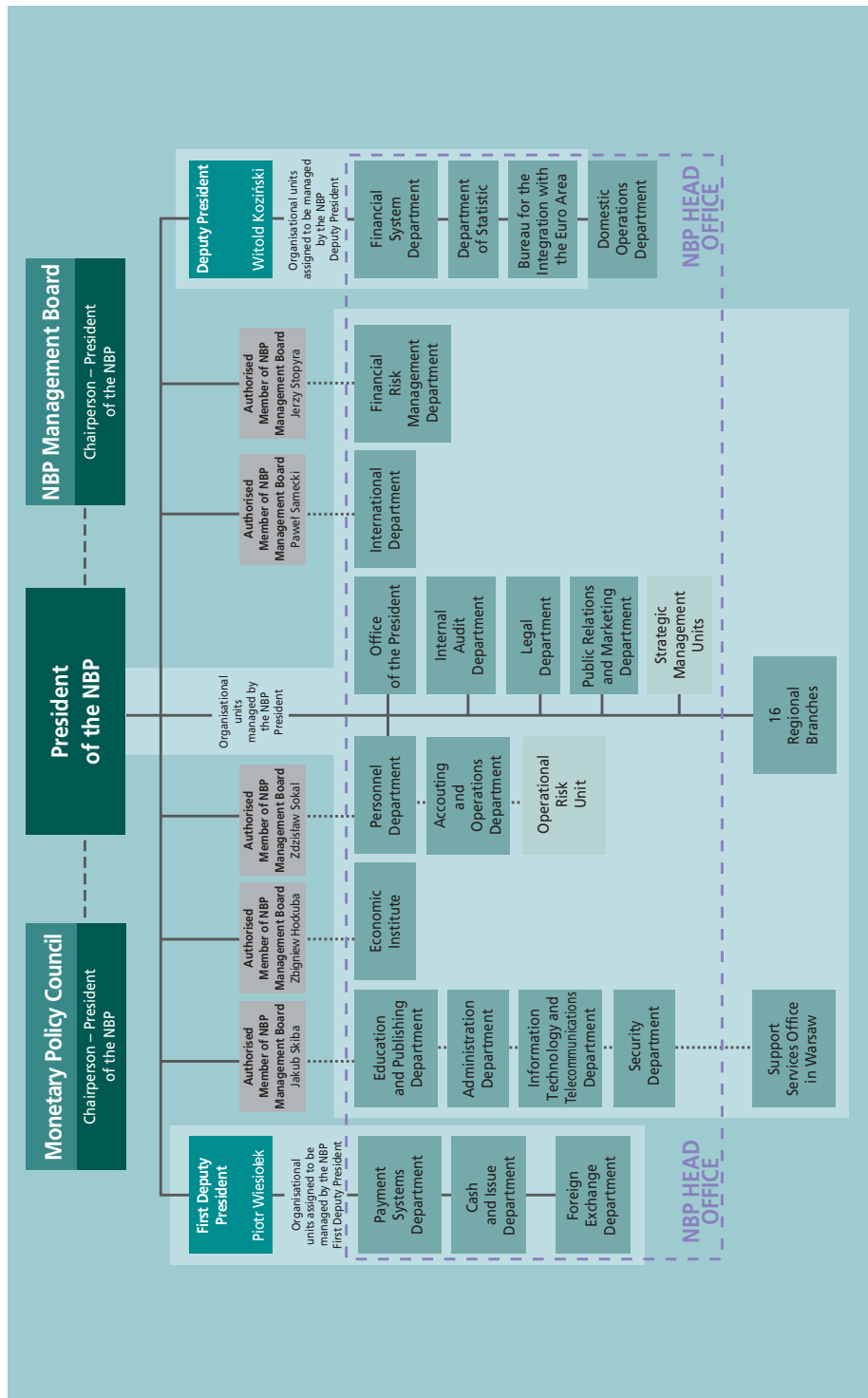
Valid since 30 December 2008



--- Day-to-day oversight exercised pursuant to an authorisation granted by the NBP President to Members of the NBP Management Board, in accordance with § 12 of the Organisational By-laws of the National Bank of Poland.

— Day-to-day oversight exercised on the basis of the NBP reporting structure, according to the areas of work of organisational units assigned by the NBP President to be managed by the NBP Deputy Presidents.

Valid since 16 January 2009*



--- Day-to-day oversight exercised pursuant to an authorisation granted by the NBP President to Members of the NBP Management Board, in accordance with § 12 of the Organisational By-laws of the National Bank of Poland.

— Day-to-day oversight exercised on the basis of the NBP reporting structure, according to the areas of work of organisational units assigned by the NBP President to be managed by the NBP Deputy Presidents.

* Including changes to the NBP Management Board effected in December 2008.

2008
Annual Report

NBP



SUMMARY

1. Pursuant to Article 227 para. 1 of the Constitution of the Republic of Poland "The central bank of the State shall be the National Bank of Poland. It shall have the exclusive right to issue money as well as to formulate and implement monetary policy. The National Bank of Poland shall be responsible for the value of Polish currency." The basic responsibilities of the NBP are stipulated in the Act on the National Bank of Poland, in the Banking Act, in the Treaty establishing the European Community, and in the Statute of the ESCB and of the ECB. In 2008, the NBP conducted its activities pursuant to the *Monetary Policy Strategy beyond 2003*, the *Monetary Policy Guidelines for 2008* and the *NBP Plan of Activity for the Years 2007–2009*.
2. This *Report* describes the performance of the statutory responsibilities of the NBP in 2008 with regard to the following areas: monetary policy, pursuance of the financial system stability,¹ issue of currency, management of official foreign exchange reserves, foreign exchange operations, development of the payment system, education and information, services to central government, research activity, statistical activity and international cooperation. The *Report* also presents the legislative activity, internal activity, as well as the balance sheet and the profit and loss account of the NBP.
3. Pursuant to the Act on the National Bank of Poland of 29 August 1997, the directing bodies of the NBP comprise the President of the National Bank of Poland, the Monetary Policy Council, and the Management Board of the National Bank of Poland. In 2008, the organisational structure of the NBP consisted of the Head Office and 17 organisational units.
4. In 2008, NBP representatives participated in the work of committees and working groups of the ECB and the ESCB.² As regards other most important responsibilities relative to the European integration, the Bank contributed to the development of agreement on the cross-border financial stability, worked to integrate the Polish payment system with the Single Euro Payments Area, continued adjustments related to the statistical activity, issued opinions on EU legal drafts, and monitored ongoing EU developments.
5. In 2008, the monetary policy was conducted against a backdrop of the strong turmoil in the world economy and, respectively, high uncertainty about the global economic outlook and inflation. The major external shock came from the global financial crisis observed since September 2008, which contributed to rapid deceleration of the world economic activity in Q4 2008 and pushed the world economy into the most severe recession since World War II. In the first six months of 2008 a strong growth in prices in the global markets of agricultural commodities and energy – observed since 2007 Q4 – had a major impact on inflationary processes, both in Poland and in a number of other countries. Furthermore, the upward risk for price stability and CPI inflation remained clearly on the increase for the whole of 2008 – fuelled by pronounced hikes in administered prices, determined by the central administration and local government. These impacted most specifically the prices of energy (in particular those of energy and natural gas) and services related to the use of flat. In the first six months of 2008 Polish economy experienced buoyant growth, principally credited to a robust acceleration in consumption and investments. Due to a rapid economic recovery employment grew and unemployment declined, strong growth in wages exceeded the growth in productivity; as a result of which unit labour costs surged and had upward impact on inflationary pressures. This pressure came to be mitigated by the elevated inflow of capital to the emerging markets and zloty appreciation. In the last six months of 2008, the unwinding global financial crisis resulted in an increase in risk aversion, outflow of capital from the emerging markets, and in effect considerable depreciation of their currencies, including the zloty. Following the bankruptcy of Lehman Brothers investment Bank, September 2008 saw a rapid intensification

¹ The chapter *Banking supervision* was replaced with the chapter *Activities for the financial system stability* further to the delegation on 1 January 2008 of banking supervision responsibilities from the NBP to the PFSA.

² Poland has been a member of the Economic and Monetary Union as a Member State with a derogation, NBP representatives participate in the works of the ESCB within the scope specified for the EU Member States which remain outside the euro area.

of the previously observed turmoil in the financial system, with strong falls in asset prices and crisis of confidence in financial institutions, which led *i.a.* to strong reduction in trade on the interbank markets. Liquidity shortages occurred also in the Polish market at that time. Furthermore, Polish banks faced a drastic constraint in financing from international financial markets. As a result of those changes, lending, having peaked in the preceding years, clearly moderated both in business and in household sectors. Meanwhile, the global economic downturn, most specifically the recession in the euro area, Poland's major trading partner, rendered into a decline in exports and industrial output in Poland, and contributed to a clear slowdown in the GDP growth. This also affected the situation in the home labour market: employment fall and unemployment growth occurred, accompanied by a lower growth rate of wages. The annual consumer price index exceeded the NBP inflation target (2.5%) in each month of the year, and the upper limit for deviations from the target (3.5%) – until November 2008; the annual average consumer price index amounted to 4.2%. CPI inflation pursued rising trend until August, *i.e.* from 4.0% in January, it increased to 4.8% in July and August. Subsequently, it began to decline to 3.7% and 3.3%, respectively, in November and December 2008. In order to stabilise inflation at the level of the inflation target in the medium term and taking account of favourable economic climate in Polish economy, the Monetary Policy Council raised interest rates on four occasions over the first six months of 2008 (in its meetings held in January, February, March and June 2008, each time by 0.25 percentage point). Between July and October the rates remained relatively stable. In view of inflation decline, marked deterioration of the economic outlook, and hence considerably weaker inflationary pressure in the medium term, the Council reduced the interest rates in November and December 2008, respectively by 0.25 and 0.75 percentage point. In effect of the above decisions, the NBP reference rate attained 5% at the end of December 2008.

6. The NBP conducted the monetary policy using the set of instruments adopted by the Monetary Policy Council in the *Monetary Policy Guidelines for the Year 2008*. A short-term interest rate remained its main instrument. The NBP's reference rate determined the minimum yield obtainable on main open market operations, influencing, at the same time, the level of short-term deposit rates in the market of unsecured interbank deposits. As in the preceding years, in 2008, the main operations consisted in the issuance of money market bills with 7-day maturity. By using those bills the NBP absorbed excess liquidity of the banking sector. The deposit and lombard rates determined the profitability of standing facilities as well as the corridor for deviations of the overnight market rate. By taking recourse to the lombard facility and the deposit facility, banks could supplement liquidity deficits and deposit their surplus liquidity with the central bank. Furthermore, in consideration of the intensifying tensions observed in the domestic financial market since September 2008 and difficulties experienced by banks seeking financing in the domestic and foreign currencies, the National Bank of Poland as from October extended the scope of its monetary policy instruments. The NBP commenced to provide the banking sector with domestic liquidity *via* repurchase agreement operations (*repos*) with the maturity of up to 3 months, and continued to issue money market bills with 7-day maturity. By using the latter as a basic instrument the Bank absorbed excess liquidity. At the same time the list of assets eligible as collateral for NBP refinancing operations expanded and banks were allowed to obtain foreign currency liquidity *via* FX swap transactions (EUR/PLN, USD/PLN, CHF/PLN).
7. The level of excess liquidity of the banking sector, measured as the average annualised balance of operations conducted by the NBP came up to PLN 9,557 million, which represented a decline of PLN 9,745 million *vis-à-vis* the average level of 2007. The decline in excess liquidity was first of all the result of the increased level of currency in circulation and the higher level of banks' reserve requirement. In parallel, liquidity in the banking sector was increased by such factors as: foreign currency purchases exceeding sale by the NBP (mainly due to the use of EU funds in the Polish zloty), and the lower level of budget deposits placed with the NBP as compared to the preceding year. The level of NBP money market bills averaged PLN 11 530 million in 2008. The repurchase agreement operations (*repos*) conducted under the *Confidence Pact* averaged PLN 2,135 million, whilst swap operations stood at PLN 162 million.

8. One of the objectives of the monetary policy pursued by the NBP is strengthening of NBP credibility as an institution responsible for maintaining the integrity and value of the Polish currency. The NBP at all times seeks to enhance the transparency of its activities and dedicates its efforts to ensure the best possible communication with the financial markets, enterprises and the general public. With that end in view, in 2008 the NBP launched information web portal NBPnews.pl, with information on the current events at the central bank. Moreover, about 460 written answers were provided to journalists' questions, and about 290 interviews and meetings with members of the Management Board of the NBP and of the Monetary Policy Council were arranged.
9. Pursuant to Article 3 section 2 para. 6 of the Act on the National Bank of Poland, the responsibilities of the NBP shall include "laying down the necessary conditions for the development of the banking system". The Polish central bank performs this responsibility on an ongoing basis by taking steps to maintain a stable and low level of inflation. In 2008 the NBP also focused its activities on strengthening collaboration between the network institutions for financial security in Poland (MF, NBP, PFSA) and preventing turmoil on the interbank market (see para. 10 of the *Summary*). In addition, the NBP sought to develop and maintain liquidity of the Polish payment system, and also guarantee safety to funds deposited in bank accounts (see para. 14 of the *Summary*). The NBP also participated in drafting legal regulations concerning the banking sector, conducted analyses of the financial system stability, as well as pursued cooperation with the Bank Guarantee Fund and the Polish Bank Association.
10. 2008 witnessed significant changes with reference to the NBP's work on the stability of the financial system. In virtue of the statutory regulations the Polish central bank has been *explicite* committed to contribute to the stability of the domestic financial system and granted additional competencies in this area. The NBP at the same time stepped up its efforts to consolidate collaboration between the institutions of financial security network at home. The Bank developed the Act on the Committee for Financial Stability and actively participated in the work of the Committee. In the context of turmoil on the interbank market, the Bank developed the *Confidence Pact*, designed to restore smooth operations of the financial market.
11. The main responsibility of the NBP issuing activity was to ensure safe and liquid cash turnover cycle. The NBP continued to issue collector's coins, which remain invariably popular. In 2008, 1,707.4 thousand pieces of coins were issued which related to 12 topics; 97.4 thousand pieces were gold and 1,610 thousand were silver coins.
12. In the management of foreign exchange reserves, the NBP sought maximum return while ensuring the safety of invested funds and the necessary liquidity of reserves. In support of the objectives set out in the long term strategy of official reserve management – adopted in 2007 – and taking into account the currently prevailing conditions and market outlook, in 2008 the Bank continued the process of ongoing diversification of currency structure and investment instruments. At the same time, in response to the escalation of the crisis in the financial market, a number of measures were undertaken with a view to reducing exposure to credit risk from investments (*i.a.*, the share of investment transactions in the investment composition was seriously reduced and their permissible duration was shortened). In effect of significant growth in the market prices of government securities, which attract most of invested funds, and depreciation of the zloty, the yield produced on the official reserves in 2008 was the highest in recent years, *i.e.* 8.5% in the currency of the instruments and 21.4% in PLN.
13. The foreign exchange activity of the NBP, conducted by the Bank's Head Office and regional branches, consisted in the maintenance of a register of bureau de change activities, issuing permits concerning foreign exchange matters, and control of foreign exchange trading. In 2008, a total of 3702 decisions and 23 resolutions concerning foreign exchange were issued, as well as 3079 inspections of foreign exchange trading were conducted. As at 31 December 2008, 4193 bureaux de change were operating in Poland.

14. Activities of the National Bank of Poland related to the payment system mainly comprised the organisation of cash settlements, oversight of payment systems, authorization and clearing systems as well as securities settlement systems. On 19 May 2008 the NBP joined TARGET2 – Trans-European Automated Real-time Gross Settlement Express Transfer system for large value payments in euro, which replaced the previously operating TARGET system. Furthermore, on 28 January 2008 the NBP launched credit transfer under SEPA initiative – SEPA Credit Transfer and allowed domestic banks use the service, itself acting as intermediary. The NBP also continued its cooperation with the banking circles, most specifically within the framework of the Council for the Payment System and undertakings carried out in cooperation with the Polish Bank Association.
15. In 2008 the NBP Open Door Days were held and 16 educational schemes were implemented within the framework of educational and informative activities. Work progressed to update the contents and develop new functionalities of the NBP website NBPportal.pl. About 1400 thousand people used this form of Bank's educational activity in 2008, whereas about 20 thousand people followed e-learning courses.
16. The maintenance of bank accounts by the National Bank of Poland contributes to the safety and liquidity of public funds settlements. In 2008, the NBP provided services to 3,968 account holders and maintained 17,446 accounts. Works continued on introducing new rules for the provision of services to the central government. As from 2008 the NBP has allowed account holders to execute credit transfer orders in the SEPA standard. These shall be placed in a paper-based form at a regional branch of the NBP. Work was also initiated to launch speed-collect services for the holders of accounts with the NBP (system of mass payments whereby a private account number is assigned to each payer or to each category of payment). The central bank also ensured servicing international liabilities and receivables of the central government and trading in Treasury securities, and cooperated with the Ministry of Finance in respect of public debt management.
17. In 2008, research work focused mainly on the costs of and benefits from participation in the third stage of the Economic and Monetary Union, participation in the Exchange Rate Mechanism II, monetary policy and inflation processes, economic condition of enterprises and households, public finance, structural changes in the economy, determinants of economic development, world economy, national and international economic climate, the balance of payments, labour and property market. The results of the research and analyses were used as the basis for decisions taken by the NBP Management Board and the Monetary Policy Council. Moreover, in 2008 the new forecasting model NECMOD replaced the previous ECMOD model and a number of changes were initiated in the forecasting process. Work on the *Report on full membership of the Republic of Poland in the third stage of the Economic and Monetary Union* came to an end. Two conferences, one international seminar and 11 open seminars were held at the NBP.
18. The NBP conducted further works to adjust its statistical tasks to the requirements of the ECB in respect of monetary, banking, and financial statistics, the statistics of the balance of payments and profit and loss account, the statistics of other financial intermediation establishments, and the statistics of the general government sector. 2008 saw the continuation of work on the new reporting systems – system of statistics of economic liaisons with abroad and investment funds statistics – as well as the development of the SIS prudential reporting system. The NBP published its quarterly financial accounts in compliance with the ECB requirements for the first time.
19. NBP representatives participated in meetings of the Committee of the Council of Ministers and the European Committee of the Council of Ministers. Moreover, NBP representatives participated in the works of such inter-departmental bodies as the Polish Financial Supervision Authority, the Financial Stability Committee, the Committee for Export Insurance Policy, the Financial Market Development Council, Accounting Standards Committee and the Tripartite

Committee for Social and Economic Affairs. The NBP collaborated with state authorities issuing opinions on normative and non-normative draft acts as regards the economic policy and the banking system. As a member of the ESCB, the NBP issued opinions on drafts of EU legal acts as well as drafts of national legal acts of EU Member States concerning the competence of the central bank. In 2008 the NBP developed two draft bills amending the Act on the National Bank of Poland and concerning the provision of the NBP with statistical data and the coverage of the NBP's balance sheet loss.

20. Representing the central bank and Poland on the international forum, in 2008 NBP representatives participated, *inter alia*, in works of such bodies as the ECB General Council, ESCB committees and working groups, the ECOFIN Council (unofficial meetings), committees and working groups of EU Council and the European Commission. The NBP also continued cooperation with the World Bank, the International Monetary Fund, the Organisation for Economic Co-operation and Development, the Bank for International Settlements, and the European Bank for Reconstruction and Development. In 2008 the NBP commenced the coordination of collaboration between domestic and international institutions. In order to extend the scope of technical assistance, the NBP Management Board adopted the *Strategy of developing technical assistance provided by the National Bank of Poland until 2011*.

21. In 2008, the NBP's average one-year staffing amounted to 3,968 full-time positions and decreased by 456 full-time positions (10.3%) compared to 2007. The decline in staffing was attributable on the one hand to the separation of GIBS from the NBP structures and on the other hand from further reduction in work force at the regional branches of the NBP by way of attrition (retirement). In 2008, 10,165 persons³ participated in training sessions organised for the staff by the NBP.

22. Pursuant to Article 69 section 1 of the Act on the National Bank of Poland, the *NBP Financial Statements for 2008* have been reviewed by a certified auditor appointed by the Monetary Policy Council. The independent certified auditor who audited the financial statements issued an unqualified opinion on the statements on 30 March 2009. The opinion of the independent certified auditor on the abbreviated financial statements is presented in Chapter 15.

23. As at the end of 2008, the NBP showed no profit.

³ Some employees participated in training sessions more than once.



1

GOVERNING BODIES
OF THE NBP

Pursuant to the Act on the National Bank of Poland of 29 August 1997⁴, which took effect on 1 January 1998, the governing bodies of the NBP comprise the President of the National Bank of Poland, the Monetary Policy Council and the Management Board of the National Bank of Poland.

1.1. President of the National Bank of Poland

In the performance of his responsibilities, the President of the National Bank of Poland presided over the meetings of the Monetary Policy Council and the Management Board of the NBP, and took part in the meetings of the General Council of the European Central Bank in Frankfurt.

While representing the central bank and Poland in liaising with foreign institutions, in 2008, the President of the NBP attended, among others, the following meetings:

- the annual meeting of the Board of Governors of the European Bank for Reconstruction and Development;
- the annual meeting of the Board of Governors of the World Bank and the International Monetary Fund;
- an unofficial meeting of the ECOFIN Council;
- meetings of Governors of the Bank for International Settlements in Basel.

In 2008, the President of the NBP issued 21 regulations, which concerned, among others:

- specification of the design, alloy, fineness, mass and mintage of coins and dates of introducing them into circulation;
- the manner of performing international settlements;

and 2 announcements.

As the superior of central bank staff, the President of the NBP participated in developing and implementing the human resources policy and overseeing compliance with work standards at the NBP.

1.2. Monetary Policy Council

In 2008, the Monetary Policy Council acted in accordance with the *Monetary Policy Strategy beyond 2003* and the *Monetary Policy Guidelines for the Year 2008*.

In 2008, the Monetary Policy Council (MPC) held 27 meetings (including 12 two-day meetings) and adopted 20 resolutions, published in *Monitor Polski* (Official Gazette) and *Dziennik Urzędowy NBP* (Official Journal of the National Bank of Poland).

The MPC adopted 6 resolutions concerning the reference rate, the interest rate on refinancing loans, the interest rate on term deposits, and the bill of exchange rediscount rate at the National Bank of Poland. Table 1 presents NBP interest rates as at the end of 2007 and 2008.

⁴ Dziennik Ustaw (Journal of Laws) of 2005, No.1, item 2, as amended.

Table 1

NBP interest rates as at the end of 2007 and 2008 (percentage points)

Reference rate		Lombard rate		Deposit at the NBP		Bill of exchange rediscount	
31 Dec 2007	31 Dec 2008	31 Dec 2007	31 Dec 2008	31 Dec 2007	31 Dec 2008	31 Dec 2007	31 Dec 2008
5.0	5.0	6.5	6.5	3.5	3.5	5.25	5.25

Source: NBP data.

Additionally, the MPC passed resolutions concerning the following matters:

- approving the annual financial statements of the National Bank of Poland as at 31 December 2007;
- approving the report on monetary policy implementation in 2007;
- assessing the activity of NBP Management Board with regard to the implementation of monetary policy guidelines in 2007;
- concerning the approval of the report on the activities of the National Bank of Poland in 2007;
- establishing monetary policy guidelines for 2009;
- the principles for conducting open market operations;
- establishing a ceiling on the liabilities arising from loans extended by foreign banking and financial institutions to the National Bank of Poland;
- principles for performing foreign exchange swap transactions by the National Bank of Poland;
- approving the NBP financial plan for 2009;
- changes in accounting principles, the arrangement of assets and liabilities in the NBP balance sheet, and of the NBP profit and loss account.

In the performance of its responsibilities arising from Article 23 of the Act on the National Bank of Poland, the MPC adopted the following documents:

- balances of payments of the Republic of Poland for the third and fourth quarter of 2007 and for the first and second quarter of 2008;
- *Poland's International Investment Position in 2007*;
- *Forecast of Poland's Balance of Payments in 2009*;
- *Opinion on the Budget Act draft for 2009*.

The MPC adopted three quarterly reports on inflation (in February, June and October), which included an assessment of inflation perspectives in the context of the monetary policy.

On 16 September 2008, the MPC held a meeting with the Prime Minister on the prospects of Poland's accession to the euro area. After the meeting, the parties declared their readiness to cooperate on activities aimed at meeting the criteria of accession to the euro area by Poland in 2011.

On 18 November 2008, the annual meeting of the Council with representatives of commercial banks took place. During the meeting, the *Monetary Policy Guidelines for 2009* were presented.

1.3. Management Board of the National Bank of Poland

Pursuant to the Act on the National Bank of Poland, the activity of the NBP is managed by the Management Board. NBP Management Board adopts resolutions on matters which are not the exclusive competence of other governing bodies of the NBP, and implements MPC resolutions. The Management Board of the NBP performed its basic responsibilities according to the *NBP Plan of Activity for the Years 2007–2009*, and the *Financial Plan*.

Pursuant to the Act on the NBP, the Management Board prepared draft resolutions and materials for the meetings of the MPC, concerning in particular:

- inflation projection results;
- ongoing macroeconomic developments, including the development of inflation processes, the condition of public finance, the economic condition of enterprises and households, the developments in the labour, property, financial and credit markets;
- economic and formal conditions of Poland's ERM II participation and accession to the euro area;
- prospects for meeting the Maastricht inflation criterion by Poland in the years 2008–2009;
- open market operations.

Moreover, NBP Management Board dealt with the situation in the financial sector, issues arising from the EU integration process, and ongoing issues related to the Bank's activity. A particular attention was paid to the situation of the banking sector in the context of the crisis in the world markets. In particular, the following issues were discussed:

- management of foreign exchange reserves, including the strategic allocation of assets;
- adjustment of the NBP to the requirements related to its participation in the TARGET2 system;
- scientific and research activities of the NBP;
- development of the SIS reporting system;
- development of regulations on financial safety nets in Poland and the European Union;
- concept of improving the activities of the NBP regional branches.

In 2008, NBP Management Board held 70 meetings, during which it adopted 70 normative resolutions, 23 non-normative resolutions, and 448 decisions.

The Management Board of the NBP adopted resolutions concerning, among others, the following matters:

- Introduction of the *Regulations concerning the refinancing of banks within a business day by the National Bank of Poland*. The introduction of the new Regulations aimed at

extending acceptable collateral for intraday credit facility granted by the NBP to commercial banks. At the same time, new time frame for granting and repayment of intraday credit facility were introduced which facilitated liquidity management by banks within a business day;

- Amendments to the resolution on the terms of opening and maintaining bank accounts by the National Bank of Poland. The major changes included the resignation from the requirement for the banks to carry out operating activities for six months prior to applying for opening a current account in the SORBNET, SORBNET-EURO or TARGET2-NBP system. The resignation from the requirement was possible due to the launch of mechanisms providing liquidity to banks, by means of, among others, providing intraday credit facility in the SORBNET, SORBNET-EURO and TARGET2-NBP systems. Another change concerned the extension of the list of the types of accounts opened and maintained at the NBP on the basis of the consent of the President of the NBP.
- Allocation of the reserve fund of the National Bank of Poland for covering the balance sheet loss of the National Bank of Poland incurred in 2007, reported in the financial statements of the National Bank of Poland as at 31 December 2007.
- Appointment to the NBP Management Board Plenipotentiary responsible for euro introduction. The tasks of the Plenipotentiary include the initiation and coordination of the NBP activities related to Poland's accession to the euro area, in particular, those related to the participation in the ERM II mechanism, participation in the development of the National Euro Changeover Plan and the introduction of euro banknotes and coins.
- Execution of foreign exchange swap transactions by the National Bank of Poland and general conditions for foreign exchange swap transactions. The introduction of foreign exchange swaps was facilitated by the resolution of the Monetary Policy Council of 13 October 2008.
- Introduction of the *Regulations concerning the refinancing of banks with the standing credit facility by the National Bank of Poland*. The list of acceptable collateral for standing credit facility granted by the NBP to commercial banks was supplemented by NBP bills and bonds.
- Amendment to the resolution on the introduction of the *Regulations of execution of payment orders by the National Bank of Poland in foreign currencies and domestic currency and cheque operations in foreign currencies in foreign and domestic trading, as well as purchase and sale of foreign currencies, for bank account holders*. The amendments were introduced in relation to the accession of the NBP to the TARGET2 system on 19 May 2008 and the NBP notification of the direct participation of the NBP in the STEP-SCT and SEPA-CT Scheme.
- Rules and manner of preparing the financial plan of the National Bank of Poland and the report on its implementation. The resolution aims at structuring and facilitating the planning process.
- Amendment to the Rules of Procedure of the NBP (see chapter: *Internal Development of the NBP* for more detail).

The Management Board made decisions concerning, among others, the following matters:

- Approving the proposal to develop a multiannual *Strategy of non-cash transactions development in Poland*.
- Approving the *Memorandum of Understanding on Cooperation between the Financial*

Supervisory Authorities, Central Banks and Finance Ministries of the European Union on Cross-Border Financial Stability of 1 June 2008;

- Accepting the reports on the performance of tasks of the Management Board Plenipotentiary responsible for improving the activity of the NBP regional branches;
- Approving the National Emergency Plan laying down the principles for cooperation between the Minister of Finance, the Polish Financial Supervision Authority and the NBP in the case of threats to the financial system stability;
- Adopting the *NBP Management Strategy for the years 2009–2012*;
- Adopting the *Strategy for the development of technical assistance granted by the NBP by 2011*;
- Granting consent for signing the *Master agreement for Financial Transactions* with the European Central Bank on repo transactions.

1.4. Implementation of the *NBP Plan of Activity for the Years 2007–2009*

On 3 January 2007, the Management Board of the NBP adopted the *NBP Plan of Activity for the Years 2007–2009*. The *Plan* specifies the areas, conditions and objectives of NBP activity and, in its detailed part, defines tasks aimed at accomplishing those objectives.

As in the previous years, the NBP monitored the implementation of the *Plan of Activity*. In 2008, eight tasks included in the *Plan* were implemented, the most important of which include:

- Preparation of the NBP to participate in the TARGET 2 system;
- Development of quarterly financial accounts in accordance with ECB requirements;
- Improvement of methods and procedures applied to seasonal adjustment of statistical data;
- Development of a set of synthetic economic activity indicators in Poland, taking into account the cyclical nature of economic growth;
- Development of a system to support the NBP staff employed at the ECB;
- Development of the assumptions for the program of skill development facilitating effective functioning in the international environment.

In relation to the adoption of the *Strategy for the Management of the National Bank of Poland for the Years 2009–2012* by the Management Board of the NBP on 9 October 2008, the next plan of activity will include the assumptions and arrangements laid down in the *Strategy*.



2

MONETARY POLICY⁵

⁵ The chapter on monetary policy is the *Report on Monetary Policy Implementation in 2008*, which was approved by the Monetary Policy Council at the meeting on 13 May 2009. The tasks in this area are performed, among others, on the basis of Article 3 para. 2 point 5, Article 12, Article 16, Article 17 para. 3 point 1 and para. 4 points 2 and 4, Articles 23–24 and provisions of Title 6 of the Act on the NBP.

2.1. Monetary policy strategy in 2008

According to the Article 227 para. 1 of the Constitution of the Republic of Poland “the National Bank of Poland shall be responsible for the value of Polish currency.” The Act on the National Bank of Poland of 29 August 1997 states in Art. 3 that “the basic objective of NBP activity shall be to maintain price stability, and it shall at the same time act in support of Government economic policies, insofar as this does not constrain pursuit of the basic objective of the NBP”.

Contemporary central banks understand price stability as an inflation low enough as not to exert negative influence on investment, saving and other important decisions taken by economic agents. Ensuring thus understood price stability is a fundamental way in which the central bank contributes, by means of its decisions, to high and sustainable economic growth. Central banks view price stability symmetrically, which means that they respond both to inflationary and deflationary threats.

Since 1998 the Monetary Policy Council (MPC) has based its monetary policy on the direct inflation targeting (DIT) strategy. International experience shows that this strategy is an effective method of ensuring price stability. Having brought down inflation to a low level, in 2004 the MPC adopted a permanent inflation target of 2.5% with a symmetrical tolerance range for deviations of +/-1 percentage point. The MPC pursues this strategy under a floating exchange rate regime. Floating exchange rate regime does not rule out foreign exchange interventions should it turn out necessary for the inflation target implementation.

In *Monetary Policy Guidelines for the Year 2008*, the Council explained how it understood the permanent inflation target and the way of its implementation:

- First, the notion of permanent inflation target means that it refers to inflation measured as a year-on-year change in prices of consumer goods and services in each month compared to the corresponding period of the preceding year. For a better understanding of inflation processes it is also justified to use annual and quarterly inflation indices such as those used in the NBP's inflation projection and in the central budget. An important role in the assessment of inflationary pressure is also played by core inflation indices.
- Second, the adopted solution means that the monetary policy is unequivocally focused on maintaining inflation as close as possible to the target of 2.5% and not only within the tolerance range. The adopted solution provides anchoring for inflation expectations, thus facilitating the pursuit of monetary policy, which in case of shocks requires smaller and less frequent exchange rate changes.
- Third, the occurrence of shocks in the economy is inevitable. It is the scale and the duration of inflation deviation from the adopted target that may differ depending on the strength of the shock and the degree of inertia of inflation expectations. The central bank normally does not respond to those deviations from the inflation target which it deems temporary and which lie within the tolerance range around the target. In countries with a permanently low inflation rate, the central bank does not have to respond even when inflation leaves the tolerance band temporarily. In the case of shocks viewed as leading to a permanent deviation from the inflation target, the central bank adjusts its monetary policy accordingly.
- Fourth, monetary policy reaction to shocks depends also on their causes and nature. The reaction to demand shocks is a relatively minor issue, since in this case inflation and output move in the same direction. An interest rate increase weakens economic activity and, consequently, inflationary pressure. Supply shocks are a more difficult problem from the point of view of monetary policy, as in this case output and inflation move in opposite directions. Inappropriate monetary policy reaction may have far-reaching negative consequences for the economy. An attempt to fully neutralise the impact of a supply shock

on inflation through monetary policy may lead to an unnecessary plunge in output, as the supply shock itself already has a negative effect on consumption and investment. On the other hand, an attempt to fully accommodate a supply shock resulting in a price increase and output decrease – by pursuing an expansive monetary policy – usually leads to persistently higher inflation, which, in turn, requires a far more restrictive monetary policy in subsequent periods, bringing about a stronger deceleration in economic growth. Reaction of the central bank should depend on the assessment of the shock's durability.

- Fifth, most of supply shocks are transitory and limited in scale. Thus, they do not require an immediate reaction. However, in the case of stronger shocks even temporary acceleration in price growth may bring about a relatively permanent rise in inflation expectations and, as a consequence, an increase in inflation due to the emergence of wage demands. In such a situation, monetary policy has to prevent secondary effects of the supply shock (the so-called second-round effects). The risk of such effects is substantial in countries with a short history of low inflation. Very useful in analysing supply shocks are core inflation indices, which help to distinguish, at least roughly, temporary effects from permanent changes in inflationary pressure.
- Sixth, because the reaction of output and inflation to the pursued monetary policy is delayed, its influence on current inflation is limited. Current decisions of the monetary authorities affect price developments in the future just as current inflation is influenced by interest rate changes made several quarters ago. However, the length of these lags is not constant and to a large extent depends on structural and institutional changes ongoing in the economy. Changes in the transmission mechanism of monetary impulses result in a situation in which central banks can only approximately determine the time lag between an interest rate decision and its strongest observed impact on real variables (output, employment), and then on inflation.
- Seventh, monetary policy affects the economy not only through changing interest rates but also through keeping them unchanged for a period of time. The decision to keep interest rates unchanged for several periods (months or quarters) also has substantial consequences for the economy because it leads to a gradual widening or narrowing of the output gap.
- Eighth, monetary policy is pursued under uncertainty. Large uncertainty is due, among others, to the fact that inflation projection models utilised by central banks may start to less adequately describe economic processes owing to the ongoing structural changes in the economy. This means that (a) while making decisions it is necessary to take into account all available data, rather than just the inflation projection; (b) it is not possible to adopt a simple policy rule which could be known *ex ante* to market participants; and (c) forward-looking monetary policy has to be presented to the public as an attempt to achieve the inflation target under large uncertainty, rather than an exercise of strict control over economic processes.
- Ninth, in pursuance of monetary policy, while assessing the inflation outlook, especially when inflation is low, central banks allow for the prices of assets because of the need of ensuring financial stability. In the conditions of liberalised financial markets and amid favourable developments on the supply side of the economy supporting low inflation, it is becoming ever more essential for monetary authorities to allow for the financial stability in their decisions. If in response to low inflation central banks reduce interest rates too much, this may lead to rapid asset price growth. This growth is accompanied with the risk of the so-called unstable boom, where higher inflation surfaces with a considerable time lag. Such rapid growth in asset prices is also accompanied with the rising risk of their violent and considerable slump, which poses a threat to the stability of the financial system and the real economy. Financial system stability ensures effective operation of the transmission mechanism, which is crucial for appropriate monetary policy implementation.

In assessing the risk of the emergence of disruptions in the asset market and the inflation outlook, it may be useful in the longer run to account for the paths of monetary aggregates.

- Tenth, in assessing monetary conditions, not only the level of real interest rates should be considered but also the level of the real exchange rate. Thus understood restrictiveness of monetary policy impacts, in tandem with the implemented fiscal policy, the total restrictiveness of macroeconomic policy. An overly expansive fiscal policy is the most common reason that necessitates keeping the interest rates at a higher level.
- Eleventh, an important input into monetary policy decision-making process is the balance of factors affecting the probabilities of future inflation running above or below target. This balance is based on the inflation projection, the assessment of the actual economic developments, which may deviate from the scenario presented in the projection, as well as the course of variables and information not accounted for directly in the projection. While assessing the factors affecting future inflation, central banks take into consideration the length of the period in which inflation remained close to the target, because such course of inflation favours the anchoring of inflation expectations.

Moreover, in the *Monetary Policy Guidelines* the Council upheld its conviction that it would be most beneficial for Poland to pursue an economic strategy aimed at creating conditions for the accession to the euro area at the earliest possible date, with proper consideration of the balance of the resulting costs and benefits.

2.2. Monetary policy in 2008

While assessing monetary policy *ex post*, it is necessary to take into account – apart from economic developments in the assessed period – the delays in the transmission of monetary policy impulses and the uncertainty accompanying the decision making. As emphasised in Section 2.1, the decisions of monetary authorities affect the economy with a considerable delay with the strongest impact observed after a few quarters. In particular, this means that inflationary processes in 2008 were to a large extent affected by the monetary policy pursued in 2006–2007, while the monetary policy pursued in 2008 will have the strongest impact on the inflationary processes in 2009–2010.

Moreover, shocks in the economy are inevitable. Shocks, though they largely remain beyond control of the national monetary policy, especially when they are connected with factors resulting from the economy's external environment, may to a large extent determine internal economic situation and inflationary processes in the short- and sometimes also in the mid-term.

The above mentioned factors are highly significant for the assessment of the monetary policy pursued in 2008, which saw strong shocks in the global economy. Those shocks were to a large extent determining the economic situation and inflationary processes, and thus also the monetary policy in Poland. In consequence, the situation in the global and Polish economies in the second half of 2008 was significantly different than the conditions observed in the first half of 2008.

Situation in external environment of Polish economy

In 2008 the most significant external shock was the global economic crisis observed since September 2008. One of the main sources of this crisis was the bursting of the price bubble in the US real property market in 2007 and the resulting crisis in the subprime mortgage market in the United States. This bursting of the real property price bubble in the United States led – through the

so-called wealth effect coincided with limited possibility of mortgage refinancing – to reducing consumption and thus also the GDP growth in this country and a considerable deterioration in the value of financial sector assets. The reduced activity in the US economy was conducive to worsening the economic climate in Europe. Additionally, the activity drop in many European countries in 2008 was connected with a slump in the real property markets in those countries. Some countries (especially Ireland, Spain and the United Kingdom) – similarly as the United States – saw the end of the boom observed in previous years in the real property market, which had been fuelled by earlier surge in lending. In turn, the boom was conducive to increasing the contribution of the construction sector's output in GDP. As a result, the meltdown in the real property market had a significant impact on the deterioration of the economic climate in those countries.

At the beginning of 2008 it was assessed that disruptions connected with the subprime loan market in the United States would mainly affect the developed economies, whose financial institutions were directly involved in the market of mortgage instruments. The impact of those disruptions on the emerging economies at first seemed limited to just capital markets: the turn of 2007 and 2008 was marked with steep declines in the world securities markets. In this period it was sometimes assessed that the activity in the developing economies could remain relatively high even in the face of a considerable slowdown in the rate of growth of the developed economies (the so-called decoupling hypothesis). Such assessments encouraged an increased inflow of capital to the developing economies and a significant appreciation of their currencies, including the Polish zloty. With the passage of time, however, the disruptions in the financial markets aggravated exerting a growing impact on business activity not only in the countries directly affected by the subprime crisis but also in the emerging economies.

In the first half of 2008 most countries of the world saw a significant rise in inflation, mainly resulting from a price surge in the global agricultural and energy commodity markets observed in 2007 and the first half of 2008.

The second half of 2008 was marked with a marked worsening of the outlook for the world economy, which was accompanied by dropping commodity prices and easing global inflationary pressure. At the same time, the previously visible appreciation trend of many currencies, including those of CEE countries, was inverted.

In September the crisis in the US financial sector aggravated in connection to the bankruptcy declared by Lehman Brothers investment bank. Financial problems of banks in the United States and Western Europe coupled with intensified liquidity disruptions led to plunges of equity prices, a significant outflow of capital from emerging markets and depreciation of their currencies. The capital outflow from the emerging economies also triggered investors' fears over the ability of some of the affected economies to finance their foreign debts, which additionally deepened the depreciation of their currencies.

In 2008 Q4 the global financial crisis contributed to the plunge in the world economy giving rise to the deepest recession in the global economy since World War II. Amid concurrent decline in inflation and inflation expectations, the situation prompted the central banks of the developed countries and also of some developing economies to effect significant interest rate cuts. At the same time governments of many countries implemented large-scale measures in the area of fiscal policy aimed at stimulating demand and thus reviving the economic activity, and recapitalising the banking sector.

The shocks observed in the world economy in 2008 constituted a considerable challenge to the monetary authorities in most countries.

In the first half of the year the developed economies were faced with a risk of stagflation, i.e. the situation when a decline in economic growth would be accompanied by a relatively high inflation, while in the developing economies appeared the risk of persistently heightened inflation due to the so-called second round effects amid relatively high economic growth. In the second half

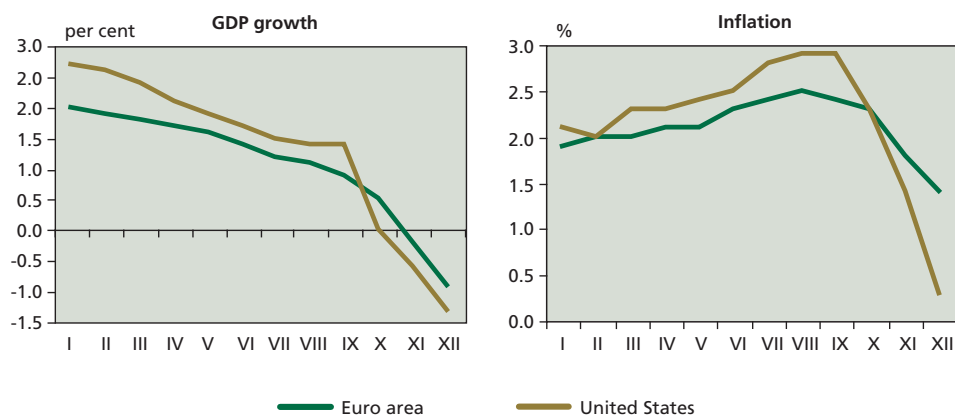
of the year inflationary pressure eased markedly and the main problems central banks were facing were the crisis in the financial markets, the ensuing threat to the stability of the financial system and a deep slump in the activity in the world economy. Moreover, central banks were confronted with disruptions in the monetary policy transmission mechanism: market interest rates were largely affected by liquidity disturbances in the money markets, resulting from the crisis of trust among market participants and from a considerable deterioration of the markets' balances due to price drops and problems with asset valuation. In many countries the decrease of asset prices and heightened risk aversion led to a significant reduction of lending. Thus, apart from interest rate cuts, the major central banks resorted to instruments directly injecting the financial system with liquidity, including foreign currency liquidity, among others by foreign exchange swap contracts. Additionally, many banks enlarged the scope of collaterals acceptable in open market operations and the list of institutions authorised to participate in such operations. Moreover, in December 2008 the US Federal Reserve, alongside cutting its key interest rate to almost zero (0.00–0.25%), introduced a credit easing strategy, which consisted in direct purchase of debt securities in order to improve the functioning of the credit markets in general and the market of mortgage loans in particular. In order to strengthen the confidence in the financial system, governments of many countries, including Poland, decided to increase the limits for deposits of non-financial sector guaranteed by the government in case of bankruptcy of a given financial institution.

The decision-making dilemmas of monetary authorities in the developing economies, including Poland, were made even harder by changes in foreign capital flows and the ensuing significant fluctuations of the exchange rate.

Moreover, due to the concurrent shocks, the uncertainty about the outlook for the world economy was markedly greater than in the previous years. This was reflected, among others, in more frequent than usual significant revisions of macroeconomic forecasts (Figure 1), which meant both downwards corrections of the expected rate of economic growth and considerable changes in the outlook for future inflation.

Figure 1

Forecasts of GDP growth and inflation in euro area and United States for 2009 as formulated in subsequent months of 2008



Source: Foreign Exchange Consensus Forecasts.

Situation in Polish economy

The changes occurring in the world economy in the course of 2008 had an impact on the situation in the banking sector and the real economy in most countries, including Poland.

In the first half of 2008 Polish economy was in a phase of intensive growth encompassing all its major sectors. Similarly as in the preceding year, the dominant contribution to GDP growth

was made by dynamic increase in consumption and investment (cf. *Appendix 1. GDP and final demand*). Fast economic growth was conducive to increased demand for labour, which resulted in a rise in employment and decline in unemployment to the lowest level in the whole history of the BAEL (LFS), i.e. since 1992. The percentage of enterprises reporting problems in finding employees also remained high. The tensions in the labour market were reflected in a high growth rate of wages, which outpaced the growth rate of labour productivity, leading to a significant upsurge in Unit Labour Costs. At the same time, the deteriorating indicators of economic climate coupled with steady decline of some measures of activity in the Polish economy pointed to a gradual deceleration of GDP growth rate. Because Polish banks had not been directly involved in complex financial instruments, including structured financial instruments secured by subprime mortgage loans, until the disruptions in the global financial markets soared in August 2008 the Polish banking system remained relatively immune to the results of those disturbances. At the same time, the increased inflow of capital to emerging markets contributed to strong appreciation of the zloty.

In the second half of 2008 the deepening world financial crisis exerted a strong and increasing impact on the Polish economy: the growing risk aversion and the ensuing capital outflow from the emerging markets resulted, following a period of strong appreciation – in a significant depreciation of zloty exchange rate. In September 2008 the collapse of Lehman Brothers bank contributed to a considerable decline in trust among counterparties in the world markets and the reduction of limits for interbank transactions. As the majority of banks operating in Poland constitute part of foreign bank groups, the disruptions in the international markets lowered the level of mutual trust among the banks. The liquidity of the domestic interbank market significantly diminished and the transactions were performed mainly for periods shorter than one week. Some banks were attracting deposits but only at interest rates significantly higher than WIBOR. WIBOR rates in this period reflected, apart from expected short term interest rates, the counterparty risk premium, which was visible in rising spread between WIBOR rates and the quotations of overnight index swaps.

After the collapse of Lehman Brothers bank there was also a radical reduction in the possibility to finance Polish banks in the international financial markets. Problems with acquiring funds in the interbank market forced banks to increase funding from dominant foreign entities or to intensify competition for non-financial sector deposits, which resulted in a significant rise in the offered interest, often above the rates in the international market.

Under the uncertainty surrounding the outlook for future economic situation and the financial standing of borrowers, both enterprises and households, the risk of lending to the non-financial sector increased significantly. This factor, in combination with the shrinking capital buffers, persuaded banks to considerably reduce lending, which had been very dynamic in previous two years. Moreover, decreased availability and a high cost of funding were forcing banks to raise their loan margins in order to keep profitability.

A marked rise in uncertainty concerning the outlook for the global and Polish economies and, consequently, a deterioration in the expectations of Polish enterprises about the future demand for their products, also resulted in slowing down their investment activity. 2008 Q4 brought a sudden deterioration in global economic climate and the ensuing downturn of the global trade exchange. These changes had a particularly strong effect on the activity in economies with a significant exports sector, including the euro area economy (especially Germany), which in the second half of 2008 experienced recession. The recession in the euro area, which is the most important trade partner of Poland, translated into a drop in exports and industrial output in Poland, contributing to a strong slowdown of GDP growth. At the same time, there was a change in the situation in the Polish labour market; employment began to fall and unemployment started to rise amid a decline in wage growth rate.

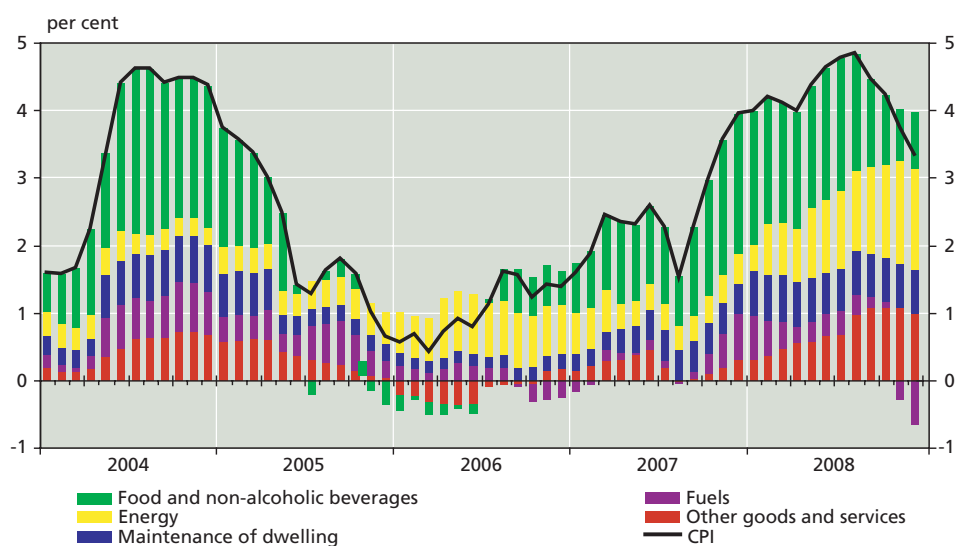
Inflationary processes in Poland

In 2008 the inflationary processes in Poland were to a large extent determined by food price movements and also by the shifts in energy prices and other administered prices, in particular prices of services related to maintenance of dwelling, i.e. by factors remaining largely beyond direct impact of the domestic monetary policy.

As a result of strong price shocks in the agricultural commodity markets in the second half of 2007 and the first half of 2008, the annual growth rate of food and non-alcoholic beverage prices in the first months of 2008 remained high and was contributing to upholding the heightened level of the annual growth rate of the prices of consumer goods and services.⁶ Similar effect was exerted by the upsurge in oil prices in the world markets observed until July 2008, which contributed to fuel price growth in the domestic market; the impact was slightly attenuated by the swift appreciation of the zloty exchange rate observed in the same period. With the unwinding of price shock effects in the agricultural commodity market (i.e. with the occurrence of the negative base effect), starting from August 2008 the annual growth rate of food prices began to slide, thus contributing to lowering the CPI inflation. The decline of oil prices in the global markets visible in the same period had a similar effect, which contributed to lowering the prices of fuels in Poland, though the impact was weakened by concurrent depreciation of the zloty against the euro and the US dollar.

Throughout 2008 the CPI inflation was being pushed up significantly by considerable rises of administered prices dependent on decisions of governmental agencies and local government authorities. The decisions were taken in different months of the year and primarily concerned the prices of energy carriers subject to the regulatory policy of the Energy Regulatory Office, in particular the prices of energy and natural gas, and the prices of services related to maintenance of dwelling, including the fees for waste removal, sewage and water supply utility services, and the costs of management and administration of housing (cf. Figure 2). In 2008 the prices of energy carriers raised the annual CPI inflation by the average of 1.1 percentage points (compared to 0.5 percentage points, on average, in 2004–2007), while the prices of services related to maintenance of dwelling raised inflation by 0.7 percentage points (compared to 0.4 percentage points, on average, in 2004–2007).

Figure 2
Contribution of main price groups to annual CPI growth



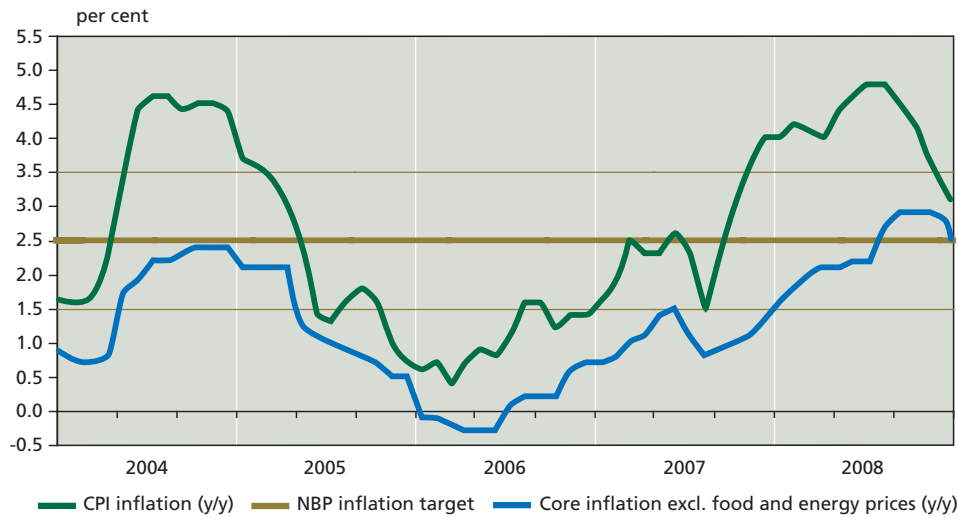
Source: GUS data, NBP calculations.

⁶ Detailed information about the paths of particular components of the inflation index can be found in *Appendix 2. Prices of consumer goods and services.*

The steady growth of prices of services – both non-market services (mainly connected with maintenance of dwelling) and some market services, supported by rising demand pressure – was the main reason of the gradual increase in the inflation net of food and energy prices⁷ observed almost in the whole of 2008. Between January and November the measure increased from 1.6% to 2.9% and then edged down to 2.8% in December.

Figure 3

Contribution of main price groups to annual CPI growth



Source: GUS data, NBP data.

Table 2

Inflation in 2008 vs. inflation targets in selected countries pursuing DIT strategy and in euro area

Country	Inflation target*	Inflation in 2008	Deviation from (centre of) target in percentage points
Australia	2–3%	4.4	+1.9
Brazil	4.5% +/-2 pp	5.9	+1.4
Czech Republic	3% +/-1 pp	6.4	+3.4
Chile	3% +/-1 pp	8.7	+5.7
Canada	2% +/-1 pp	2.4	+0.4
South Korea	3% +/-0.5 pp	4.7	+1.7
Mexico	3% +/-1 pp	5.1	+2.1
Norway	2.5%	3.8	+1.3
New Zealand	1–3%	4.0	+2.0
Poland	2.5% +/-1 pp	4.2	+1.7
Slovakia	below 2%	3.9	+1.9
Euro area	below but close to 2%	3.3	+1.3
Sweden	2% +/-1 pp	3.4	+1.4
Hungary	3% +/-1 pp	6.1	+3.1
United Kingdom	2% +/-1 pp	3.6	+1.6

* Inflation target expressed in CPI, except for euro area and Slovakia, where it is expressed in HICP.

Source: Data of central statistical offices and central banks of the listed countries.

⁷ In June 2008 the NBP introduced a new measure of core inflation, i.e. core inflation net of food and energy prices. The measure strips the CPI of the prices of food and non-alcoholic beverages and also those of fuel and energy carriers (electricity, natural gas, heating fuel etc.).

Due to the impact of the above mentioned factors, the annual growth of prices of consumer goods and services remained above the inflation target of 2.5% in all months of the year, and starting from November 2008 also above the upper limit for deviations from the target (3.5%); the average annual growth of prices of consumer goods and services amounted to 4.2%. Until August the CPI inflation displayed a rising trend, rising from 4.0% in January to 4.8% in July and August and then began to fall back to 3.7% in November and 3.3% in December 2008 (Figure 3). It should be emphasised that the inflation path over the inflation target throughout 2008 was primarily the result of external factors, which can also be confirmed by the heightened inflation in the majority of both the developed and developing countries (Table 2). In most countries implementing the strategy of direct inflation targeting and in the euro area inflation remained markedly above the inflation target (or the quantitative definition of price stability for the euro area).

Monetary policy in Poland

In the first half of 2008 the Monetary Policy Council was striving to lower inflation to the inflation target in the monetary policy transmission horizon by continuing the cycle of NBP interest rate increases which had been started back in April 2007. In 2008 the interest rates were raised on four occasions: at MPC meetings in January, February, March and June 2008, each time by 0.25 percentage points. From July to October the rates were kept unchanged. In the face of falling inflation, marked deterioration in outlook for economic growth and the ensuing significant easing of inflationary pressure in the medium term, in November and December 2008 the Council cut interest rates by 0.25 and 0.75 percentage points, respectively. As a result, in the first half of 2008 the reference rate of the NBP rose by the total of 1 percentage point and then was cut back by the total of 1 percentage point in the second half of 2008. Consequently, at the end of December 2008 it stood at 5% (Figure 4).

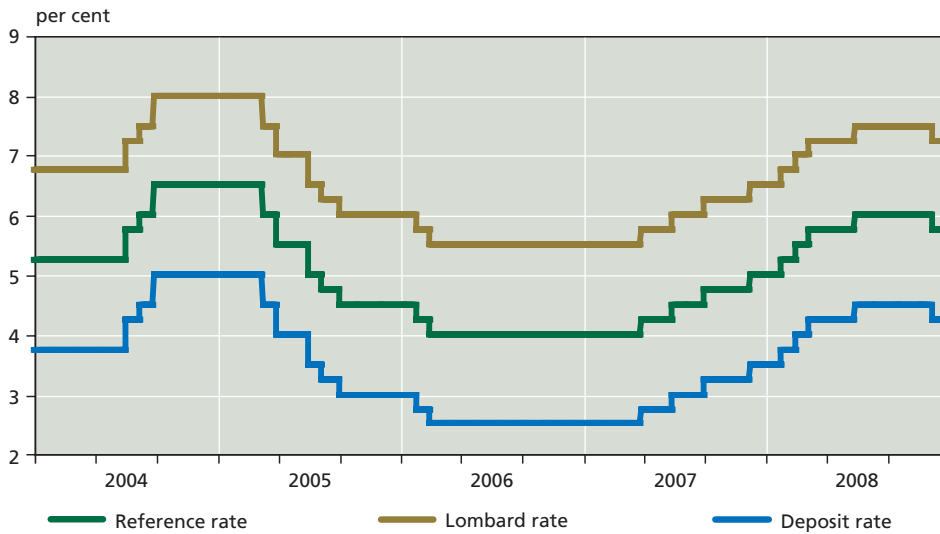
On each occasion when taking decisions on NBP interest rates, the Council considered the mid-term inflation outlook, assessing it in the context of past, current and especially the anticipated economic situation. The decisions of the Council was affected by the changing assessment of factors influencing the probabilities of future inflation running above or below the target. The assessment took into account the results of subsequent projections and other forecasting activities and also the path of variables and information not directly accounted for in the projections.

Similarly as in many other economies in the region, at the beginning of 2008 inflation in Poland remained at a heightened level, among others, as a result of the price shocks in the agricultural and energy commodity markets in the previous year. Moreover, January brought significant increases of regulated prices, primarily the prices of services related to maintenance of dwelling followed by energy price rises in February, which accelerated the CPI growth. The data on national accounts released in the first months of 2008 and other macroeconomic data indicated that Polish economy still remained in the period of dynamic growth. The information on labour market developments pointed to a continuing strong wage growth and unfavourable relation between wage and labour productivity growth. The Council assessed that due to, among others, renewed demands for wage increases in the public finance sector, the wage pressure in the economy was likely to persist in the coming period. The Council expected that inflation in the following months would remain above the upper limit for deviations from the NBP's inflation target with further increases of, among others, regulated prices contributing to this scenario. This assessment was also supported by the projections of inflation and GDP prepared in February 2008, which saw the central path of CPI inflation – assuming unchanged NBP key interest rates – remaining above the inflation target throughout the projection horizon, i.e. till the end of 2010. At the same time the projection suggested a positive output gap throughout the projection horizon (with unchanged interest rates), strong wage increases and unfavourable relationship between wage and labour productivity growth. Despite the fact that the anticipated continuation of the heightened inflation was expected to be primarily the outcome of factors remaining beyond

the direct influence of central bank, the MPC was convinced that monetary policy should allow for the possibility of this situation contributing to a deterioration of inflation expectations. In the conditions of low unemployment rate accompanied by tensions in the labour market, this could increase the probability of emergence of the so-called second round effects.

Figure 4

NBP key interest rates in 2004–2008



Source: NBP data.

In the Council's opinion, the factors that contributed to limiting inflation in the medium term in the first months of 2008 included, in particular, the high growth of investment, which was supporting productivity growth, the continuing good financial standing of enterprises, rising competition in the market of internationally tradable goods and services, appreciation of the zloty exchange rate and the expected deceleration of growth in the global economy. Nevertheless, at the meetings in January, February and March 2008 the Council assessed that the effect of these factors may prove insufficient to keep inflation at the target level in the monetary policy transmission horizon and thus decided to increase the key NBP interest rates by 0.25 percentage points on each occasion.

At the meetings in April and May 2008 the Council still assessed that the probability of inflation running above the target in the medium term was still higher than the probability of inflation falling below the target. However, after three consecutive interest rate increases (the total of six increases counting from the beginning of the monetary policy tightening cycle started in April 2007) the Council decided to keep rates unchanged both in April and May. The decisions were supported by the following factors: a high uncertainty about the outlook for growth in the global and, consequently, Polish economies, weaker than expected data on industrial output and retail sales and deteriorating results of economic climate surveys, which suggested that the rate of economic growth in Poland would slow down more strongly than previously anticipated, which would be easing the inflationary pressure. The Council also assessed that inflation in the medium term would be lowered by the previously effected interest rate increases and by the appreciation of the zloty observed in the previous period, which was strengthening monetary policy restrictiveness.

At the meeting in June 2008 the Council got acquainted with the new projection of inflation and GDP, which suggested that inflation till 2009 in Poland would be higher than anticipated in the February projection. The data published in June pointed to a rise in the current inflation and

a deepening of the unfavourable relation between the growth of wages and labour productivity. Although the rise in both current and forecast inflation was to a large extent the result of the growth of regulated prices and food and fuel prices, in the Council's assessment under the conditions of high wage increases this could raise the risk of the so-called second round effects. At the same time there was an increase in both current and forecast inflation abroad. Those factors persuaded the Council to raise NBP interest rates by 0.25 percentage points at its June meeting.

Data released in July, August and September 2008 confirmed earlier signals that the activity in domestic economy was decreasing and the assessments of the future rate of economic growth were steadily worsening. The Council assessed that the drop in GDP growth below the growth of potential product would favour the easing of inflationary pressure in the medium term. On the other hand, the continuing increase of unit labour costs was expected to have the opposite effect. At the same time, the uncertainty surrounding the expected scale of growth deceleration in the world economy and in Poland remained high due to disturbances in the international financial markets which resulted in capital outflows from emerging markets and depreciation of many currencies, including – from August 2008 – the zloty. In view of this uncertainty and previous monetary policy tightening, the Council decided to keep interest rates unchanged at its meetings in July, August and September.

In October the turmoil in the international financial markets aggravated strongly in parallel with intensification of fears of recession in the developed economies with concurrent easing of inflationary pressure and inflation expectations. This convinced major central banks to carry out a coordinated interest rate cut. Changes in the external environment were also exerting a growing impact on the Polish economy contributing to deterioration in the assessment of future economic situation by households and enterprises. At the meeting in October the Council assessed that the slowdown in the domestic economic would be stronger than previously anticipated, which would be easing the inflationary pressure in the medium term. Additionally, the rise of market interest rates triggered by increased risk aversion led to a higher cost of credit and the liquidity disruptions in the money markets provoked encouraged banks to tighten their lending conditions. In this situation, in the October meeting the Council assessed the probability of inflation running above the target in the medium term to be similar to the probability of inflation running below the target and so it kept NBP interest rates unchanged. At the same time, as the access to financing currency positions by commercial banks was limited due to the turmoil in the international financial markets, in October the Council introduced an additional monetary policy instrument, namely the currency swap.

November and December were marked by increasingly adverse impact of the financial crisis on the global economic activity, which contributed to the continuing decline in prices of many commodities and food in international markets and, consequently, to a significant decrease of inflation around the world. In this situation a number of central banks considerably eased their monetary policy in this period. The annual inflation in Poland was also falling, though till November it remained above the upper limit for deviations from the inflation target, which was to a large extent the result of the rises of regulated prices introduced in 2008. At the meetings in November and December the Council assessed that the expected significant slowdown of domestic economic growth would be conducive to inflation fall. Moreover, the Council expected the drop in the demand for labour, triggered by slowing GDP growth rate, to ease the wage pressure in the medium term; this was also suggested by the data released in the period on employment, unemployment and wages pointing to a gradual easing of tensions in the labour market. The Council perceived further increase of regulated prices and the exchange rate depreciation of the zloty observed over the preceding months as factors delaying inflation decline. Considering the above factors, at the meetings in November and December the Council assessed the probability of inflation running below the inflation target in the medium term as higher than the probability of inflation running above the target and thus decided to cut NBP interest rates by 0.25 percentage points and 0.75 percentage points, respectively, i.e. by the total of 1 percentage point.

In September 2008 the Prime Minister of the Republic of Poland and the Monetary Policy Council issued a common declaration stating that Poland should meet the Maastricht convergence

criteria in 2011 and receive positive recommendation for euro area accession. In the press releases called *Information from the meeting of the Monetary Policy Council* issued in the last months of 2008 the Council upheld its position that Poland should join ERM II and the euro area at the earliest possible date, after achieving the necessary political support for introducing amendments to the Constitution of the Republic of Poland and other legal acts necessary to adopt the euro in Poland. The macroeconomic conditions and the uncertainty about the outlook for euro adoption in Poland, connected, among others, with the lack of political consensus in this respect, were allowed for by the Council in its monetary policy pursued in the last months of 2008.

As in the previous years, communication with the environment was an important component in the pursuit of monetary policy under the direct inflation targeting strategy. For this reason, the Council presented its assessments of the current economic situation and future economic developments. The most important instruments of communication in 2008 included the following cyclical publications: *Inflation Reports*, *Information from the meeting of the Monetary Policy Council* (with accompanying press conferences organised after Council meetings), *Minutes of the Monetary Policy Council decision-making meeting*⁸ (Appendix 6) as well as the *Report on Monetary Policy Implementation in 2007* and *Monetary Policy Guidelines for the Year 2008*.

2.3. Monetary policy instruments in 2008⁹

In 2008, the National Bank of Poland pursued its monetary policy influencing the inflation level through interest rate channel. The Monetary Policy Council set the NBP's official interest rates which determined the yield on monetary policy instruments. To shape short-term interest rates, the NBP used the following instruments: open market operations, lending and deposit operations (standing facilities) and reserve requirements. By influencing the level of short-term interest rates, the Monetary Policy Council strived to achieve such a level of interest rates in the economy that would be consistent with the adopted inflation target.

In the first three quarters of 2008 the situation in the world financial markets had limited impact on the functioning of the domestic financial markets. Consequently, the National Bank of Poland implemented its monetary policy using a set of instruments that was similar to that used in the previous year. The announcement of Lehman Brothers bankruptcy in September 2008 triggered a sudden slump in the interbank money market. The turmoil in the international markets fed through to the domestic market leading to, among others, a significant reduction of interbank market liquidity. The aggravating crisis of confidence led to the lowering of mutual credit limits between banks and to the changes in their way of liquidity management. There was a significant decrease of the turnover in the unsecured interbank deposits market and the shortening of transactions maturities.

Taking into consideration the tensions building up in the domestic financial markets and banks' problems with obtaining financing in both domestic and foreign currencies, in October 2008 the NBP undertook additional measures under the so-called *Confidence Pact*. The measures focused on three main objectives:

1. to enable banks to obtain financing in the zloty for periods longer than one day,
2. to enable banks to obtain foreign currency financing, and

⁸ *Minutes of the Monetary Policy Council decision-making meeting* present a more detailed discussion of the problems and arguments which had significant impact on the decisions taken by the Council in 2008.

⁹ Wherever average annual values (including POLONIA rate) and the scale of yearly use of a given instrument are provided, the figures account for the reserve maintenance periods in 2008, i.e. the aggregate values in the period from 31 December 2007 to 30 December 2008.

3. to increase the possibilities of banks to obtain funds in the zloty by extending the list of securities acceptable in transactions with the NBP.

The NBP began to inject domestic liquidity into the banking sector through repo transactions with maturities of up to 3 months, while retaining the issuance of the NBP bills with 7-day maturity as the principal instrument of liquidity surplus absorption. At the same time, the scope of assets acceptable as collateral for NBP refinancing operations was extended and banks were enabled to obtain foreign currency liquidity by means of foreign exchange swaps.

2.3.1. Liquidity surplus in banking sector

The level of short-term liquidity of the banking sector in 2008, calculated as the balance of open market operations (basic and fine-tuning), foreign exchange swaps and standing facilities, amounted to PLN 10,964 million, on average. In comparison to 2007 the level dropped by PLN 8,850 million, i.e. by 45%.

The banking sector liquidity was affected by changes in autonomous factors independent from the NBP.

The largest contribution to lowering the liquidity level of the banking sector was made by the growth in the volume of notes and coin in circulation by PLN 16,272 million comparing December 2008 to December 2007. The annual growth rate of cash was 19.01%, which was connected, among others, with cash withdrawals from banks in October 2008 (the total of over PLN 8 million during six days). Additionally, the increasing level of deposits with commercial banks in 2008 caused the increase of the requirement reserves level by 20.5%, what was the reason of the banking sector liquidity drop by PLN 3,972 million. The main factor conducive to the increase in the scale of liquidity was the purchase of foreign currencies by the NBP (which exceed sales), which was responsible for its growth by the average of PLN 6,363 million. Another important factor contributing to rising liquidity surplus was a decline in the public sector deposits with the NBP. It was responsible for the increasing liquidity by PLN 4,956 million. Less important factor of the banking sector liquidity growth were the NBP payments including: discount on the NBP bills, interest accrued on the reserve requirement and the NBP bonds.

Starting from mid-September 2008, due to the crisis in the financial markets, commercial banks started to show more caution in investing their funds into open market operations. The fall in the demand for the NBP bills in relation to the existing liquidity conditions led to a significant surplus in the financial assets held by banks on current accounts in relation to the required reserve and to the high overnight deposit placed with the NBP. The overall average level of the overnight deposit placed with the NBP in 2008 was PLN 1,421 million. However, in the period until August 2008 it was PLN 417 million, while from September to the end of the year it averaged PLN 3,455 million (the maximum level of approx. PLN 17 million).

2.3.2. Monetary policy tools

2.3.2.1. Interest rate

In 2008 the fundamental monetary policy instrument was the short-term interest rate. The Monetary Policy Council set the NBP's official interest rates which determined the interest rates of monetary policy instruments.

The main interest rate of the NBP was the reference rate. Changes in the NBP's reference rate defined the direction of the pursued monetary policy. This rate determined the yield

obtainable on main open market operations, influencing, at the same time, the level of short-term deposit rates in the market of unsecured interbank deposits market.

The deposit rate and the lombard rate of the NBP determined the fluctuation band of overnight interest rates in the interbank market. The rediscount rate indirectly determined the interest on required reserve funds.

In 2008 the Monetary Policy Council changed key NBP rates on six occasions. In the first half of the year NBP interest rates were hiked on four occasions and then cut twice in the final quarter of 2008. As a result the reference, lombard, deposit and rediscount rates at the end of 2008 landed at the same level as at the end of the previous year. The tolerance band for deviations of short-term market rates remained unchanged at +/-1.5 percentage points around the reference rate.

Table 3**Decisions of Monetary Policy Council regarding changes in official interest rates in 2008**

Decision date*	Decision
30 January 2008	Raising the reference rate from 5.00% to 5.25% Raising the lombard rate from 6.50% to 6.75% Raising the rediscount rate from 5.25% to 5.50% Raising the deposit rate from 3.50% to 3.75%
27 February 2008	Raising the reference rate from 5.25% to 5.50% Raising the lombard rate from 6.75% to 7.00% Raising the rediscount rate from 5.50% to 5.75% Raising the deposit rate from 3.75% to 4.00%
26 March 2008	Raising the reference rate from 5.50% to 5.75% Raising the lombard rate from 7.00% to 7.25% Raising the rediscount rate from 5.75% to 6.00% Raising the deposit rate from 4.00% to 4.25%
25 June 2008	Raising the reference rate from 5.75% to 6.00% Raising the lombard rate from 7.25% to 7.50% Raising the rediscount rate from 6.00% to 6.25% Raising the deposit rate from 4.25% to 4.50%
26 November 2008	Cutting the reference rate from 6.00% to 5.75% Cutting the lombard rate from 7.50% to 7.25% Cutting the rediscount rate from 6.25% to 6.00% Cutting the deposit rate from 4.50% to 4.25%
23 December 2008	Cutting the reference rate from 5.75% to 5.00% Cutting the lombard rate from 7.25% to 6.50% Cutting the rediscount rate from 6.00% to 5.25% Cutting the deposit rate from 4.25% to 3.50%.

* Decisions came into force on the following business day.

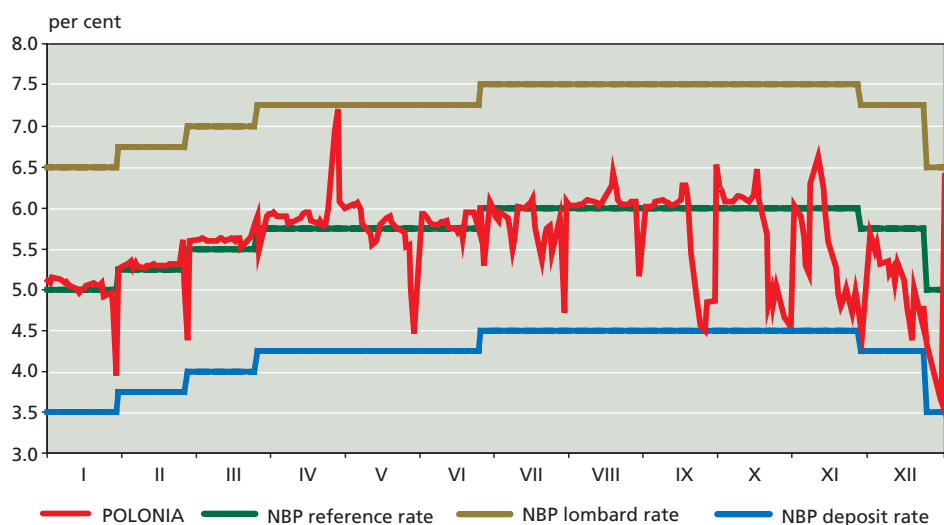
Source: NBP data.

Since 2008 the NBP has affected the liquidity conditions in the banking sector in such a way as to place the POLONIA rate around the NBP reference rate. In the preceding year the aim had been to influence the rate of WIBOR SW. This change was prompted by the tendencies in the term structure of the money market. Over the recent years there has been a rise, among others, in the share of overnight deposits in the total turnover of the unsecured interbank deposits market. They account for the major part of all transactions.

In the first three quarters of 2008 the POLONIA rate was following the shifts in the reference rate of the NBP. Some larger temporary deviations of the POLONIA rate from the NBP reference rate occurred only in the last days of the required reserve maintenance periods.

Figure 5

NBP interest rates and POLONIA rate in 2008



Source: NBP data.

In the last quarter of 2008, the exacerbating disturbances in the world financial markets had a significant bearing on the situation in the domestic market and the behaviour of banks. In the conditions of a significant rise in uncertainty and a lack of confidence in the interbank market, banks – for prudential reasons – retained considerable surplus funds on their accounts that led to a drop in the price of overnight money and thus caused the path of the POLONIA rate to run below the NBP reference rate.

The average deviation¹⁰ of the POLONIA rate from the NBP reference rate in 2008 was 32 basis points (compared with 23 basis points in 2007), in the first three quarters averaging 20 basis points and in the fourth as much as 70 basis points.

2.3.2.2. Open market operations

In 2008 open market operations were the principal instrument for maintaining short-term interest rates at a level consistent with the pursuit of the MPC-established inflation target. As regards these operations, the NBP could make use of basic, fine-tuning and structural operations.

Basic operations consisted in the issuance of the NBP bills with 7-day maturity. They were performed, similarly as in the preceding year, on a regular basis (once a week). In the first three quarters of 2008 the demand received from banks on basic operations was close to the supply of bills declared by the NBP. Banks were depositing the major part of their surpluses in this kind of operations.

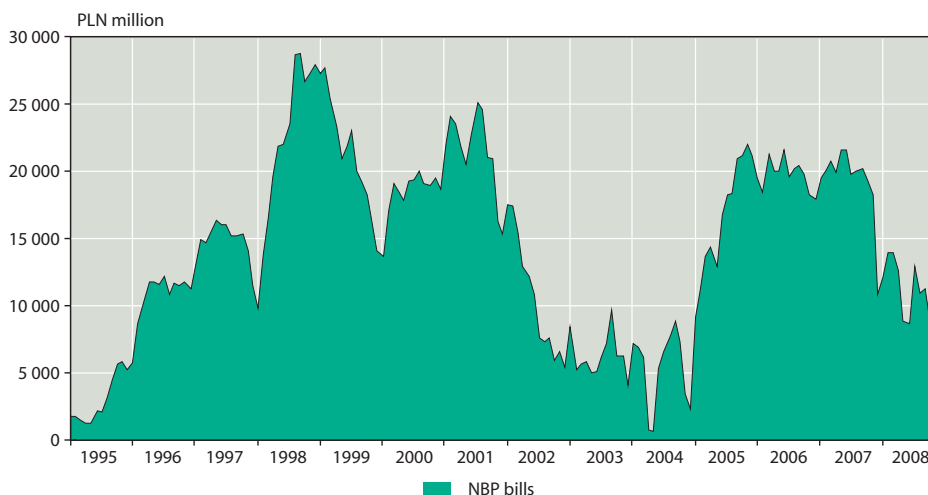
Starting from mid-September (the announcement of Lehman Brothers bankruptcy) the deteriorating situation in the international financial markets and the liquidity problems of other foreign financial entities were exerting an indirect impact on the functioning of the domestic interbank market. Banks significantly reduced the depositing of surpluses in basic open market

¹⁰ Average deviation of POLONIA rate was calculated according to the uniform base of 365 days in the year.

operations, holding their funds on current accounts (as security buffer), even at the NBP deposit rate, which bore less interest (in comparison to basic operations). They preferred managing their liquidity positions on an overnight basis and limited lending funds for longer terms.

Figure 6

Average monthly balance of basic open market operations 1995–2008



Source: NBP data.

Basic operations were available for all the banks participating in the SORBNET system which, at the same time, had an account at the NBP's Securities Register and the ELBON application and for the Bank Guarantee Fund.

In 2008 the National Bank of Poland, apart from the basic open market operations, could also recourse to conducting fine-tuning operations. While implementing measures connected with the *Confidence Pact*, on 17 October 2008 the NBP started conducting repo transactions providing liquidity to the banking sector. The first fine-tuning repo operation was carried out on 17 October 2008. As a result, the banking sector was provided with liquidity for the period of 6 days. Another repo operation was executed on 21 October 2008 with a maturity of 14 days. Starting from November 2008 the NBP was injecting liquidity to banks using the liquidity-providing repo operations with 3-month maturity. On 16 December 2008 a 28-day repo operation was also carried out.

In total there were 6 repo operations conducted in 2008. The average level of banking sector liquidity influenced in this way was higher by PLN 4.3 billion, PLN 8.5 billion and PLN 12.8 billion, respectively, in October, November and December. In average annual terms, the level of repo operations in 2008 amounted to PLN 2.1 billion. At the end of 2008 the balance of the banking sector's liquidity provision in the form of repo operations reached PLN 15.3 billion.

As regards fine-tuning operations, the NBP also implemented additional issues of bills for periods shorter than the maturity of basic open market operations. The issues were meant as an attempt at curbing the significant surplus liquidity of the banking sector responsible for a considerable decline of the POLONIA rate. The first operation of this kind was executed on 25 November 2008 with a 3-day maturity. Another one, with a 2-day maturity, was conducted on 10 December. Due to the fact that the impact of both operations on the POLONIA rate was rather slight and temporary, the NBP abstained from implementing this kind of measures later on.

Fine-tuning operations were initially available for 13 banks which were most active in the money and foreign exchange markets and which signed contracts with the NBP to act as a Money Market Dealer. Started from 7 November 2008 – by virtue of the Decision of the NBP's

Management Board – fine-tuning operations were conducted with all the banks meeting the criteria necessary for the participation in basic open market operations.

In 2008 it was not necessary to modify the long-term liquidity structure of the banking sector. Thus, the NBP did not execute any structural open market operations.

2.3.2.3. Reserve requirements

In 2008 the obligation to hold reserve requirements in the accounts with the NBP applied to banks, branches of credit institutions and branches of foreign banks operating in Poland. Required reserves were held in the averaged system. Banks were obliged to maintain an average balance of funds in accounts with the NBP during the reserve period at the level not lower than the value of the reserve requirements.

Required reserves were calculated on the basis of bank's collected deposits and funds received from the sale of securities. Excluded from the reserve base were funds received from a different domestic bank, acquired from abroad for at least two years and deposited in credit and savings accounts at building societies and in individual pension accounts. Required reserves were calculated and held in the Polish zloty. The rates of the reserve requirements were not changed in 2008 and amounted to 3.5% of all liabilities, except for funds acquired from repo transactions, for which the required reserve rate was 0%.

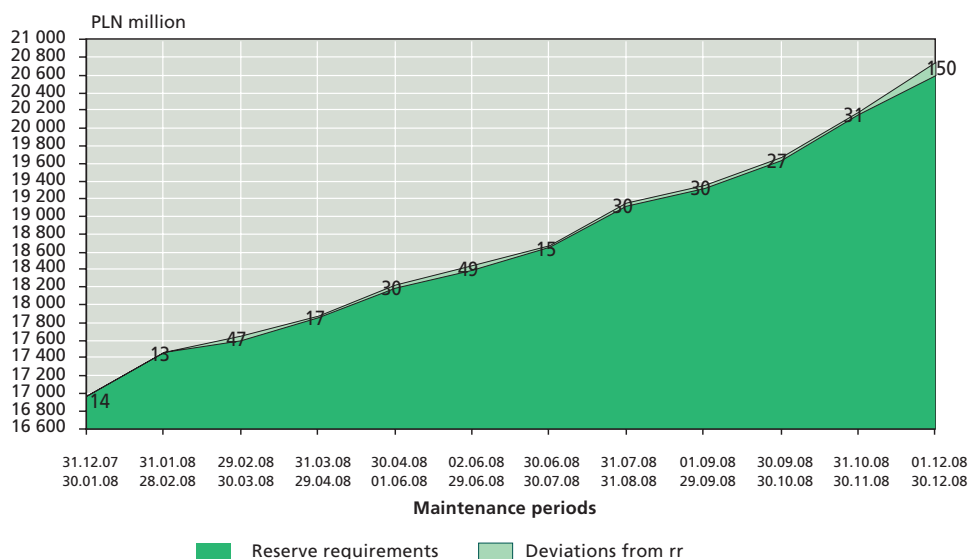
Banks reduced the amount of calculated reserve requirements by the equivalent of EUR 500 thousand. The holdings of required reserves were remunerated at the level of 0.9 of the NBP rediscount rate.

The amount of required reserves was PLN 21,089 million as of 31 December 2008, showing an increase of PLN 4,123 million (24.3%) as compared with 31 December 2007.

This rise in the required reserves level mainly resulted from a 23.4% increase of deposits that constitute the reserve base and to which the positive reserve ratio is applied.

Figure 7

Changes of required reserves level and deviations from reserve requirements in 2008



Source: NBP data.

There was a continuation in all the reserve maintenance periods of a surplus in the average balance of funds of PLN 38 million, on average, (i.e. 0.20%) in relation to the reserve requirements. In particular periods this surplus ranged from PLN 13 million in February (0.07%) to PLN 150 million in December (0.73%). The larger deviation of the reserve holdings from the required reserves in December 2008 resulted from cautious current liquidity management on the part of banks at the end of the year amid concurrent liquidity tensions in the world markets.

The minimal differences between the required and maintained reserves persisting throughout the year resulted from:

- proper asset management at banks,
- banks' use of instruments facilitating asset management in accounts with the NBP (intraday credit, deposit and Lombard facilities), and
- remuneration of reserve holdings only to the amount of the required reserves.

2.3.2.4. Standing facilities

Lending and deposit operations performed at the initiative of commercial banks were meant to supplement short-term liquidity of the banking sector or to allow banks to deposit their free overnight funds with the NBP. These operations prevented excessive fluctuations of interbank rates. The main instruments categorised as lending and deposit operations include Lombard facility and deposit facility.

The Lombard facility interest rate determining the maximum cost of funding with the NBP also set a ceiling on fluctuations of interbank rates, while the deposit rate constituted the lower limit of the band for interbank rate deviations.

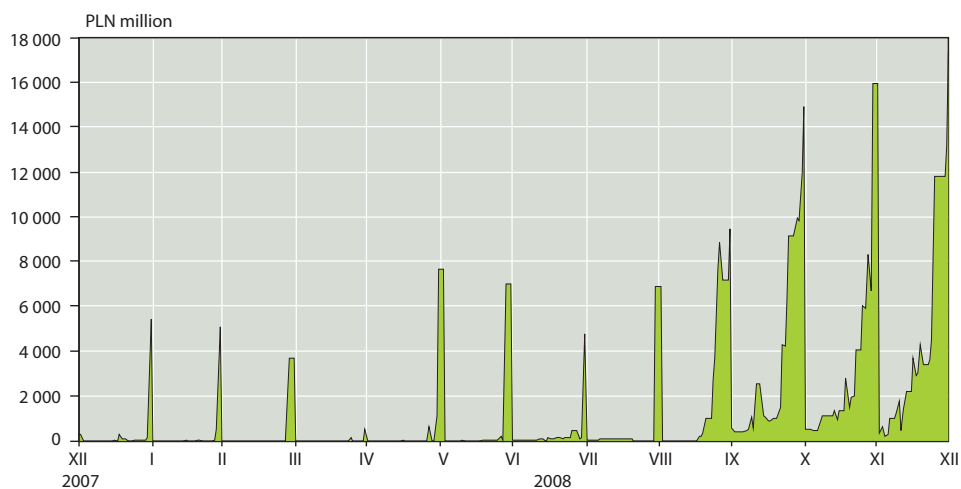
In 2008 banks made use of Lombard facility collateralised with securities thus supplementing their current liquidity on accounts with the NBP. To implement measures covered in the *Confidence Pact* starting from 27 October 2008 (Resolution No. 44/2008 of the NBP Management Board) the NBP extended the list of securities allowed as collateral for Lombard facility granted by the NBP to include securities deposited with the National Depository for Securities (KDPW SA), i.e. EIB bonds, mortgage bonds, utilities bonds, municipal bonds and corporate bonds of domestic issuers. A detailed list of these securities is published on the NBP's official website.

The total amount of credit used in 2008 was PLN 5.2 billion, compared to PLN 6.7 billion in 2007, while the average daily use of Lombard facility was PLN 14.3 million as compared to PLN 18.5 million in 2007.

The total amount of term deposits placed by banks with the NBP in 2008 amounted to PLN 520.1 billion (calculated for days of use) and was 2.5 times higher compared with the deposits placed in the previous year. The total value of overnight deposits placed by banks fluctuated between PLN 41 thousand and PLN 17.3 billion. The average daily level of overnight deposits amounted to PLN 1.4 billion, compared to PLN 0.5 billion in 2007. The highest amounts were deposited by banks in the last days of the required reserve maintenance periods.

Figure 8

Overnight deposits with NBP in 2008 (daily data)



Source: NBP data.

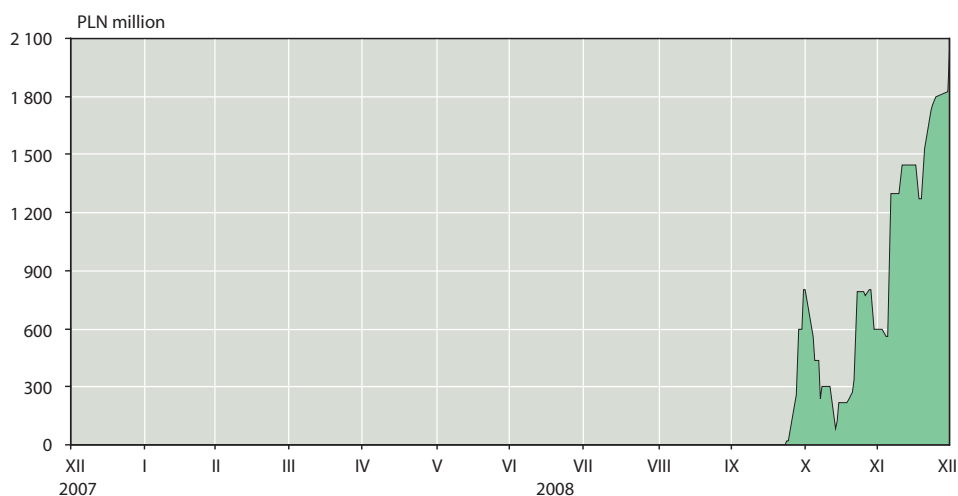
2.3.2.5. Foreign exchange swaps

On 13 October 2008 the MPC modified the set of monetary policy instruments complementing it with the foreign exchange swap. As a result, using the foreign exchange swap the NBP could purchase (or sell) the zloty with foreign currencies in the spot market while simultaneously reselling (or repurchasing) it on a forward transaction basis on a specified date.

Starting from 17 October 2008 this kind of operations were offered to banks in USD/PLN and EUR/PLN currency pairs. The first foreign exchange swap was concluded on 21 October 2008. Till 7 December 2008 the transactions could be conducted on both pairs every day with 7-day maturity. Starting from 8 December 2008 transactions in EUR/PLN pair were offered once a week, but the frequency for USD/PLN pair remained unchanged.

Figure 9

Balance of foreign exchange swaps in 2008 (daily date, PLN equivalent)



Source: NBP data.

Apart from that, on 17 November 2008 the NBP began conducting foreign exchange swap transactions in CHF/PLN currency pair. The NBP carried out two kinds of such operations. Operations with 7-day maturity were offered on a regular weekly basis. In agreement with the Swiss National Bank, on three occasions the NBP also conducted operations with 84-day maturity.

In 2008 Q4 foreign exchange swaps reduced the banking sector liquidity in the domestic currency, on average, by PLN 75 million in October, PLN 476 million in November and PLN 1,410 million in December. In average annual terms the impact of foreign exchange swaps on the reduction of banking sector liquidity in 2008 amounted to PLN 162 million.

2.3.2.6. Other operations

Intraday credit facility is an instrument facilitating liquidity management in the banking sector during the business day and, at the same time, ensuring the interbank settlement liquidity. It is a non-interest bearing credit collateralised with Treasury securities, taken and repaid during the same business day. In 2008 the daily injection of operational liquidity for banks ranged between PLN 11.3 billion and PLN 19.5 billion. The use of intraday credit facility increased by 17.4% in relation to 2007.

Intraday credit in the euro serves to ensure settlement liquidity in the SORBNET–EURO system. It is secured with Treasury bonds that have been previously accepted by the ECB. It is incurred and repaid during the same business day. In 2008 the daily injection of euro-denominated operational liquidity to banks ranged between EUR 0.5 million and EUR 4.2 million. The use of the intraday credit in the euro rose by 61.0% in relation to 2007.

Moreover, a reduction of the haircuts in relation to the collateral for Lombard facility and intraday credit facility was one of the instruments included in the *Confidence Pact*. They were cut (Lombard facility starting from 27 October and intraday credit facility from 17 November) from 20% to 15% of the nominal value of securities issued by the State Treasury and the NBP.

This modification was aimed at increasing the liquidity pool available for banks in the form of Lombard facility and intraday credit facility with the given level of collateral. In view of the portfolios of Treasury securities and securities issued by the NBP held by banks, the potential amount of funds obtained from the central bank in the previous year was increased by approx. PLN 6.9 billion.

2008
Annual Report

NBP

ACTIVITIES FOR THE FINANCIAL SYSTEM STABILITY¹¹

¹¹The chapter entitled *Activities for the financial system stability* has replaced the chapter on *Banking supervision*, as a result of the transfer of banking supervision tasks from the NBP to the Polish Financial Supervision Authority on 1 January 2008. The tasks described in this chapter are performed pursuant to Article 3(2)(6) and (6a) of the Act on the National Bank of Poland of 29 August 1997.

One of the important areas of the functioning of the National Bank of Poland is to implement measures aimed at supporting the stability and development of the financial system. The NBP performed this task mainly by developing conditions necessary to develop the banking system. After the transfer of the banking supervision tasks to the Polish Financial Supervision Authority,¹² the list of NBP statutory tasks was enlarged to include activities aimed at supporting the stability of the domestic financial system and new financial stability-related tasks were imposed on the Bank.

The financial system stability is generally understood as a situation when the financial system performs its functions in a continuous and effective way, even when unexpected and adverse disturbances occur on a significant scale. Disturbances in the functioning of the financial system and in the efficiency of the provision of financial services have a harmful influence on the standing of enterprises and households and hinder the functioning of the transmission mechanism of monetary policy impulses. A stable financial system significantly supports the implementation of central bank main objectives, i.e. maintaining a stable price level and thus providing grounds for long-term economic growth.

3.1. Extension of the NBP's statutory tasks

The entry into force of the Act on the Financial Stability Committee (see paragraph 3.2) imposed an explicit task on the National Bank of Poland to conduct activities aimed at enhancing the stability of the domestic financial system.¹³

It should be emphasized that the explicit acknowledgement of the central bank role in safeguarding systemic stability complies with the solutions adopted by several EU countries, in particular those where central banks do not perform the banking supervision function. Pursuant to the opinion of the ECB,¹⁴ central banks usually have the greatest powers to take measures enhancing financial stability, due to their knowledge about the developments in the financial markets, their participation in payment systems and the conduct of monetary policy operations.

3.2. Participation in the work of the Financial Stability Committee

Acting for the stability of the domestic financial system, the National Bank of Poland consistently strived to tighten cooperation with the institutions of the financial safety net in the country. Those actions gained particular significance after the transfer of the banking supervision tasks to the Polish Financial Supervision Authority (KNF). On 21 December 2007 the *Agreement between the President of the National Bank of Poland, the Minister of Finance and the Chairman of the Polish Financial Supervision Authority on cooperation in supporting the stability of the domestic financial system* was signed. Pursuant to the *Agreement* the Financial Stability Committee was established. The Committee consists of the Minister of Finance (MF) who acts as a chairman, the President of the National Bank of Poland and the Chairman of the Polish Financial Supervision Authority.

In the initial period of its existence the Committee operated pursuant to the said *Agreement*. At the same time, work began on regulating the rules of the Committee's functioning in the form

¹² See *Report on NBP operations in 2007*.

¹³ Article 17(4)(5a) of the Act on the National Bank of Poland of 29 August 1997.

¹⁴ *The role of central banks in prudential supervision, European Central Bank*, http://www.ecb.int/pub/pdf/other/prudentialsupcbrole_en.pdf.

of a legal act. The Act of 7 October 2008 on the Financial Stability Committee entered into force on 13 December 2008.¹⁵ It regulates the principles for cooperation between the institutions represented in the Committee, specifies the tasks and course of the Committee work and the methods of information sharing between the institutions.

Pursuant to the Act, the tasks of the Committee include the following:

- assessing the situation of the domestic financial system and the situation in international markets;
- ensuring appropriate information sharing between the members of the Committee on important events and tendencies which may pose a threat to the stability of the domestic financial system;
- coordinating activities of the members of the Committee when a direct threat to the stability of the domestic financial system occurs.

In addition, the year 2008 saw the continuation of the work of the working group established within the Committee with an aim to create comprehensive cooperation principles between the MF, the KNF and the NBP in the case of a threat to the financial system stability. The NBP presided over the works of the group. Principles for the coordination of the activities of each institution and the procedures of cooperation in the case of a direct threat to the stability of the domestic financial system were developed.

In 2008, within the framework of the work of the Financial Stability Committee, the NBP prepared several current analyses and studies mainly concerning the situation in the domestic and international financial markets in the context of the international financial crisis.

3.3. Analyses and research for the needs of the financial system

The analyses of the stability of the financial system are one of the major areas of analytical and research activity of the National Bank of Poland. The central bank focuses on the functioning of the financial system as a whole and the interactions between the functioning of the system and macroeconomic processes. Such an approach is defined as macroprudential (in contrast to the supervisory approach, microprudential, where more attention is paid to the safe functioning of individual financial institutions, analysed separately).

The NBP also carries out analyses and studies on the development of the financial system. Their objective is to evaluate the condition and analyse the development factors of institutions and financial markets in Poland as compared to other European Union Member States and to identify the obstacles to the development of the domestic financial system, among others, in terms of infrastructure and regulations.

The National Bank of Poland publishes the results of the works in cyclical reports. The following publications were published in 2008:

- *Financial Stability Report – June 2008* and *Financial Stability Review – October 2008*. The publications contain a synthetic assessment of the risk to the stable functioning of the financial system and an analysis of risk factors in the environment of financial institutions, including macroeconomic processes and the situation on financial markets and the real

¹⁵ Dziennik Ustaw [Journal of Laws] No. 209/2008, item 1317.

estate market. Due to the dominant role of banks in the Polish financial system, the risk taken by banks was described in detail, as well as their ability to absorb adverse changes in the conditions of their functioning. To this end, the NBP carried out, among others, stress tests, using quantitative models developed in the NBP. The publications also include the analysis of the most important sectors on non-banking financial institutions, i.e. insurance companies, pension funds societies and investment fund management companies.

- *Financial System Development in Poland 2007*. The publication comprehensively describes major changes in the domestic financial system and the relationship between these changes and the structure of the financial assets of households and the external sources of financing for enterprises. It also presents trends and barriers to the development of financial institutions operating in Poland and financial markets. The trends have been presented against the evolution of financial systems in the countries from the region and in selected EU Member States.

The financial system analyses carried out by the NBP also include quarterly surveys of the loan market condition. The aim of the survey is to determine the direction of changes in loan policy, criteria and conditions for granting loans, as well as changes in demand for loans in the Polish banking system. The survey is addressed to the chairpersons of the banks' credit committees. The NBP publishes the results of the survey on its website.

3.4. Activities aimed at preventing disturbances in the interbank market

The Polish banking market also suffered the consequences of the crisis which affected international financial markets in the fourth quarter of 2008. A decline in confidence in the interbank market was observed, as well as difficulties of banks in obtaining external financing. The National Bank of Poland monitored the developments on a current basis and undertook relevant prevention measures. On 13 October 2008, the NBP announced the so-called *Confidence Pact* and emphasized its readiness to implement further actions aimed at ensuring the stability of the Polish banking system.

In the *Confidence Pact* the NBP focuses on restoring the normal functioning of the financial market, including the confidence in the interbank market, by means of appropriate extension of monetary policy instruments: The objectives of the *Pact* include:

- to enable banks to obtain zloty for periods longer than one day;
- to enable banks to obtain foreign currencies;
- to increase the possibility for banks to obtain zloty liquidity by broadening the range of collateral in operations with the NBP.

In order to accomplish the above objectives, the NBP:

- extended the maturity of open market operations (repo operations) to three months;
- introduced foreign exchange swaps;
- expanded the scope of acceptable collateral in refinancing loans by foreign currency deposits;

- introduced modifications in the operation system of marginal lending facility by decreasing the value of collateral as compared to the amount of the credit and expanding the range of assets that may serve as collateral.

At the same time, the NBP maintained the issue of 7-day NBP bills as the main instrument to drain excess liquidity and announced that the frequency of open market operations could be increased in order to flexibly respond to changes in liquidity and stabilize the POLONIA rate around the reference rate.

Due to the crisis in international financial markets, the National Bank of Poland organised meetings with the representatives of commercial banks devoted to the assessment of the situation in the Polish financial system and the discussion about the measures needed to maintain its stability during the financial crisis.

3.5. Cooperation with domestic institutions

In addition to carrying out activities within the Financial Stability Committee, the NBP cooperates with other domestic institutions of the financial system. The cooperation with the Bank Guarantee Fund, in the form of, *inter alia*, the participation of the representatives appointed by the President of the NBP in the BFG Council, is of particular importance.

In 2008, the employees of the Bank also participated in the meetings of the Financial Market Development Council and in the work of working groups and teams functioning within the Council which developed draft legal solutions important for the elimination of barriers to the development of the financial market in Poland.

3.6. International cooperation for financial stability

Acting for the stability of the financial system, the National Bank of Poland takes part in the activities undertaken in this regard by the European Union. As a member of the European System of Central Banks, the NBP participates in the Banking Supervisory Committee (BSC) operating at the ESCB.¹⁶ In 2008, the NBP representatives actively participated in the works of the Committee and its working groups and task forces.

After transferring the banking supervision tasks to the Polish Financial Supervision Authority, the National Bank of Poland remained a member of the Committee of European Banking Supervisors (CEBS). A representative of the NBP is a member of the Bureau of CEBS, i.e. the senior management of the Committee, and the NBP employees participate in the working groups. In 2008, the work of the Committee focused on developing a single market for banking services in the European Union.

Moreover, in 2008, the NBP actively participated in the preparation of the *Memorandum of Understanding on Cooperation between the Financial Supervisory Authorities, Central Banks and Finance Ministries of the European Union on Cross-Border Financial Stability* of 1 June 2008.¹⁷ The agreement is the result of decisions made by the ECOFIN Council in October 2007. The wording of the agreement was prepared by an ad hoc Working Group on Financial Stability Arrangements, appointed by the Economic and Financial Committee (EFC). The Group consisted of high level

¹⁶ Committees are established at the ECB pursuant to Article 9 of the *Rules and Procedures of the EBC* (ECB 1999). The Banking Supervisory Committee is one of 12 committees operating at the ECB. It was established in 1999, pursuant to the decision of the ECB Governing Council.

¹⁷ <http://www.ecb.europa.eu/pub/pdf/other/mou-financialstability2008en.pdf>.

representatives of finance ministries, central banks and supervisory authorities from selected EU countries. The First Vice President of the NBP participated in its work.

The *Memorandum* represents an extended version of the document signed in 2005. The main change consists in increasing the number of institutions involved in the potential management of the crisis in the EU financial sector by institutions supervising the insurance and securities markets. The new *Memorandum* regulates in more detail the procedures for cooperation between individual institutions in the case of a cross-border financial crisis. It also refers to national solutions in the field of crisis management, supporting their creation and development.

3.7. The participation of the National Bank of Poland in bank restructuring

In 2008, the NBP did not finance the bank restructuring programs. In 2008 no bank was exempt from the reserve requirement.

The most important activities in 2008

- The Act on the Financial Stability Committee expanded the list of the NBP's statutory tasks to include activities aimed at supporting the stability of the domestic financial system.
- The NBP actively participated in the work of the Financial Stability Committee.
- In order to prevent disturbances in the interbank market, the NBP developed the so-called *Confidence Pact*.

THE ISSUE OF CURRENCY¹⁸

¹⁸ The responsibilities in this field are exercised, *inter alia*, pursuant to Article 4 and Articles 31 to 37 of the Act on the NBP.

Pursuant to statutory provisions, the National Bank of Poland has the exclusive right to issue notes and coins of the Republic of Poland. The NBP contributed to the maintenance of monetary stability by ensuring security, liquidity, and quality of cash operations.

4.1. Notes and coins in circulation

The value of notes and coins in circulation (including bank vault cash) as at 31 December 2008 amounted to PLN 102,134.7 million.¹⁹ This represents an increase in the value of notes and coins by PLN 16,140.4 million, i.e. by 18.77% compared to the figure as at 31 December 2007.

In 2008, manufacturers of notes and coins, i.e. the Polish Security Printing Works (*Polska Wytwórnia Papierów Wartościowych SA – PWPW SA*) and the Mint of Poland, Joint-Stock Co (*Mennica Polska SA – MP SA*) delivered 1,152,643.4 thousand pieces of notes and coins to the NBP. The total cost of purchase amounted to PLN 339.5 million, which represents an increase by 12.72% on 2007 (PLN 301.2 million).²⁰

As at 31 December 2008, notes accounted for 97.31% of all currency in circulation by value, whilst coins represented 2.69% (in 2007, notes accounted for 97.16%, and coins – 2.84%).

In terms of volume, notes represented 12.11%, and coins – 87.89% of all notes and coins in circulation (in 2007, notes accounted for 9.93%, whereas coins – for 90.07%).

In terms of value, 100 zloty and 200 zloty notes accounted for the largest share of all notes in circulation at the end of 2008, totalling 65.27% and 22.73%, respectively (63.58% and 23.58% in 2007). In the case of coins, 5 zloty and 2 zloty coins had the largest share of all coins in circulation, accounting for 31.02% and 28.47%, respectively (31.38% and 28.46% in 2007).

In terms of volume, 100 zloty and 50 zloty notes had the largest share in the notes in circulation at the end of 2008, amounting to 56.85% and 16.16%, respectively (in 2007, their respective shares stood at 54.41% and 16.76%). In the case of coins, 1 grosz and 2 grosz coins dominated, with their respective shares at 36.45% (36.57% in 2007), and 17.80% (17.84% in 2007).

4.2. Issue of collector coins

The NBP issues collector coins, *inter alia*, to disseminate knowledge about the history and culture of Poland. In 2008, the total of 1,707.4 thousand pieces of coins were issued covering 12 topics, of which 97.4 thousand pieces were gold coins and 1,610 thousand were silver coins.

In 2008, 22 types of collector coins were issued:

- 9 gold coins with face values of 200, 100 and 50 zloty;
- 13 silver coins with face values of 20 and 10 zloty.

¹⁹ Of which PLN 175.5 million is the value of notes and coins withdrawn from circulation as a result of the redenomination of the zloty, which had not been exchanged for new notes and coins by the end of 2008.

²⁰ The increase in the cost of purchase of notes and coins in 2007 results from the inclusion of the costs of gold and silver used for the production of collector coins which until 2007 were included in the "Other costs" item to the cost of purchase.

The coins included several types of "non-standard" coins:

- gold coin with the face value of 50 zloty (*90th Anniversary of Regaining Independence by Poland*);
- silver coin with a zirconium (*Siberian Exiles*);
- silver coin with a sphere (*XXIXth Olympic Games – Beijing 2008*);
- silver coin with a square hole (*XXIXth Olympic Games – Beijing 2008*);
- silver coin with an integral hologram (*450 Years of the Polish Postal Service*);
- silver coin made with the use of halftone technique (*90th Anniversary of the Greater Poland Uprising*);
- silver oxide coin with a glass insert (*400th Anniversary of Polish Settlement in North America*).

Moreover, the NBP continued the issue of general circulation coins with a face value of 2 zloty, struck in the Nordic Gold alloy, which accompanied each issue of collector coins. In April 2008, the NBP finished the issue of coins with a face value of 2 zloty, struck in Nordic Gold alloy, of the *Historical Cities in Poland* series; every month a coin dedicated to a different city was issued in this series. In 2008, the total of 16 types of general circulation coins struck in the Nordic Gold alloy were issued.

In 2008, a collector note was issued commemorating the 90th Anniversary of Regaining Independence by Poland with a face value of 10 zloty; 80 thousand pieces of the note were issued.

Moreover, 8,000 pieces of gold bullion coins were issued.

4.3. Withdrawal of unfit notes and coins

In 2008, the total of 308.6 million pieces of notes and coins were withdrawn from circulation (296.8 million pieces in 2007) due to unfitness or loss of counterfeit protection features. The average life of notes is correlated with their face value and ranges from 9 months in the case of 10 zloty notes to 132 months for 200 zloty notes. The average life of coins exceeds ten years.

4.4. Counterfeit Polish currency

The number of counterfeit Polish currency notes and coins decreased by 10.43% on 2007. Table 4 presents the number and breakdown of counterfeit Polish notes and coins reported in 2008 in comparison with 2007.

Authentic, general circulation coins predominantly with face values of 10 and 20 zloty, withdrawn in 1994, which had been reshaped (e.g. filed) and used in coin-operated vending machines have been numbered among the counterfeit old issues.

Table 4

Number and breakdown of counterfeit Polish currency notes and coins

Counterfeit notes and coins	2007		2008		Increase/ decrease (in %)
	Number (pieces)	Breakdown (in %)	Number (pieces)	Breakdown (in %)	
Notes of current issue, the "Polish Monarchs" series	15 227	40.60	16 525	49.29	+8.50
Notes issued previously, the "Great Poles" series	24	0.06	10	0.03	-58.30
Coins of current issue	19 911	53.20	12 999	38.77	-34.72
Coins of previous issues, withdrawn in 1994	2 267	6.06	3 993	11.91	-76.13
Total	37 429	100.00	33 527	100.00	-10.43

Source: NBP data.

4.5. Supply of notes and coins to banks

In 2008, commercial banks purchased Polish currency notes and coins from the NBP for the amount of PLN 171.5 billion (PLN 155.5 billion in 2007), of which PLN 105.0 billion – i.e. 61.2% of the total value – accounted for transactions of purchase of notes and coin under agreements on storing and purchasing notes and coins deposited at the NBP²¹ (62.0% in 2007), whereas PLN 66.5 billion – i.e. 38.8% of the total value, accounted for transactions of purchase concluded on the basis of agreements on the execution procedure for the agreements of sale-purchase of Polish currency notes and coins²² (38.0% in 2007).

4.6. Exchange of currency which ceased to be legal tender

The NBP and domestic banks providing cash services continued the exchange of notes and coins issued prior to the 1 January 1995 redenomination. By the end of 2008, 99.83% of notes and coins issued before redenomination were replaced.

4.7. Work of the Commission for the Strategy of Introducing Euro Notes and Coins

On 25 March 2005, the President of the NBP appointed the Commission for the Strategy of Introducing Euro Notes and Coins. In 2008, the Commission:

- prepared the *Report on implementation of tasks between May 2005 and September 2007*;

²¹ Under such agreements banks store in their vaults notes and coins which are NBP property, and which can be re-purchased.

²² I.e. an agreement which regulates the collection or delivery of notes and coins by banks from and to the NBP.

- prepared the schedule of activities related to the preparation of the NBP for the accession to ERM II and the euro area;
- analysed the conditions for euro introduction in Poland and estimated the costs of euro notes and coins introduction in Poland for the NBP, public administration, financial sector and the enterprise sector.

On 5 January 2009, the President of the NBP dissolved the Commission for the Strategy of Introducing Euro Notes and Coins due to the appointment of the Management Board Plenipotentiary for the euro introduction and the establishment of the Commission for the Euro Introduction. Organisational changes related to the new manner of works on introducing the common currency are included in the government document entitled: *Road map of the euro adoption by Poland*.

The most important activities in 2008

- The NBP issued a collector note with a face value of 10 zloty to commemorate the 90th anniversary of regaining independence by Poland.
- The Management Board Plenipotentiary for introducing euro was appointed and the Commission for the Euro Introduction was established.

2008
Annual Report

NBP

MANAGEMENT OF THE OFFICIAL RESERVES²³

²³ The responsibilities in this field are carried out, *inter alia*, pursuant to Article 3 section 2 para. 2 and Article 52 of the Act on the NBP.

The NBP, by holding and managing the official reserves, and by carrying out banking operations and taking other measures to ensure the security of foreign exchange turnover and Poland's payment liquidity, acts as a central foreign exchange authority. Foreign exchange reserves serve primarily to ensure financial credibility and stability of the country. Their amount and composition should allow to conduct efficient monetary and exchange rate policies

In the management of foreign exchange reserves, the NBP aims at maximising the return on reserves while ensuring optimum security of invested funds and the requisite liquidity of its reserves.

5.1. General principles for managing the official reserves

In October 2007, the Management Board of the NBP adopted the *Long-term Foreign Exchange Reserves Management Strategy of the National Bank of Poland*, with the aim to maximise the return on reserves over the long perspective, along with maintaining financial risk at an accepted level. In the implementation of its strategy, the NBP endeavours to:

- further diversify the currencies and extend the scope of investment instruments,
- introduce the advanced methods of global allocation of assets,
- improve decision making procedure,
- develop methods to manage investment risk.

Those objectives are reflected in the resolution of the NBP Management Board, which most specifically sets forth the principal terms and conditions of managing the official reserves, including decision-making, investment instruments to be used and principles of establishing the limits and criteria to select the NBP counterparties.

As a part of the approved decision-making procedure, the NBP Management Board on a yearly basis determines the Strategic Allocation of Assets, *via* its decisions regarding:

- currency and investment composition,
- the level of modified duration, which illustrates the sensitivity of investment to changes in the yields on the instruments (interest rate risk),
- the scope of active investment policy.

The implemented investment strategy is adjusted for medium- and short-term market expectations in the Tactical Allocation of Assets and Management of Active Portfolio.

5.2. Financial risk management in the official reserve management process

One of the most important elements in the official reserve management is the management of the risk that accompanies investments. This is based on the system of investment limits and restrictions accepted by the Management Board of the NBP.

Table 5 presents main types of financial risk in the official reserve management process and the methods applied by the NBP to mitigate those risks.

Table 5**List of investment limits and restrictions applicable at the NBP in the financial risk management process**

Risk	Mitigation methods
Credit risk	Reduction in the share of deposit transactions and non-government securities Counterparty selection criteria and ongoing monitoring of their creditworthiness Counterparty limits on deposit and foreign exchange transactions Minimum rating of securities Exposure limits for issuers of securities Collateral in investment transactions with securities repurchase agreement
Foreign exchange risk	Optimal currency composition of benchmark portfolios Benchmark volatility ranges of currency composition
Interest rate risk	Maximum level of modified duration of reserves Optimum level of modified duration of reserves specified in the benchmark Benchmark volatility ranges of modified duration of currency portfolios
Liquidity risk	Investment in the currency of countries whose financial markets feature the highest liquidity Reduction in the share of deposit transactions Securities selection criteria

Source: NBP data.

With the escalation of crisis in the financial markets, leading to deterioration of financial position of banks, the credit risk management gained pivotal importance in 2008. In order to reduce exposure to this risk, the NBP took the following actions:

- significant reduction in the share of deposits in foreign exchange reserves,
- shortening of investment horizon for investment transactions, so as to enable a rapid response to the changes of financial standing of counterparties,
- intensification of monitoring of counterparties' creditworthiness, whereby the previously applied methodology has been extended to include the assessment of standing reflected in market quotations,
- collaboration with some counterparties has been limited to investment transactions or suspended.

Thanks to the undertaken actions, the NBP was adequately protected against potential losses resulting from the increased credit risk.

5.3. Level of the official reserve assets²⁴

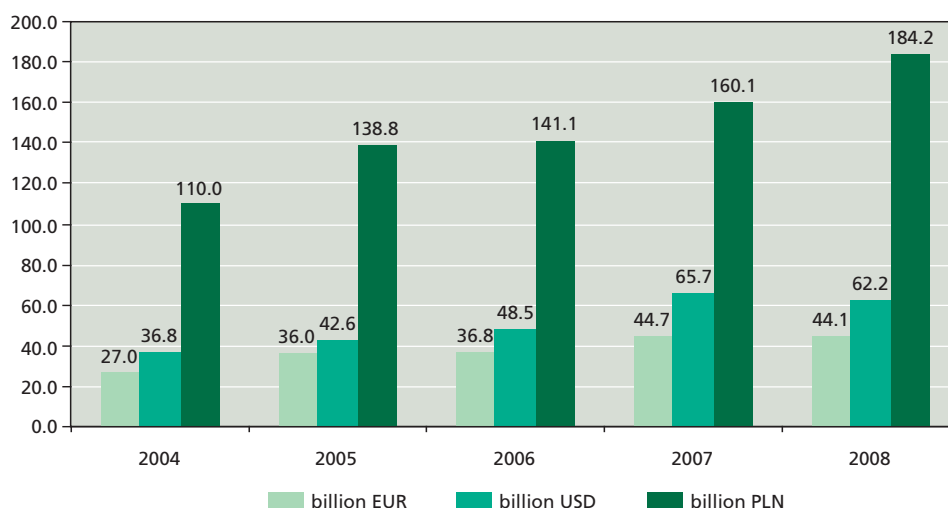
In 2008, the NBP official reserve assets:

- fell by EUR 0.6 billion to EUR 44.1 billion (-1.2%) – when calculated in EUR,
- fell by USD 3.6 billion to USD 62.2 billion (-5.4%) – when calculated in USD,
- grew by PLN 24.1 billion to PLN 184.2 billion (15.0%) – when calculated in PLN.

Figure 10 presents the level of the official reserves between 2004 and 2008.

Figure 10

Official reserve assets between 2004 and 2008



Source: NBP data.

The growth in the value of the official reserves was stimulated by the positive balance of external flows, most specifically by the inflow of funds from the European Union and returns on investments. Notwithstanding, 2008 saw the decline in the value of the official reserve assets expressed in EUR and USD. This can be traceable to the reduction – due to the financial crisis – of the scale of investments involving sale (repo) and repurchase (reverse repo) transactions carried out in parallel.

The official currency assets denominated in PLN reported a growth. A strong depreciation of the zloty against the main reserve currencies (USD and EUR) was an additional factor of growth in this case.

In 2008, due to the significant increase in the price of gold (about 4%), the value of monetary gold owned by the NBP increased:

- by EUR 0.2 billion to EUR 2.0 billion – when calculated in EUR,

²⁴ According to the definition of the International Monetary Fund (IMF), the official reserve assets comprise easily disposable and liquid foreign assets owned by the central bank. This category includes monetary gold, special drawing rights (SDRs), reserve position in the International Monetary Fund, assets in foreign currencies, mainly in the form of securities, deposits and currency.

- by USD 0.1 billion to USD 2.9 billion – when calculated in US dollar,
- by PLN 1.7 billion to PLN 8.5 billion – when calculated in PLN.

5.4. Foreign exchange reserves management strategy

The rate of return on investing foreign exchange reserves depends on market conditions – fluctuations of exchange rates and prices of investment instruments. The parameters of the Strategic Allocation of Assets have also a significant impact.

Based on the analysis of global macroeconomic outlook conducted at the end of 2007, forecasts of developments in the world financial markets and the results of optimisation analysis, the NBP Management Board decided to further diversify the currency composition of the official reserves in 2008. The composition of the Strategic Benchmark was extended to include the Norwegian krone, whereas the share of the euro was moderated. Owing to the potential appreciation of the Japanese yen, the NBP Management Board also accepted the possibility to commence investing in the said currency under the Tactical Allocation of Assets (upper exposure limit for the JPY was established at the level of 2% of the reserves). Furthermore, as the NBP Management Board decided to abandon the shortened modified duration US dollar portfolio, the modified duration of the Strategic Benchmark increased compared with the preceding year.

Table 6 shows the currency composition and modified duration of the benchmark between 2004 and 2008.

Table 6

Currency composition and modified duration of the benchmark between 2004 and 2008

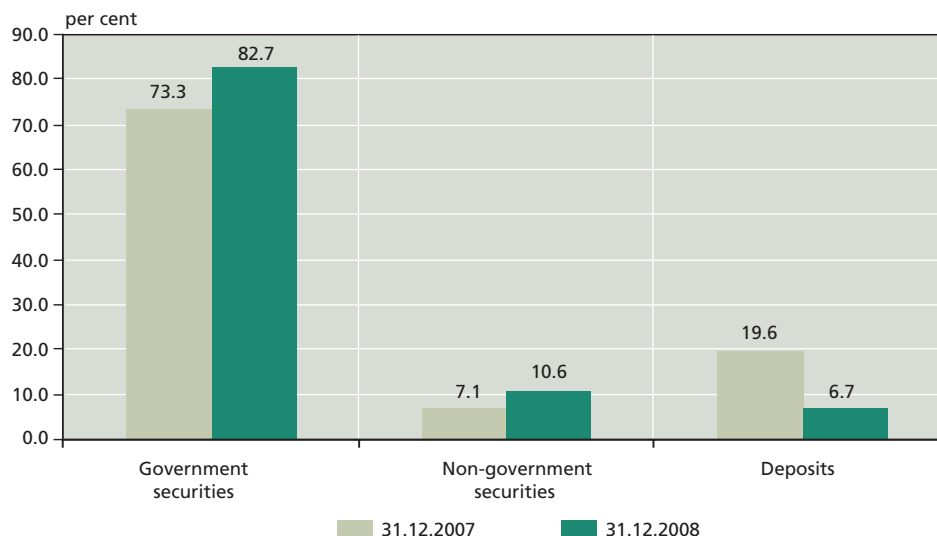
	Benchmark currency composition (in %)					Modified duration
	USD	EUR	GBP	AUD	NOK	
2004	50	40	10	0	0	1.75
2005	50	40	10	0	0	1.76
2006	45	40	15	0	0	1.55
2007	40	40	15	5	0	1.52
2008	40	35	15	5	5	2.02

Source: NBP data.

In the management of its official reserves, the NBP invests in typical instruments, used by other central banks. Government securities constitute the dominant part of foreign exchange reserves. The NBP also invests in non-government securities, including the instruments issued by international institutions and government agencies. Moreover, part of the reserves is held in deposits at prestigious banks. In the implementation of its Long-term Strategy the NBP continued to steadily extend the spectrum of securities. As a result of currency diversification, the investments were launched in the Norwegian and Japanese market. The process of reserves diversification took account of the prevailing market conditions.

Figure 11

Share of individual investment instruments in the NBP official reserves as at the end of 2007 and 2008



Source: NBP data.

5.5. Market environment in 2008

Main trends occurring throughout the year in the markets whose instruments dominated in individual currency portfolios.

The financial markets were impacted by the crisis in the US subprime market, which occurred in mid-2007, spread dramatically in 2008, and caused significant losses in the global financial sector. This brought about crisis of confidence to the international bank market. Significant deficiency of liquidity (most clearly visible at the turn of Qs 3 and 4) was one of its effects. Central banks undertook a number of measures to counteract adverse effects of the crisis. Not only did they supply the markets with liquidity and implement security packages, but also reduced their policy rates. This step pushed down both the interest rates on deposits and yields on government securities. Along with the above, the increased risk aversion among investors supported the inflow of capital to the markets of government securities perceived as the most safe investments. In addition, as another consequence of the crisis, the financial market volatility soared.

Yields slumped across all securities markets under analysis. Whereas the decline in yield on 2-year bonds in the US, European and British markets was, respectively, 228 bps, 221 bps and 331 bps, that on 10-year bonds declined by 181 bps, 138 bps and 149 bps, respectively.

5.5.1. US government securities market

The yields on the US government securities followed a declining path in 2008, continued since the mid-2007 (Figure 12).

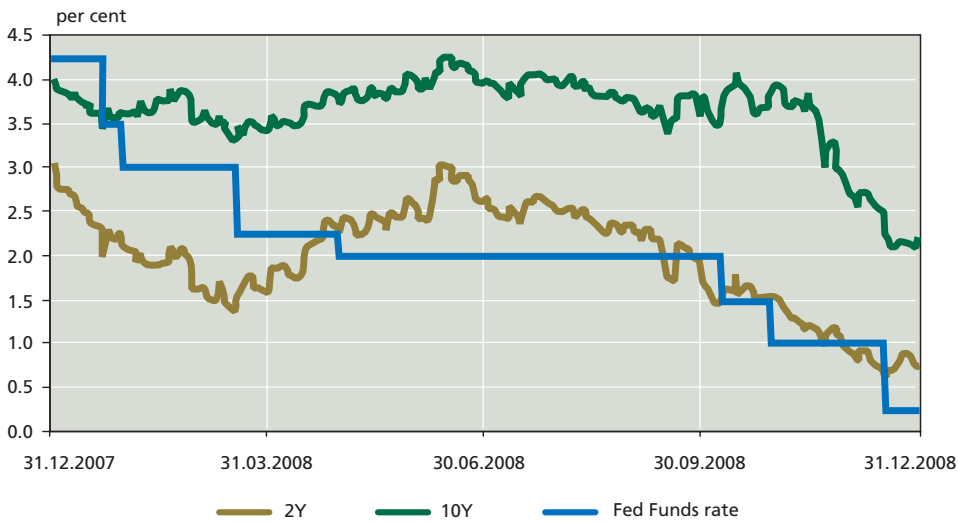
The fall in yields was principally attributable to the market expectations for a continued cycle of reduction by the FED of its policy rates. In 2008, the FED reduced the interest rate on the federal funds on seven occasions, i.e. from 4.25% down to the range between 0% and 0.25%, in order to safeguard the economy against the adverse impact of the crisis.

Treasury bonds prices grew, fuelled by the increase in risk aversion among the investors who worried about the standing of the financial sector (and also associated with the aggravation of the crisis in the US subprime market).

2008 Q2 brought about a correction in the falling trend of yields, due to the increasing inflation expectations and upcoming – in the opinion of the market – prospects for tightening monetary policy by the FED.

Figure 12

Yields on US government securities against the Fed Funds rate



Source: Bloomberg.

5.5.2. Euro-area government securities market

Over the subsequent quarters of 2008, the evolution of yields on the euro-area government securities followed that of the US market.

Even though inflation rose in the euro area and “hawkish” stance communicated by the representatives of the European Central Bank, 2008 Q1 featured a predominant decline in bond yields, derived from investor apprehension about the impact of subprime crisis on the world economy.

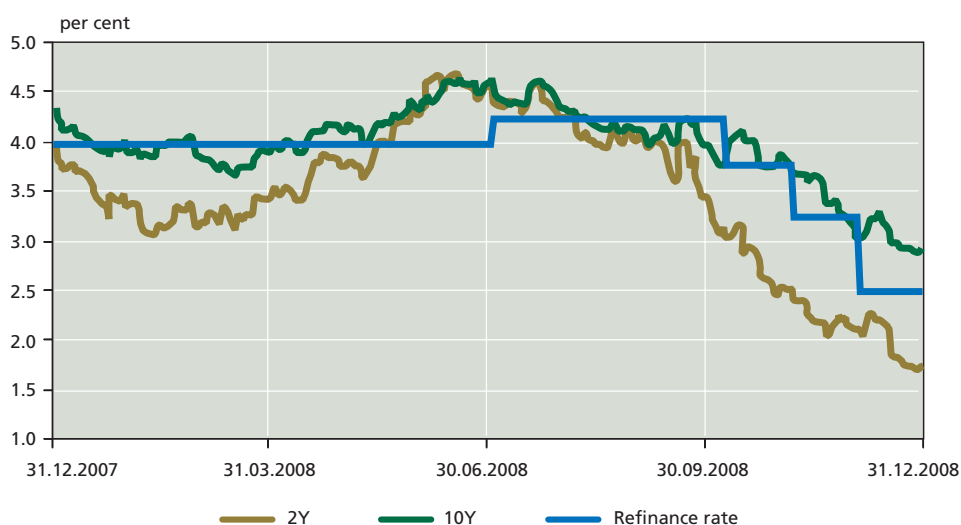
The rising tendencies in the yields in 2008 Q2 stemmed from the continued growth both in inflation and in the associated growing expectations of the rise in the ECB policy rate (at the beginning of July, the ECB increased the refinancing rate by 25 bps, up to the level of 4.25%).

In the second half of the year, the yields on the euro area government bonds contracted. This was due to the release of worse than anticipated statistics concerning the euro area economy and at the same time stemmed from expectations for lowering the refinancing rate. In order to counteract the recession, in Q4, the ECB reduced the policy rate on three occasions, altogether by 175 bps, down to the level of 2.5%.

The intensification of the crisis in the financial sector in the second half of September and apprehension about the global economic slowdown were reflected in steady inflow of funds from riskier markets to the government bonds market. This fact significantly contributed to increase in prices of the euro area government bonds in 2008.

Figure 13

Yields on euro-area government securities against the refinancing rate



Source: Bloomberg.

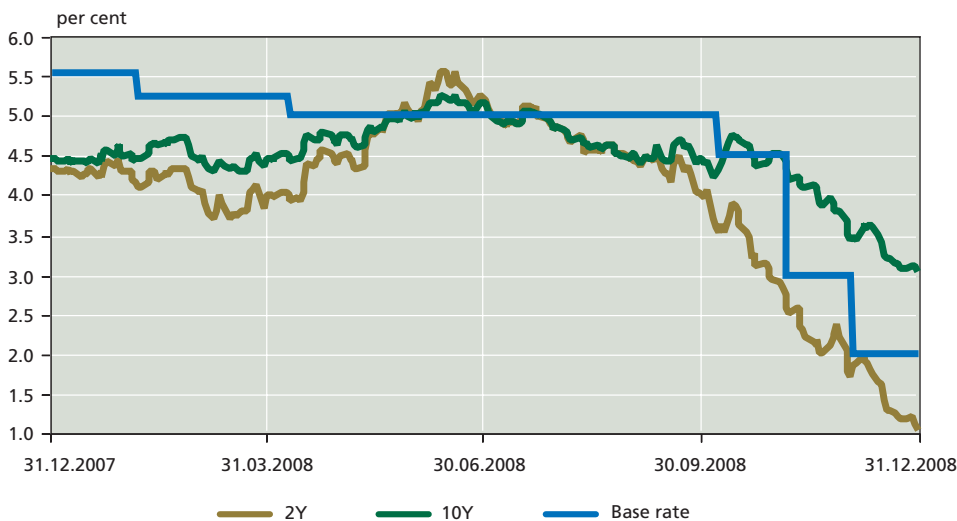
5.5.3. British government securities market

The British securities market followed the developments in the US and European markets. The yields on the British government bonds declined in 2008 Q1, *i.a.* as result of pronounced economic deceleration and contraction in the real property market in the UK, which intensified investors' expectations for the reduced policy rates. In line with market expectations the Bank of England (BoE) reduced the repo rate on two occasions, in February and in April, by 25 bps each time.

In 2008 Q2, yields rose on the government bonds. This reflected weakening expectations for further reductions in the BoE policy rate among financial market operators due to the inflation rate amounting over the inflation target determined by the central bank.

Figure 14

Yields on UK government securities against the base rate



Source: Bloomberg.

Since end-June, the decline was observed in the yields on the British government bonds, which was driven by the aggravation of the financial crisis and recurring expectations for the reduction in the repo rates. In order to prevent a strong weakening of the British economy, the BoE in 2008 Q4 reduced interest rates on three occasions, in total by 300 bps, down to level of 2%.

5.5.4. Australian interbank deposits market

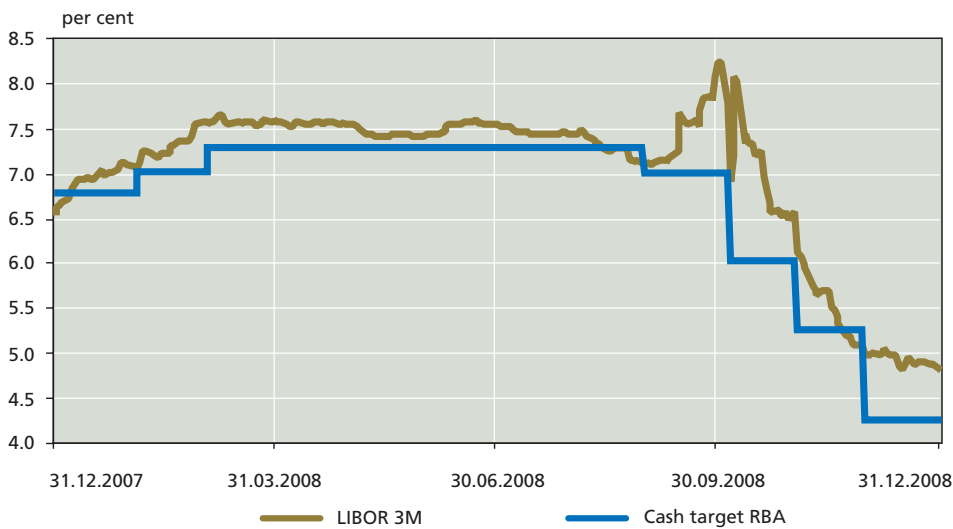
In 2008, a decline in AUD LIBOR rates was observed. For most of the year, the interest rate on deposits followed the evolution pattern of the policy rates. A short-term reversal of this tendency occurred at the turn of Q3 and Q4, where liquidity shortage in the money market sent LIBOR rates upwards, notwithstanding the expectations for the reduction in interest by the Reserve Bank of Australia (RBA).

The interest rates on deposits climbed up in 2008 Q1. The RBA effected two increases in the cash target rate by 25-bps each, at that time. The actions of the central bank of Australia were driven by the growing inflationary expectations.

In 2008 Q4, AUD LIBOR showed a significant decline, principally in the wake of the reductions in the policy rate by the RBA. Between September and December, the central bank of Australia cut the interest rates on four occasions, by 300 bps altogether, down to 4.25%, *i.e.* the lowest level in 6 years. Those reductions were the response to the signs of strong slowdown in the Australian economy.

Figure 15

1-month AUD LIBOR rate against the cash target rate



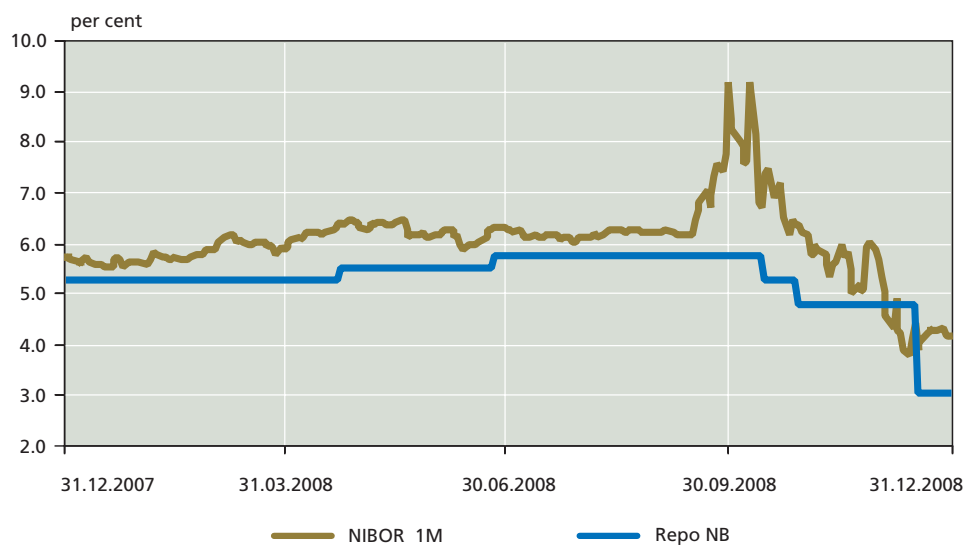
Source: Bloomberg.

5.5.5. Norwegian interbank deposits market

Deposit rates denominated in NOK went down in 2008.

The growth in the interest rates on 1-month deposits, observed in 2008 Q1, was mainly the consequence of the market taking advantage of the rise in the central bank deposit rate, associated with the intensified inflationary expectations. The central bank of Norway (Norges Bank) increased its policy rates both in April and in June, by 25 bps each time, up to the level of 5.75%.

At the turn of September and October, as a result of the intensification of the liquidity crisis, a short-term boost occurred in the interest rate on deposits in the interbank market. A subsequent strong decline in the deposit rates was driven by the three reductions by Norges Bank in its policy rate, down by 275 bps in total, down to the level of 3%. The reductions in the interest rate were the Norwegian central bank's response to the deterioration in the national macroeconomic situation.

Figure 16**1-month NIBOR rate against the repo rate**

Source: Bloomberg.

5.6. Return on foreign exchange reserves

The return attained by the NBP in 2008 was the highest in recent years, both calculated in the currency of instruments,²⁵ and in zloty.²⁶ The yields calculated in the currency of instrument stood at 8.5%, *i.e.* significantly above the average policy rate for the reserve currencies. It is worthwhile to mention that the investment decisions were taken in the context of seriously elevated volatility and uncertainty in the financial markets. High rate of return on the reserves was primarily attributable to a significant growth in prices in government bonds markets, consequent increase in demand for the safest and most liquid instruments, and reductions in the central banks' policy rates.

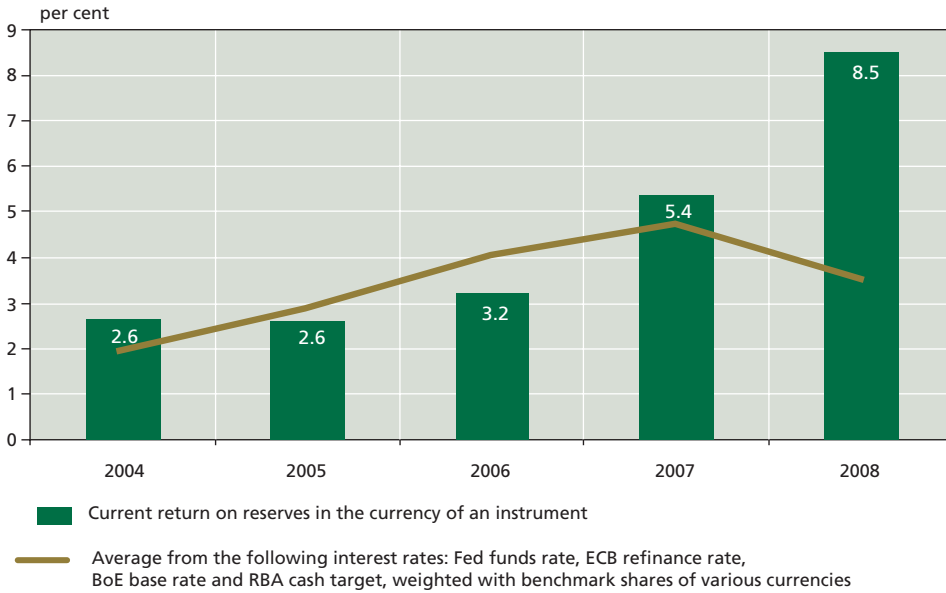
The return on foreign exchange reserves in zloty terms stood at 21.4%. This value was the function of high yields in the currency of instruments and strong depreciation of the zloty against the major reserve currencies – USD and EUR (in 2008 the USD/PLN and EUR/PLN exchange rates rose by c. 22% and 16%, respectively), as depicted in Figure 19.

²⁵ Return on foreign exchange reserves denominated in the currencies of various investment portfolios are/is calculated on the basis of daily changes in the market value of the instruments.

²⁶ Return on foreign exchange reserves denominated in PLN additionally include the influence of changes in the exchange rates of reserve currencies against the zloty.

Figure 17

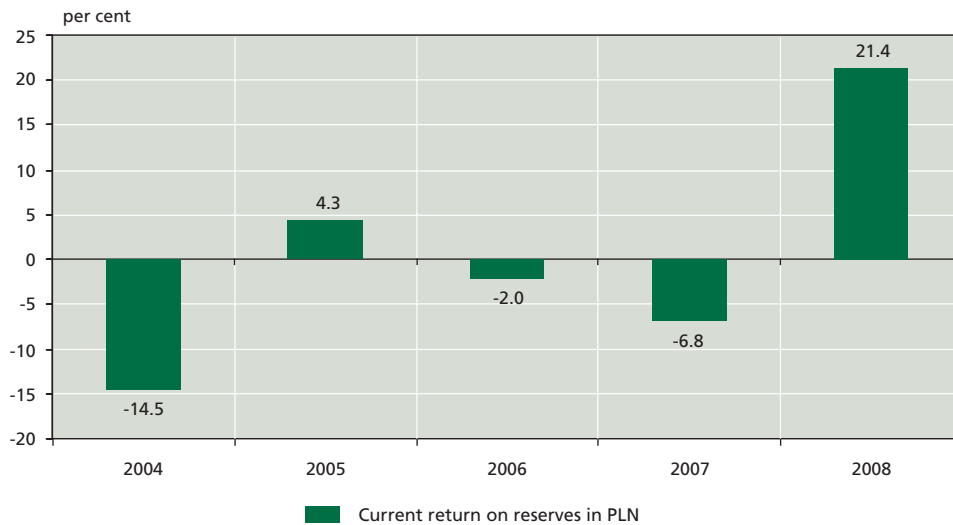
Return on the NBP foreign exchange reserves (excluding the influence of fluctuations in exchange rates)



Source: NBP data.

Figure 18

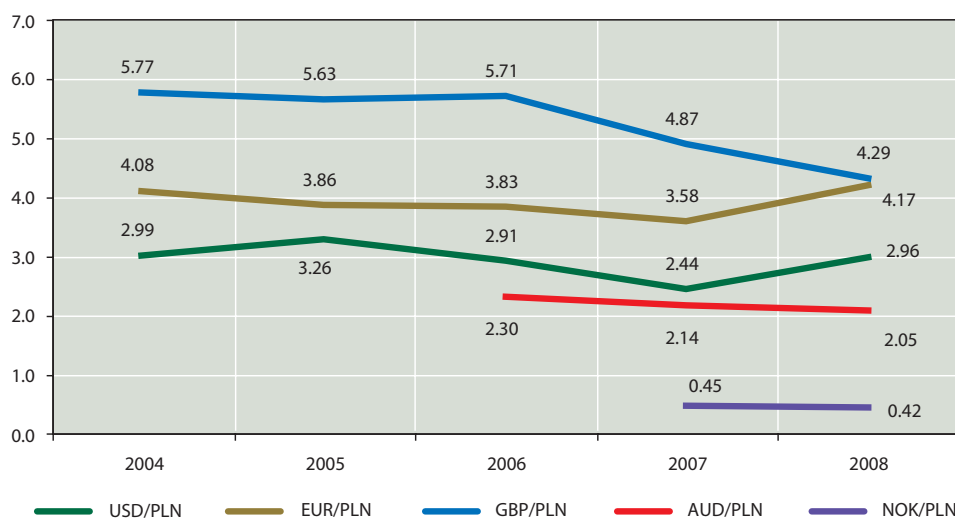
Return on foreign exchange reserves between 2004 and 2008 (including the influence of fluctuations in exchange rates)



Source: NBP data.

Figure 19

Exchange rates of reserve currencies against the PLN between 2004 and 2008 (at the end of periods)



Source: NBP data.

5.7. Investment income

The income from investment activity related to the management of the official reserves, excluding the exchange rate valuation effects, stood at PLN 6.9 billion in 2008, which is an equivalent of EUR 2.0 billion or USD 2.9 billion (as against PLN 6.1 billion in 2007).

The net income, including the exchange rate valuation effects, amounted to PLN 5.7 billion, which is an equivalent of EUR 1.6 billion and USD 2.4 billion (as against PLN -9.4 billion in 2007). Exchange rate differences are understood as exchange rate valuation adjustments, realised or unrealised, related to the assets and liabilities held in currencies.

5.8. Activities aimed at increasing the return on foreign exchange reserves

In 2008 under the Long-term Strategy the following measures were taken so as to reduce volatility of the official reserves and increase the return on them:

- process of diversifying the currency composition of the official reserves and range of the applied investment instruments continued, taking into account the current market environment – investments in the Norwegian and Japanese markets started and the spectrum of securities was extended,
- work progressed to further elaborate the methods of assets allocation (including improvement of the applied optimisation models) and financial risk management (with particular focus on the elevated credit risk in the context of the crisis),

- greater flexibility was allowed in adjusting investment policy targets to dynamic evolution of the market environment, by modifying the decision-making in the field of the management of reserves.

The most important actions in 2008

- The return on the NBP official reserves was the highest in recent years and stood at 8.5% in the currency of instruments and at 21.4% in zloty.
- A number of measures were adopted so as to reduce the exposure to credit risk, significantly elevated in the context of the crisis in the financial markets.
- Pursuant to the *Long-term Foreign Exchange Reserves Management Strategy of the National Bank of Poland* actions aiming to increase the return on and to reduce volatility of the official reserves proceeded.

2008
Annual Report

NBP

FOREIGN EXCHANGE OPERATIONS²⁷

²⁷ The responsibilities in this field are exercised, *inter alia*, pursuant to Article 3 section 2 para. 3, and Article 52 of the Act on the NBP, and the provisions of the Foreign Exchange Act.

The purpose of foreign exchange operations of the NBP is to ensure security of foreign exchange transactions and exercise control within the scope specified in the provisions of the Foreign Exchange Law. Whereby, the NBP, *inter alia*, maintains a register of bureaux de change, issues decisions on foreign exchange matters and controls foreign exchange transactions.

6.1. Register of entities conducting foreign exchange market operations

In 2008, 824 entries were made to the register of entities conducting bureau de change operations (900 in 2007), including 164 entries with reference to start-ups which launched foreign exchange market operations. The remaining entries concerned deletion of entrepreneurs from the register and amendments to data entered into the register. As at 31 December 2008, the total number of 4,193 bureaux de change operated in Poland (as at 31 December 2007 the number was 4,187).

6.2. Foreign exchange decisions

In 2008, a total of 3,702 decisions concerning foreign exchange were issued, including: 2,772 permits, 930 other decisions²⁸ and 23 rulings (as compared to 2,473 decisions and 25 rulings in 2007).

6.3. Foreign exchange control

In 2008, a total of 3,079 inspections were conducted (as compared to 2,980 in 2007), including:

- 1,986 inspections concerning compliance with reporting requirements in respect of the balance of payments (1,891 inspections in 2007), including 87 inspections combined with the inspection of foreign exchange permits (61 in 2007);
- 1,093 inspections regarding foreign exchange market operations (1,089 in 2007).

1,271 inspections, i.e. 41% of all inspections conducted, detected irregularities (as compared to 1,268, i.e. 43%, in 2007). In the case of irregularities, post-inspection recommendations were issued, committing the management of the inspected unit to comply with applicable regulations.

The most important activities in 2008

- As at 31 December 2008, the total of 4,193 bureaux de change operated in Poland.
- The total of 3,702 decisions concerning foreign exchange were issued.
- 1,271 inspections, i.e. 41% of all the conducted inspections, detected irregularities.

²⁸ Relating to cancellation of proceedings and change of permit.

DEVELOPMENT OF THE PAYMENT SYSTEM²⁹

²⁹ The responsibilities in this area are carried out, *inter alia*, pursuant to Article 3 section 2 para.1 and para. 6 of the Act on the NBP, and the Act on Settlement Finality in Payment and Securities Settlement Systems and on the Rules of Oversight of These Systems.

The contribution of the National Bank of Poland to the development of the payment system consists primarily in organising money settlements, exercising oversight of payment and securities settlement systems, and drafting relevant legal regulations.

In 2008, the activities of the NBP aimed at development of the payment system focused on current servicing of the SORBNET and SORBNET-EURO systems, preparations for membership in TARGET2 and performance of oversight functions.

7.1. Integration with payment systems functioning in the European Union

In 2008, the National Bank of Poland continued preparations for participation in TARGET2, a trans-European RTGS system for the settlement of large value euro payments, which replaced TARGET. The works were completed on 19 May 2008 and the NBP joined the new system. At the same time, the TARGET2-NBP system was launched, as a part of the domestic settlement infrastructure for euro payments. In addition to the NBP, the list of direct participants of the TARGET2-NBP system include three banks: ABN AMRO Bank (Poland) SA, Bank Zachodni WBK SA and Powszechna Kasa Oszczędności Bank Polski SA. 24 other commercial banks, the National Clearing House SA and the National Depository for Securities enjoyed access to settlements in the TARGET2 through the NBP and the SORBNET-EURO.

The connection of the NBP to the TARGET2 began a four-year transition period, after which all the Polish banking sector will have to join the new system (by or before May 2012), in accordance with the possible models of participation (direct, indirect). Therefore, the NBP entered into cooperation with another institutions considering the transfer of settlements from SORBNET-EURO directly to TARGET2 in the shortest possible time specified by the NBP, i.e. in June 2009. One of the first institutions to take such a decision was KIR SA.

On 28 January 2008, the NBP launched STEP2 SEPA Credit Transfer settlement system (SEPA payment order in the STEP2 system) and under its authorization enabled the domestic commercial banks to use the service through its intermediation. Moreover, the NBP made available the SEPA credit transfer to its customers, and from July 2008 also in the case of orders transferred abroad (cf. Chapter *Services to Central Government*).

7.2. Oversight of payment systems, authorisation and clearing systems and securities settlement systems

Oversight over payment systems, authorisation and clearing systems and securities settlement systems is exercised by the NBP, whose mission is to minimise the risk related to possible disruptions in the functioning of these systems.

To this effect, in 2008, the NBP:

- Collected and analysed statistical data and information concerning the functioning of large value payment systems, i.e. SORBNET, SORBNET-EURO and TARGET2-NBP, monitored the functioning of those systems and prepared functional changes in order to minimise the systemic risk.

- Assessed the compliance of SORBNET-EURO with the *Core Principles for Systemically Important Payment Systems*. Performance of this evaluation was prerequisite to join the SORBNET-EURO system with TARGET2.
- Validated the authorisation and settlement system: BluePay payments by BLUEPAY SA, "Dotpay" payment service by Dotpay SA and to Merchant Services Poland SA.
- In August 2008 validated the Easy Pay Safe Electronic Payment Platform and Easy Pay Safe Mobile Sim Payment Platform by the Polish Security Printing Works.

Moreover, the NBP participated in the works so as to compile statistical data on the payment system functioning which are made available in the ECB's Statistical Data Warehouse.

The National Bank of Poland also took an active part in the works initiated by the European Central Bank in the field of exchange of information and continuity tests of critical infrastructure of payment systems and securities settlement systems at the EU level. In relation to the above activities, a section on the payment system business continuity was created on the NBP's website.

7.3. Regulatory activity regarding the payment system

In relation to the preparations for participation in TARGET2, draft resolutions amending the existing provisions were drawn up. They entered into force upon NBP's accession to TARGET2, i.e. on 19 May 2008.

The NBP also drafted legislative amendments to the legal regulations which hamper the development of non-cash circulation. The aim of the proposed solutions is to eliminate notes and coins from circulation step by step to the benefit of non-cash instruments or at least treat payments by cash and by funds on the bank account on equal terms.

Furthermore:

- The NBP issued an opinion on the draft legal act developed by the Ministry of Finance which implemented Directive 2007/64/EC of the European Parliament and of the Council of 13 November 2007 on payment services in the internal market.
- NBP representatives participated in the works of the payment services working group appointed within the Financial Market Development Council at the Minister of Finance.
- The NBP participated in drafting legal acts which regulated the Polish capital market in order to adjust them to the provisions of the EC directives (cf. Chapter *Legislative activity*). The central bank opposes the introduction of provisions aimed at excluding it from among the shareholders of the National Depository for Securities. The Act amending the act on trading in financial instruments and certain other acts was passed by the Sejm of the Republic of Poland on 1 September 2008, taking into account the provisions questioned by the NBP. On 23 September 2008, the President of the Republic of Poland forwarded the act to the Constitutional Tribunal.

7.4. Servicing banks' current accounts held at the NBP Head Office

In 2008, the NBP continued its activities related to the servicing of the SORBNET and SORBNET-EURO and preparations for membership in TARGET2.

Whereas the Bank:

- Developed IT, organisational and legislative amendments so that Polish banks could join TARGET on 19 May 2008.
- Initiated activities preparing for the transfer of settlements of the National Clearing House SA from SORBNET-EURO to TARGET2 from 8 June 2009.

7.4.1. Number of bank current accounts operated by the NBP in the SORBNET system

As at the end of December 2008, current accounts in zloty were held at the NBP Head Office for 55 banks, i.e. three banks less than in the previous year.

In 2008, three current accounts in zloty were opened for:

- BNP Paribas Securities Services SA Oddział w Polsce – on 26 May;
- Alior Bank SA – on 16 September;
- Allianz Bank Polska SA – on 10 November.

No current account was closed in the same period.

7.4.2. Operations performed on banks' current accounts held at the NBP in the SORBNET system

In 2008, about 1,638 thousand operations were performed in the banks' current accounts held with the NBP Head Office (1,455 thousand in 2007) for the total amount of PLN 33.4 trillion (PLN 32.5 trillion in 2007). This translates into an increase in the number of transactions by 183 thousand (about 13%) and in their total value by PLN 0.9 trillion (about 3%) as compared to 2007. The average transaction value in 2008 decreased by about 9% and amounted to PLN 20.4 million (22.3 million in 2007).

Table 7 outlines the structure of turnover in banks' current accounts held in PLN in the SORBNET system, while Table 8 provides the breakdown of orders by main categories of operations performed in those accounts.

The dominant position of customer transfer orders in turnover in current accounts strengthened again. Whereas the turnover from exchange of orders in the interbank market fell by 1.0 percentage point in the total volume of all orders processed and by PLN 0.1 trillion in value, that from KIR orders rose – for the second subsequent year – by 0.1 percentage point in the total volume of all orders processed and by PLN 0.05 trillion in value.

Table 7

Structure of turnover in banks' current accounts in PLN in the SORBNET system in 2008

Types of current account transactions	Turnover (in million zloty)			Turnover structure (in %)	
	balance	of which:		debits	credits
		debits	credits		
Balance of funds in banks' accounts (in PLN million):					
– as at beginning of the year: 16 846.1	–	–	–	–	–
– as at the end of the year: 23 964.7					
Movement in balance of funds in banks' current accounts, of which:	7 118.6	33 376 448.7	33 383 567.3	100.0	100.0
1) customer transfer orders:	338 268.9	18 798 157.4	19 136 426.3	56.3	57.3
– interbank	0.0	17 840 412.0	17 840 412.0	53.5	53.4
– involving the National Depository for Securities	-6 875.8	27 833.6	20 957.8	0.1	0.1
– involving other customers of the NBP	345 144.6	929 911.9	1 275 056.5	2.8	3.8
2) interbank transactions:	0.0	6 822 725.8	6 822 725.8	20.4	20.4
– money market	0.0	5 213 862.8	5 213 862.8	15.6	15.6
– FX market	0.0	1 194 158.5	1 194 158.5	3.6	3.6
– securities	0.0	414 704.4	414 704.5	1.2	1.2
of which secondary market trading in:					
– Treasury bills	0.0	373 248.4	373 248.4	1.1	1.1
– NBP money market bills	0.0	1 390.3	1 390.3	0.0	0.0
3) drawings or repayments of NBP loans to banks	771.8	3 753 494.9	3 754 266.7	11.2	11.2
4) transactions and operations settled by the National Depository for Securities	6 839.3	2 041 947.4	2 048 786.6	6.1	6.1
5) purchase (buyback) of securities from the NBP:	-1 809.5	605 348.8	603 539.3	1.8	1.8
– NBP money market bills	-7 020.4	605 348.8	598 328.4	1.8	1.8
– other securities	5 210.9	0.0	5 210.9	0.0	0.0
6) exchange of transfer orders <i>via</i> the National Clearing House:	-314 615.4	695 453.1	380 837.6	2.1	1.1
– morning settlement session	-225 503.3	359 192.3	133 688.9	1.1	0.4
– afternoon settlement session	-91 530.4	206 850.4	115 320.0	0.6	0.3
– evening settlement session	2 418.3	129 410.4	131 828.7	0.4	0.4
7) placings and returns of term deposits at the NBP	-199.5	316 209.2	316 009.7	0.9	0.9
8) purchase or sale of cash at the NBP of:	-16 082.4	171 943.2	155 860.9	0.5	0.5
– domestic currency	-16 061.3	171 922.2	155 860.9	0.5	0.5
– foreign currency	-21.1	21.1	0.0	0.0	0.0
9) purchase or redemption of Treasury securities:	-17 629.9	100 940.6	83 310.8	0.3	0.2
– Treasury bills	-27 913.1	63 154.5	35 241.4	0.2	0.1
– other securities	-10 283.3	37 786.1	48 069.4	0.1	0.1
10) open market operations:	15 252.6	19 076.5	34 329.1	0.1	0.1
– repos	15 252.6	19 076.5	34 329.1	0.1	0.1
– reverse repos	0.0	0.0	0.0	0.0	0.0
– outright sales	0.0	0.0	0.0	0.0	0.0
11) purchase or sale of foreign currencies at the NBP	-6 559.4	8 019.0	1 459.6	0.0	0.0
12) interest paid or received by banks	1 249.6	146.0	1 395.6	0.0	0.0
13) transactions in reserve accounts	41.5	161.8	203.3	0.0	0.0
14) other transactions	1 591.0	42 824.9	44 415.9	0.1	0.1

Source: NBP data.

Table 8

Number of transfer orders by principal types of operations performed in banks' current accounts in PLN in the SORBNET system in 2008

Item	Number of payment orders executed on current accounts			Order breakdown (in %)	
	total	of which:		debits	credits
		debits	credits		
Total number of payment orders performed in banks' current accounts, of which:	1 638 380	1 486 916	1 531 851	100.0	100.0
1) customer transfer orders:	1 276 007	1 231 050	1 264 166	82.8	82.5
– interbank	1 219 209	1 219 209	1 219 209	82.0	79.6
– involving the National Depository for Securities	1 207	914	293	0.1	0.0
– involving other customers of the NBP	55 591	10 927	44 664	0.7	2.9
2) interbank transactions:	158 268	158 268	158 268	10.6	10.3
– money market	92 663	92 663	92 663	6.2	6.0
– FX market	58 099	58 099	58 099	3.9	3.8
– securities	7 506	7 506	7 506	0.5	0.5
of which secondary market trading in:					
– Treasury bills	5 471	5 471	5 471	0.4	0.4
– NBP money market bills	11	11	11	0.0	0.0
3) drawings or repayments of NBP loans to banks	26 218	10 007	16 211	0.7	1.1
4) transactions and operations settled by the National Depository for Securities	40 390	19 217	21 596	1.3	1.4
5) purchase (buyback) of securities from the NBP:	1 878	938	940	0.1	0.1
– NBP money market bills	1 839	938	901	0.1	0.1
– other securities	39	0	39	0.0	0.0
6) exchange of orders via the National Clearing House:	39 135	19 863	19 272	1.3	1.3
– morning settlement session	13 067	5 432	7 635	0.4	0.5
– afternoon settlement session	13 062	8 248	4 814	0.6	0.3
– evening settlement session	13 006	6 183	6 823	0.4	0.4
7) placings and returns of term deposits at the NBP	2 720	1 390	1 330	0.1	0.1
8) purchase or sale of cash at the NBP:	77 084	37 567	39 517	2.5	2.6
– domestic currency	77 052	37 535	39 517	2.5	2.6
– foreign currency	32	32	0	0.0	0.0
9) purchase or redemption of Treasury securities:	3 308	1 128	2 180	0.1	0.1
– Treasury bills	777	343	434	0.0	0.0
– other securities	2 531	785	1 746	0.1	0.1
10) open market operations:	209	68	141	0.0	0.0
– repos	209	68	141	0.0	0.0
– reverse repos	0	0	0	0.0	0.0
– outright sales	0	0	0	0.0	0.0
11) purchase or sale of foreign currencies at the NBP	128	67	61	0.0	0.0
12) interest paid or received by banks	3 905	1 831	2 074	0.1	0.1
13) transactions on reserve accounts	132	66	66	0.0	0.0
14) other transactions	8 998	5 514	6 029	0.4	0.4

Source: NBP data.

7.4.3. Number of bank current accounts operated by the NBP in the SORBNET-EURO system

As at the end of December 2008, the NBP Head Office operated current accounts in the euro of 32 banks, i.e. three less compared to the previous year.

In 2008, four current accounts of the following banks were closed:

- Svenska Handelsbanken AB SA Oddział w Polsce, in relation to the termination of the agreement;
- Powszechna Kasa Oszczędności Bank Polski Spółka Akcyjna, Bank Zachodni WBK SA, ABN AMRO BANK/POLSKA/SA, in relation to the changeover to direct settlement in the TARGET2-NBP system.

One current account was opened in the same period, for a new participant, i.e. Alior Bank SA, on 16 September.

7.4.4. Transactions executed on banks' current accounts held at the NBP in the SORBNET-EURO system

In 2008, about 275 thousand operations in EUR were performed in the SORBNET-EURO system (153 thousand in 2007) for the total amount of EUR 37.2 billion (EUR 23.1 billion in 2007). This translates into an increase in the number of operations by 122 thousand (about 80%) and in their total value by EUR 14.1 billion (about 61.0%) as compared to 2007. The average value of transactions amounted to EUR 135.2 thousand (EUR 151.0 thousand in 2007), i.e. it decreased by EUR 15.8 thousand, i.e. by about 11%.

Table 9 portrays the structure of turnover in banks' current accounts in the SORBNET-EURO system, while Table 10 outlines the breakdown of orders by main categories of operations performed in those accounts.

Turnover from customer transfer orders fell by around EUR 166 million as compared to 2007. Its share in turnover structure shrank by 1.3 percentage point.

Table 9

Structure of turnover in banks' current accounts held in EUR in the SORBNET-EURO system in 2008

Categories of current account transactions	Turnover (thousand euro)			Turnover structure (in %)	
	balance	of which:		debits	credits
		debits	credits		
Balance of funds in banks' accounts (in EUR thousand):					
– as at the beginning of the year:	62 099.5				
– as at the end of the year:	117 873.3				
Movement in balance of funds in banks' current accounts, of which:	55 773.8	37 184 776.6	37 240 550.3	100.0	100.0
1) cross-border interbank payments	-10 408 536.7	27 668 748.1	17 260 211.4	74.4	46.3
2) exchange of cross-border orders via the National Clearing House	1 879 671.1	4 254 668.4	6 134 339.5	11.4	16.5
3) cross-border customer payments	7 797 549.8	1 022 715.0	8 820 264.9	2.8	23.7

4) exchange of domestic orders <i>via</i> the National Clearing House:	-288 975.4	2 743 462.8	2 454 487.4	7.4	6.6
– morning settlement session	40 269.4	998 285.4	1 038 554.9	2.7	2.8
– afternoon settlement session	-329 244.8	1 745 177.4	1 415 932.5	4.7	3.8
5) domestic customer transfer orders:	1 058 132.9	359 958.4	1 418 091.3	1.0	3.8
– interbank	0.0	359 790.7	359 790.7	1.0	1.0
– involving the National Depository for Securities	-41.4	49.1	7.7	0.0	0.0
– involving other customers of the NBP	1 058 174.3	118.5	1 058 292.9	0.0	2.8
6) domestic operations on the interbank market:	0.0	832 426.7	832 426.7	2.2	2.2
– money market	0.0	483 063.2	483 063.2	1.3	1.3
– FX market	0.0	349 363.5	349 363.5	0.9	0.9
– securities	0.0	0.0	0.0	0.0	0.0
7) drawings or repayments of NBP intraday loans to banks	0.0	267 085.6	267 085.6	0.7	0.7
8) transactions and operations settled by the National Depository for Securities	23 312.3	0.0	23 312.3	0.0	0.1
9) interest paid or received by banks	1 346.5	165.3	1 511.8	0.0	0.0
10) other transactions	-6 726.7	35 546.3	28 819.5	0.1	0.1

Source: NBP data.

Table 10

Number of transfer orders by principal types of transactions performed in banks' current accounts in EUR in the SORBNET-EURO system in 2008

Item	Number of payment orders executed in current accounts			Order breakdown (in %)	
	total	of which:		debits	credits
		debits	credits		
Total number of payment orders performed on banks' current accounts, of which:	275 122	40 733	236 763	100.0	100.0
1) cross-border interbank payments	47 830	9 120	38 710	22.4	16.3
2) exchange of cross-border orders <i>via</i> the National Clearing House	8 088	2 185	5 903	5.4	2.5
3) cross-border customer payments	203 048	23 840	179 208	58.5	75.7
4) exchange of domestic orders <i>via</i> the National Clearing House:	10 828	2 184	8 644	5.4	3.7
– morning settlement session	4 659	962	3 697	2.4	1.6
– afternoon settlement session	6 169	1 222	4 947	3.0	2.1
5) domestic customer transfer orders:	2 981	2 062	2 967	5.1	1.3
– interbank	2 048	2 048	2 048	5.0	0.9
– involving the National Depository for Securities	10	8	2	0.0	0.0
– involving other customers of the NBP	923	6	917	0.0	0.4
6) domestic operations on the interbank market:	326	326	326	0.8	0.1
– money market	121	121	121	0.3	0.1
– FX market	205	205	205	0.5	0.1
– securities	0	0	0	0.0	0.0
7) drawings or repayments of NBP intraday loans to banks	499	249	250	0.6	0.1

8) transactions and operations settled by the National Depository for Securities	212	0	212	0.0	0.1
9) interest paid or received by banks	1 022	622	400	1.5	0.2
10) other transactions	288	145	143	0.4	0.1

Source: NBP data.

7.4.5. Number of bank current accounts operated by the NBP in the TARGET2-NBP system

As at the end of December 2008, current accounts in the euro in TARGET2-NBP at the NBP Head Office were held for three banks, which as from 19 May 2008 have been the direct participants of the TARGET2 system. They include:

- Powszechna Kasa Oszczędności Bank Polski Spółka Akcyjna,
- Bank Zachodni WBK SA,
- ABN AMRO BANK/POLSKA/ SA.

The NBP's current account in EUR is also operated in the TARGET2-NBP system.

7.4.6. Transactions executed in banks' current accounts held at the NBP in the TARGET2-NBP system

In 2008, about 326 thousand transactions were performed between the participants of the TARGET2-NBP system, in the total amount of EUR 157.7 billion and the average value of a transaction of about EUR 0.5 million.

Table 11 depicts the balance of funds, number and value of orders performed in banks' accounts in the euro in the TARGET2-NBP system.

Table 11

Balance of funds, number and value of orders performed in banks' accounts in EUR in the TARGET2-NBP system in 2008

No.	Item	Name of unit	Total	Monthly average
1.	Balance of funds on the NBP account:			
1.1.	as at the beginning of the day 19 May	0.0 EUR million	–	96.4
1.2.	as at the end of the year	125.5 EUR million	–	112.1
2.	Balance of funds on the banks' accounts:		–	
2.1.	as at the beginning of the day 19 May	0.0 EUR million	–	10.3
2.2.	as at the end of the year	7.1 EUR million	–	11.2
3.	Balance of funds at the end of the year (1+2)	132.6 EUR million	–	123.3
4.	Number of executed orders:	pcs.	326 492	40 812
4.1.	domestic payments	pcs.	19 951	2 494
4.2.	cross-border payments sent	pcs.	89 612	11 202

4.3.	cross-border payments received	pcs.	216 929	27 116
5.	Value of executed orders:	EUR million	157 723.1	19 715.4
5.1.	– domestic payments	EUR million	4 126.5	515.8
5.2.	– cross-border payments sent	EUR million	75 295.1	9 411.9
5.3.	– cross-border payments received	EUR million	78 301.5	9 787.7
6.	Average value of orders:	EUR million	–	0.5
6.1.	– domestic payments	EUR million	–	0.2
6.2.	– cross-border payments sent	EUR million	–	0.8
6.3.	– cross-border payments received	EUR million	–	0.4

Source: NBP data.

7.5. Bank records

The responsibilities of the National Bank of Poland include the granting and registration of the numbers of banks and their organisational units, as well as keeping and updating the bank records (the General Inspectorate of Banking Supervision was responsible for this task by the end of 2007).

To this effect, in 2008, the NBP:

- granted numbers to 28 new commercial banks (including two head offices of commercial banks, 26 organisational units of commercial banks), seven branches of credit institutions (including five branches of operating credit institutions and two branches of credit institutions being organised);
- deleted 65 numbers of domestic banks (including cooperative banks), branches of credit institutions and their organisational units;
- introduced a total of 7692 changes of data concerning banks and their organisational units;
- provided the information about the bank records on the NBP's website.

7.6. Developing standards

The purpose of works with regard to developing standards is to increase the safety and efficiency of the Polish payment system, and to adjust the banking infrastructure to the European Union requirements and standards.

In 2008, the NBP representatives participated in the works of:

- Technical Committee for Banking and Banking Financial Services at the Polish Committee for Standardization; drafts of two standards were prepared, namely, *PN-ISO 20022 Financial services – Universal financial industry message scheme – Part 2: Roles and responsibilities of the registration bodies* and *PN-ISO 7341 Banking – Nostro accounts reconciliation*;
- expert bodies operating at the Polish Bank Association.

7.7. Activity of the Payment System Council

The Payment System Council was established in 1998 as a consultative and advisory body affiliated with the Management Board of the NBP. It currently comprises, along with NBP representatives, the representatives of the management of the Polish Financial Supervision Authority, Polish Post and the management boards of the Polish Bank Association, National Clearing House, National Depository for Securities, FirstData Polska SA and five commercial banks.

In 2008, four meetings of the Payment System Council were held. The most important discussed issues included:

- Integration of the Polish payment system into the EU single payment area; the Council studied the information prepared by the NBP on the migration of the NBP and Polish banks to the TARGET2 system on 19 May 2008 and adopted the report on SEPA implementation in Poland;
- Evolution of the securities settlement systems in Poland as compared to the development of deposit and settlement system in the European Union;
- Promotion of non-cash transactions, including:
 - results of the workshops on non-cash transactions in Poland and selected European Union countries, held by the NBP in 2007;
 - results of the analysis of the benefits arising from the promotion of non-cash transactions;
 - *draft Strategy for non-cash transactions development in Poland for the years 2009–2013*, developed by the National Bank of Poland, the Polish Bank Association and the Coalition for Non-Cash Transactions and Micropayments;
 - report from the operations of the Coalition for Non-Cash Transactions and Micropayments;
 - report on innovative payment services both at home and abroad.

The Council also discussed the results of various comparative analyses, with most important of them being the following:

- comparisons of selected elements of the Polish payment system with the systems of other EU Member States;
- comparisons of the amount of fees for cross-border transfers in the euro in Polish banks (for the period between November 2007 and November 2008);
- comparison of the studies on the costs of cash and non-cash payment instruments in selected countries and the conclusions for Poland.

In addition, the Council issued opinions about the half-year evaluations of the functioning of the Polish payment system, which were next presented to the Management Board of the NBP.

7.8. Collaboration with the banking sector regarding other interbank projects

The NBP continued its collaboration with the Polish Bank Association. In 2008:

- Measures related to the development and promotion of non-cash transactions were undertaken (cf. paragraph 7.7);
- Works on the SEPA implementation continued, including: the concept of accession to SEPA Credit Transfer and the European settlement system STEP2 SEPA Credit Transfer was developed, preparations for the implementation of SEPA Direct Debit (SDD) were discussed and the information and promotional campaign on SEPA instruments was prepared.

The most important activities of the NBP in 2008

- The NBP launched the TARGET2 system.
- Draft *Strategy for non-cash transactions development in Poland for the years 2009–2013* was developed.
- The NBP joined the SEPA Credit Transfer scheme.

EDUCATION AND INFORMATION

Pursuant to Article 59 of the Act on the NBP, the National Bank of Poland conducts publishing and promotional activity. Within its framework, it also implements educational and informational projects designed to enhance the transparency of the NBP's operations and public knowledge regarding the principles of operation of the central bank, the banking system, and the market economy, as well as to disseminate the knowledge about the EMU and the euro in the society and in the banking sector.

8.1. Promotional activity

In 2008, the NBP conducted promotional activities concerning the issue of collector coins and notes. The NBP cooperated with the media, organised numerous competitions, press conferences and meetings on the topics of presented on coins and notes.

The Bank supported the public debate on benefits and costs of accession to the euro area and distributed information materials on the common currency. The contents of the information services about the euro, namely www.nbp.pl/euro, were expanded.

In 2008, the National Bank of Poland organised Open Days for the fifth time. There were approximately 30 thousand visitors to the NBP Head Office and the regional branches during the Open Days.

8.2. Publishing activity

In 2008, as in previous years, the NBP issued numerous periodic publications, including in particular: *the Annual Report*, *Report on NBP Activity*, *Monetary Policy Guidelines*, *Report on Monetary Policy Implementation*, *Financial System Development in Poland*, *Monetary Policy Instruments*, *International Investment Position of Poland*, *Inflation Report*, *Balance of Payments of the Republic of Poland*, *Information Bulletin*, *Preliminary Information* and *Bank i Kredyt* (Bank and Credit), which in 2008 contained an educational insert entitled *Europejska integracja monetarna od A do Z* (European Monetary Integration from A to Z).

Most NBP publications are issued in two language versions – Polish and English – with a circulation of around 1000 copies per each version.

In addition, as part of cooperation with the European Central Bank, the NBP published quarterly editions of the *Monthly Bulletin* in Polish.

The NBP published a number of studies from the series *Materiały i Studia* (National Bank of Poland Working Papers) (the list of publications issued in 2008 is presented in Annex 8). In addition, the publications included the third edition of *Badanie rynku pracy w województwie mazowieckim* (Survey of the Labour Market in the Mazowieckie Voivodeship), *Payment System in Poland* and numismatic folders for collector coins.

8.3. Information activity

8.3.1. Liaising with the media and market analysts

In 2008, the NBP organised 50 press conferences and meetings with journalists, including regular press conferences following the meetings of the Monetary Policy Council, as well as conferences devoted to inflation projections. Over 170 press releases were published.

Over 460 written responses to questions of journalists concerning the activities of the NBP were provided, and about 290 interviews and meetings with members of the Management Board of the NBP and of the Monetary Policy Council were held.

In 2008, the NBP launched information portal NBPnews.pl presenting information about current events at the Polish central bank. It contains a separate section for journalists with additional video material and photographs.

8.3.2. NBP website

The NBP website includes information about the ongoing activity of the NBP, presents official positions of the Bank's management, as well as documents, statistics and economic analyses of the NBP.

In 2008, the number of users who visited the website www.nbp.pl amounted to around 600 thousand persons monthly.

8.3.3. Examining petitions, complaints, requests and letters

In 2008, 8,742 matters submitted to the NBP were examined (i.e. 25% more than in 2006), including 8,535 letters and 207 complaints and requests.

Out of the total number of submitted matters, 8,298 were handled at the NBP and 444 (5%) were directed to banks and other institutions, according to their competence.

The matters examined by the NBP concerned mainly the availability of collector coins, requests for financial support, access to archives and statistical data.

The NBP addressed letters to banks and other institutions mainly related to banking services, including irregularities in granting and servicing loans, debt recovery, performance of transfer orders and settlements of payments by payment cards. The remaining matters concerned bonds issued before 1939, providing assistance in establishing legal successors of (closed down or transformed) banks, as well as information about banking products.

8.4. Educational activity

The National Bank of Poland conducts activities fostering dissemination of the economic knowledge, understanding the principles of functioning of the market economy and economic processes, and elaborating the skills necessary for efficient operation in the market economy.

8.4.1. The Program of Economic Education

As part of programs for schools, students, journalists and the clergy, the following schemes were implemented: *Ekonomia w szkole* (Economics in School), *Podstawowe pojęcia ekonomiczne* (Basic Economic Concepts), *Moje finanse* (My Finances), *Z klasy do kasy* (From My Class to Some Cash) – Fifth Edition, *Ekonomia na co dzień* (Day-to-day Economics), the competition for a written paper, *Olympics of Knowledge about Finance*, *Economic Olympics*, *Entrepreneurship Olympics*, *Polska przedsiębiorcza* (Enterprising Poland) – economic education for students, *Kapitalizm i Ewangelia* (Capitalism and the Gospel), *Serwis edukacji ekonomicznej* (Economic Education Service) at the "Opoka" portal, the *Władysław Grabski Memorial Award*, *Pieniądze na stół! – finanse domowe* (Money on the table! – household finances).

The following schemes were also organised in cooperation with public and private media: *Motel w pół drogi* (The Midway Motel) and a series of economic supplements to nation-wide daily newspapers.

In 2008, the National Bank of Poland launched *Competitions for the Prize of the NBP President* for the best Master's theses, doctoral and postdoctoral dissertations on macroeconomy, finance and banking which concern monetary policy or financial markets.

8.4.2. Economic Education Portal – NBPortal.pl

In 2008, the NBP conducted works on updating the content and expanding the new functions of NBPortal.pl (such as videoblogs, videostreaming). This form of NBP educational activity was used by around 1,400 thousand people in 2008, while the number of users of e-learning courses amounted to about 20 thousand persons.

8.5. NBP Central Library

The publications at NBP Central Library pertain to economics, with particular emphasis on banking and the money. Its book collections are made available to all interested parties in the reading room or *via* interlibrary lending. Using databases at NBP Central Library is free and available to all.³⁰

In 2008, 9,816 readers used the lending room, with 12,432 books made available. There were 5,465 visitors to the reading room, and 16,545 books were made available to them. In total, 15,571 readers used the library collections, and 29,858 books were made available.

Table 12

Collections of NBP Central Library

Type of publications	31 Dec 2005	31 Dec 2006	31 Dec 2007	31 Dec 2008
Self-contained publications	99 237 volumes	103 574 volumes	108 017 volumes	112 630 volumes
Serial publications	37 685 volumes	38 500 volumes	39 000 volumes	40 300 volumes
Total current periodicals	525 titles	525 titles	505 titles	505 titles

Source: NBP data.

³⁰ Contact to NBP Central Library *via* electronic mail: biblioteka@nbp.pl.

The most important activities in 2008

- Educational activities were continued.
- The Economic Education Portal – NBPortal.pl – was further developed.
- NBPnews.pl information portal with information for journalists was launched.

2008
Annual Report

NBP

SERVICES TO THE CENTRAL GOVERNMENT³¹

³¹ The responsibilities in this field are exercised, *inter alia*, in pursuance with Article 3 section 2 para. 4 and Articles 49, 51, 52 of the Act on the NBP, the provisions of the Act on Public Finance and the provisions of the Banking Act.

The responsibilities of the National Bank of Poland within the framework of services to the central government include operating central government accounts, servicing the international receivables and liabilities of the central government, trading in Treasury securities and public debt management, particularly with regard to central government debt.

9.1. Bank accounts operated at the NBP

Within the services to the central government, in 2008 the National Bank of Poland operated the bank accounts referred to in Article 160 of the Public Finance Act of 30 June 2005, including the central government account, current accounts of the government institutions, including offices servicing tax authorities, government special-purpose funds and auxiliary enterprises of government institutions, as well as accounts for permanent expenses of those units. The NBP also operates term deposit accounts in zloty and foreign currencies for entities entitled to hold accounts at the NBP.

Furthermore, the National Bank of Poland operates, with the approval of the President of the NBP, accounts of other legal persons, pursuant to Article 51 section 1 para. 4 of the Act on the National Bank of Poland, *inter alia* the Social Insurance Institution (Zakład Ubezpieczeń Społecznych – ZUS), the Polish Agency for Enterprise Development (Państwowa Agencja Rozwoju Przedsiębiorczości), the Agricultural Market Agency (Agencja Rynku Rolnego) and the Agency for Restructuring and Modernisation of Agriculture (Agencja Restrukturyzacji i Modernizacji Rolnictwa).

By operating central government accounts, the National Bank of Poland contributes to ensuring the safety and liquidity of public funds settlements.

9.1.1. Operating bank accounts

The transactions executed by the National Bank of Poland in central government accounts include non-cash operations pertaining to revenues and expenditure of the state budget – primarily via the *enbepe* electronic banking system, and also cash operations. A cross-system B2B interface combining the Integrated Accounting System of the NBP with the IT and accounting system of the Ministry of Finance is used for operating bank accounts of the State Budget Department and the Paying Authority Department of the Ministry of Finance.

In 2008, the works progressed with regard to the launch of the cross-system B2B interface for other account holders. In addition, further works were conducted together with the Ministry of Finance on the introduction of new rules for the provision of services to the central government. Accordingly, the outstanding funds on the accounts of government institutions should qualify for statutory return into the current account of the central government at the end of each operational day.

As from October 2008 the NBP has authorized account holders to file credit transfer orders under the SEPA initiative. These shall be placed in a paper-based form at a regional branch of the NBP. Electronic SEPA credit transfer will become operational with completing the next stage of work to automate this process.

In 2008 work was undertaken to develop speed-collect services for the holders of accounts with the NBP. The under-development system called *NBPCollect* is going to be a specialist settlement service designed for entities which process a large number of payers or payment types. Respectively, each payer or category of payment will be assigned its personal account number, the so-called micro-account.

9.1.2. Categories of accounts operated by the NBP

The NBP operates accounts in PLN and in foreign currencies, including accounts for the servicing of the European Union budget funds.

In 2008 the National Bank of Poland provided services to 3968 customers (3765 in 2007), for whom the NBP regional branches operated around 17,446 bank accounts including 9727 bank accounts under the programme of alternative cash services.³²

9.2. Servicing international receivables and liabilities of central government

The National Bank of Poland provided, pursuant to the contracts of agency signed in previous years with the Minister of Finance, the servicing of receivables and liabilities of the central government arising from:

- 55 loans granted by international institutions and financial organisations to the government of the Republic of Poland (51 in 2007),
- 52 foreign loans guaranteed by the government of the Republic of Poland, granted to domestic entities (56 in 2007),
- 2 agreements concerning the provision of loan finance to domestic entities (2 in 2007).

In the function of depositary for the World Bank, its agencies and the European Bank for Reconstruction and Development, the NBP administered 15 promissory notes issued by the government of the Republic of Poland in connection with Poland's membership in those organisations.

9.3. Organising trade in Treasury securities

9.3.1. Treasury securities tenders

The NBP, in its capacity of the issuing agent for Treasury securities, is committed to hold Treasury bill sale and buyback tenders as well as Treasury bond sale, buyback and switch tenders.

In 2008, the NBP carried out:

- 31 Treasury bill tenders – where the Ministry of Finance offered for sale 2-day, 3-, 5-, 13-, 26-, 39- and 52-week bills, totalling PLN 65.9 billion. Most specifically 52- and 13- week bills which represented, respectively, 51.6% and 21.4% of all the bonds sold.
- 31 Treasury bond tenders, incl. 6 non-competitive tenders. The sales were dominated by fixed-rate bonds and zero-coupon bonds (65.8% and 27% of total sales, respectively). Floating-rate bonds and inflation-indexed bonds were also sold.

³² The alternative cash services are provided for the account holders with the seat located externally to the place of the NBP regional branch.

- 11 Treasury bond switch tenders, where the Ministry of Finance bought back bonds worth PLN 22.3 billion, and sold bonds worth PLN 22.9 billion. Fixed-rate bonds represented the straight majority in all trade total (80.8%).

No Treasury securities buyback tenders were held in 2008.

9.3.2. Treasury Securities Dealer system

The development of the Treasury Securities Dealer system³³ is one of the tasks of the *Strategy of the Public Finance Sector Debt Management*.

In 2008, pursuant to the Agreement on cooperation with regard to the functioning of the Treasury Securities Dealer system concluded with the Ministry of Finance, the NBP performed the following responsibilities:

- provided monthly and quarterly assessments of the activity of Treasury Securities Dealer banks and banks being candidates for the Treasury Securities Dealers in the Treasury bills and bonds market and derivatives market;
- organized the Treasury securities fixing on the MTS Poland electronic platform, the launch of which was intended to improve the transparency of trading in securities;³⁴
- participated in the meetings of the Council of Market Participants, arranged by the Ministry of Finance.

In addition, within the framework of cooperation with the Ministry of Finance, the NBP performed examination and verification activities at banks whose accounts and securities deposit accounts are maintained in the Securities Register.

9.4. Public debt management activities

Public debt management activities cover primarily cooperation between the NBP and the Ministry of Finance within the Public Debt Management Committee.³⁵

The objective is to exchange information with a view to coordinating the public debt management policy (carried out by the Ministry of Finance) with the monetary and exchange rate policies (implemented by the NBP). The most important responsibilities of the Committee include the development of a long-term public debt management strategy, minimisation of the cost of debt servicing and the creation of conditions for the development of financial markets.

³³ The main purpose of the Treasury Securities Dealer system is to separate a group of banks (the so-called primary dealers) which, in exchange for certain privileges, are obliged to actively operate in the Treasury securities market in order to ensure its liquidity, transparency and efficiency.

³⁴ The banks acting as primary dealers have an obligation of everyday quotation of prices of purchase and sale of T-bonds (mainly benchmark issues) on the organised electronic secondary market (MTS Poland), an obligation to conclude the transactions pursuant to the price adopted at the platform and to inform the market in real time about the quotation.

³⁵ Appointed pursuant to the agreement of 22 December 1994 between the National Bank of Poland and the Minister of Finance.

The most important activities in 2008

- The NBP serviced 3968 customers and operated 17,446 accounts.
- Work progressed to implement the system of micro-payments for the holders of accounts with the NBP.

2008
Annual Report

NBP

RESEARCH ACTIVITY³⁶

³⁶ The responsibilities in this field are exercised, *inter alia*, pursuant to Article 59 of the Act on the NBP.

In 2008, research activity focused on issues related to benefits and costs of Poland's participation in the third stage of the EMU, participation in the Exchange Rate Mechanism II, monetary policy and inflation processes, economic condition of enterprises and households, structural changes in the economy, determinants of economic development, world economy, national and international economic climate, the balance of payments, labour and property market. Results of the conducted research served, *inter alia*, to build and improve the model tools intended to develop forecasts.

These forecasts and findings of research and analytical works fed into the decisions taken by the Management Board of the NBP and the Monetary Policy Council.

In 2008, well-renowned national and international periodicals published 79 academic publications of the NBP employees, including 57 in Polish and 22 in English. Five publications were included in the so-called Philadelphia list (cf. Annex 8).

10.1. Research related to participation in the Exchange Rate Mechanism II (ERM II)

- Observing the ECB requirements for accession to ERM II and undertaking necessary adjustment activities to meet the criteria of participation in ERM II
 - Information on convergence in relation to monetary Maastricht criteria in new European Union Member States was prepared.
 - The NBP participated in the preparation of *Convergence Report 2008* issued by the ECB.
- Setting the optimal central parity in the ERM II
 - Calculations of the fundamental equilibrium exchange rate were updated.
 - Changes of the equilibrium exchange rate were presented at the meetings of the Monetary Policy Council.
 - *Analysis of factors which may influence the zloty exchange rate within the two coming years (taking into account the schedule of preparations related to Poland's entry to ERM II)* was prepared.

10.2. Enterprise and household surveys

- Development of analyses and forecasts of the financial standing of enterprises based on the surveys

The central objective of the analyses is to provide data on the interaction between monetary policy and real sector of the economy. Advantages of the analyses include the anticipatory character of provided information and the fact that they supplement the data of the Central Statistical Office and other research centres. Development of research on the corporate sector implies extending the analysed subjects and areas and implementing modern methods and solutions used in major research centres and central banks.

- Survey studies of financial standing of enterprises

In particular, the envisaged areas of research within the project address the following topics: present and forecast economic situation, in particular the demand, investment activity, price generating mechanisms, including the comparison of these mechanisms in Polish enterprises with the EU countries. In relation to growing wages and low labour supply, large emphasis was put on labour market research and analyses. A lot of attention was paid to the analysis of profitability of export sales. In response to the turmoil in financial markets, the availability of bank financing was studied in more detail.

- Research on economic activity of enterprises
 - The list of research issues addressed included relations between real factors and exchange rate, their impact on enterprises' decisions on export and involvement in foreign trade, as well as the impact of direct foreign investment on productivity of enterprises. The research was conducted under the international MICRO-DYN project, whose participants were academic centres in the European countries.
 - The work was conducted on the assessment of economic situation on the basis of indicators of overall economic situation of Poland. A new method of evaluating those indicators was developed which allows to formulate more coherent conclusions and facilitates the establishment of the location of the economy in the business cycle.
- Research on households' situation
 - The analytical activity covered the issues concerning: generation and distribution of disposable income, financing private consumption using own funds and loans, as well as accumulation of savings in the household sector. The analysis also touched upon the determinants of consumption and savings, as well as the reasons for diversification of the propensity to consume and save in households. The analyses of consumer sentiment were also conducted.
 - The data from Household Budget Surveys and Labour Force Survey allowed to create a model to simulate the potential impact of deterioration of the situation in the labour market on the financial system stability by means of mortgage loan channel. The new model served to simulate the effect of demographic changes and changes in the labour market in different variants.

10.3. Other macroeconomic research

- Analyses and examinations of prices of consumer goods and services
 - Ongoing analyses and studies of inflation processes in the national economy were conducted. Projections of changes in consumer prices on selected categories of goods and services were developed.
 - The sectoral analyses were conducted with regard to the structure and functioning of the market of electric energy, gas fuels, liquid fuels and telecommunications. The impact of the liberalization of the energy and telecommunications markets on inflation processes was analysed.
 - Determinants of changes in food prices in Poland were analysed.
 - Impact of the trends in the world commodity markets, including the markets of agricultural and food products, on the developments in various price categories in the

- national economy was analysed. The analyses covered the impact of globalisation processes on selected price processes in Poland.
- Methodological work was conducted with regard to the construction, functioning and evolution of Consumer Price Indices (CPI) and the studies related to the core inflation indices.
 - Five measures of core inflation were calculated and published monthly. A new measure of core inflation was introduced, namely, core inflation excluding prices of food and energy. The new measure was also used in the NECMOD macroeconomic model.
 - Studies and analyses of the impact of the changes of regulated prices and of indirect taxes' rates on inflation processes in the economy were conducted.
- Structural conditions of potential economic growth
 - Analyses of long-term economic growth and its conditions put a strong emphasis on globalisation processes observed in recent years and related to, *inter alia*, increasing openness of the Polish economy, growth in productivity of factors of production, economic migrations of Poles and increasing liberalization of the services sector. An attempt was made at quantifying the impact of those factors on the Polish economy using the Computable General Equilibrium (CGE) model.
 - Analysis of labour markets
 - The analysis of flexibility of the Polish market functioning was conducted in comparison with the EU countries under the ECB project Wage Dynamics Network.
 - The comparative analysis of labour market institutions in selected euro area countries was conducted.
 - The conducted analysis covered relative significance of changes of forms of activity in the labour market (passivity, unemployment and employment) in the context of their impact on the unemployment rate. Results of the works allow to make indirect conclusions on flexibility of adjustments in the labour market.
 - Analyses of regional labour markets continued. The data obtained in 2007 and 2008 were used to prepare the publications entitled *Wages, labour productivity and migrations*.
 - Examination of real property prices in Poland
 - Developments in the real property sector were observed. The system of monitoring housing prices was developed.
 - Structural analyses of 16 housing markets in provincial cities were conducted.
 - A weighted-average index of housing prices on secondary market was developed for major city markets and the works began on the creation of a hedonic housing price index.
 - Major international markets were monitored in terms of threats and consequences of the crisis on real property market.
 - Participation in the basic research conducted by the ESCB, including cooperation in preparing economic analyses and forecasts

- A new prognostic model NECMOD replaced the ECMOD model.
- Macroeconomic forecasts of the Polish economy to be used by the Monetary Policy Council were prepared.
- Semi-annual macroeconomic forecasts of the Polish economy were prepared to be used by the ECB.
- The participation in the works of the ECB working groups (Working Group on Forecasting, Working Group on Econometric Modeling) was continued.
- Analyses of inflation expectations
 - The publication entitled *Mechanisms of pricing in Polish enterprises compared to behaviour of companies from the euro area* was published.
 - Analyses of consumer inflation expectations were conducted in the form of international comparisons.
 - The analyses of consumer perception of inflations and methods of measuring inflation expectations of individuals were developed.
 - The analysis was conducted of anticipatory character of inflationary expectations among European consumers.
- Analyses of effectiveness of monetary policy transmission mechanism
 - The analyses were conducted on benefits from publication of interest rate path.
 - The dynamic, stochastic model of general equilibrium of the Polish economy SOE-PL was developed.

10.4. Development of analytical and research activity of the NBP

- Changes in the forecasting process
 - Numerous changes were initiated in the forecasting process, including the process of input data collection, processing (including seasonal adjustment) and safe storage, formatting and communicating the results of projections to external recipients, as well as in the description of risks of external forecasts determining the results of the NBP forecasts.
 - The methodology of developing fan chart was altered. The aim of the changes was to use forecasting know-how to evaluate the projection errors, while maintaining the assessment of risk of individual foreign variables by the experts. Whereas the developed methodology is close to that applied at some central banks, it also contains innovative elements, such as inclusion of expert opinions in the assessment of the risk of projections.
 - New forecast models widely used at other central banks, i.e. BVAR, DFM, models based on current and leading macroeconomic indicators, were developed and introduced.

- Development of plans of NBP scientific research
 - The work on the second part of Report on works of the *Working Commission for Scientific Research in the NBP* was completed. The Management Board adopted the *Framework programme of NBP economic research for 2009–2012*. The works are in progress to implement the remaining recommendations of the Commission.

10.5. Works on the *Report on full membership of the Republic of Poland in the third stage of the Economic and Monetary Union*

In 2008, the National Bank of Poland completed the main body of work on the *Report on full membership of the Republic of Poland in the third stage of the Economic and Monetary Union*.

The total of 49 research projects were elaborated for needs of the *Report*. Whereas the NBP specialists conducted 35 projects, 14 projects were authored by external experts. Domestic and foreign science and research institutions, higher education institutions and government administration bodies contributed to the research work. Partial studies were subject to a free anonymous peer review by a pool which gathered around 50 experts.

According to the adopted principle of openness of works, wide range communication and consultative activities were conducted. In 2008:

- The synopsis of the *Report* was presented during the meeting with chief economists of commercial banks and during a seminar in the Institute of Economic Sciences of the Polish Academy of Sciences (January 2008).
- Research work were accompanied by 54 seminars, including five seminars on methodological and conceptual framework, five seminars on preliminary research results and 44 seminars on final results.
- Three seminars hosted foreign experts (Christopher Rosenberg Ph.D. from the IMF, Professor Lawrence Uren from the University of Melbourne and Elena Kohutikova, former Vice-Governor of the National Bank of Slovakia/Národná banka Slovenska).
- On 2 April 2008, the NBP representatives held a meeting with the Deputy Prime Minister and the Minister of Economy and with the Minister of Finance. On that opportunity, the decision was taken to establish working cooperation with regard to works on the *Report*. Accordingly, two research projects originated as a result of the works.
- As a result of cooperation with the members of the Tripartite Commission (Trade Unions' Forum, NSZZ Solidarność, All-Poland Alliance of Trade Unions (OPZZ), Business Center Club, Confederation of Polish Employers, Polish Confederation of Private Employers Lewiatan, Polish Craft Association) and the Polish Bank Association, the opinions of those organisations on monetary integration were obtained and published in an annex to the *Report*.
- Meetings with journalists continued on a systematic basis. Four meetings took place in 2008 with the aim to inform the media about the progress of works on the *Report*.

The *Report on full membership of the Republic of Poland in the third stage of the Economic and Monetary Union* was adopted by the Management Board of the NBP on 13 February 2009.

A press conference took place on 16 February. The main findings of the document include the following:

- Whereas the euro adoption should be beneficial for Poland in the long run, a visible asymmetry of expected costs and benefits develops over time.
- Direct benefits (reduction of exchange rate risk and transaction costs) will occur in the short run, but they will be accompanied by the risk related to the possible lack of optimal ECB policy.
- Indirect benefits may begin to occur only in the medium term.
- The total scale of costs and benefits will largely depend on macroeconomic policy, both in the period of preparations prior to euro area accession and during membership in the monetary union.
- Necessary measures should be targeted at permanent achievement of nominal convergence criteria, improving the quality of factors of production which influence international competitiveness of the economy, and on introducing necessary structural reforms which improve flexibility of adaptation mechanisms.
- An important factor in the preparation of the economy and society for the euro introduction is to build a nation-wide consensus conducive for the process.

The *Report* contains the *Supplement* on the impact of the observed crisis on the scale of costs and benefits of the euro adoption. It demonstrates that:

- In the long term the ongoing crisis should not significantly affect the distribution of costs and benefits of the accession to the euro area, but the choice of the time of preparations will influence their balance.
- Turmoil in global financial markets and uncertainty concerning their impact on Poland's ability for durable fulfillment of the Maastricht criteria call for in-depth reflection on the choice of the appropriate time of accession to the ERM II and point to the necessity to develop the strategy of staying within the mechanism.
- The assessment of Poland's ability to meet nominal convergence criteria on the basis of up-to-date forecasts is highly uncertain.

10.6. Academic conferences and seminars organised by the NBP³⁷

In 2008, the NBP organised the following international conferences and seminars:

- October 2008 – international conference entitled *Common Currency and its Future: Lessons for the New Member States*. The participants of the conference included eminent economists, *inter alia*, Willem Buiter (London School of Economics), Susan Schadler, Professor Ronald McKinnon (Stanford University), Professor Andrew Rose (UC Berkeley), Professor Barry Eichengreen (UC Berkeley), Peter Backé Ph.D. (National Bank of Austria),

³⁷ Except for seminars organised within the framework of research works on the *Report on full membership of the Republic of Poland in the third stage of the Economic and Monetary Union*, referred to in paragraph 10.5.

Christoph Rosenberg Ph.D, (IMF), Massimo Suardi (European Commission), Professor Jeffrey Frankel (Harvard University), Märten Ross (Bank of Estonia/Eesti Pank), Professor László Halpern (Hungarian Academy of Sciences), Professor Vladimir Lavrač (Institute for Economic Research), Professor Paul de Grauwe (Katholieke Universiteit Leuven), Professor Jakob de Haan (University of Groningen).

- September 2008 – international academic seminar within the framework of the MICRODYN research consortium, devoted to the problems of the growth of enterprises and innovativeness in the European Union Member States.
- December 2008 – conference entitled *Migration, Labour Market and Economic Growth in Europe after Enlargement*. The conference included the presentation of 30 articles on the impact of migration on various areas of the economy and modelling of migration phenomena. The participants of the conference included experts in migration research (Professor Oded Stark, Professor Marek Sokólski), as well as the representatives of international organisations (OECD, IMF, ECB), central banks and institutions shaping the Polish migration policy.

Moreover, 11 open-to-public academic seminars were organised. Their list is presented in Annex 8.

The most important activities in 2008

- In 2008, well-renowned national and international periodicals published 79 academic publications, including 57 in Polish and 22 in English. Five publications were included on the so-called Philadelphia list.
- A new prognostic model NECMOD replaced the ECMOD model.
- Changes in the forecasting process were initiated.
- The works on the *Report on full membership of the Republic of Poland in the third stage of the Economic and Monetary Union* were completed.
- Two international conferences and one international seminar were held, as well as 11 open-to-public academic seminars.

STATISTICAL ACTIVITY³⁸

³⁸ The responsibilities in this field are exercised, *inter alia*, pursuant to Article 3 section 2 para. 7, Article 17 section 4 para. 13, Article 23 of the Act on the NBP and the Act on Public Statistics.

Planning and pursuing monetary policy requires collecting statistical data of wide scope and high quality. The information published by the NBP is also used by external recipients. The NBP submits reports to domestic and international institutions regularly, including, in particular, the European Central Bank.

In 2008, the NBP proceeded with harmonisation work to adjust statistical activity to EU requirements, in accordance with the tasks set out in the *NBP Plan of activity for years 2007–2009*.

11.1. Responsibilities regarding monetary and financial statistics, the balance of payments and the international investment position

In 2008, the statistical responsibilities included:

- collection, validation checks, processing and ongoing analysis of data regarding:
 - the balance of payments, the external debt and the international investment position;
 - balance-sheet data from banks and credit unions;
 - interest rates applied by banks;
- interpretation of monetary developments and balance of payments operations, for the purpose of ongoing monitoring of monetary developments;
- processing and analysing information about the financial situation of enterprises;
- development of methodology for compilation of the monetary and financial statistics, the balance of payments, financial accounts and the general government sector statistics;
- modification of the IT systems applied in the collection and processing of statistical data.

The results of the work were used to prepare a number of tables, analytical materials and publications addressed to both internal and external users. The most important of them included:

- quarterly reports on the balance of payments and the annual report on *Poland's International Investment Position*;
- quarterly figures on Poland's external debt and international investment position;
- monthly balance of payments data;
- monthly consolidated balance sheet of the MFI sector, including basic monetary aggregates (M3 money supply and its counterparts);
- quarterly financial accounts.

Statistical information was forwarded to domestic institutions such as the Sejm, the Council of Ministers, the Central Statistical Office, and to academic institutes. It was also submitted to the ECB and other international organisations such as the IMF, the World Bank, the OECD, the BIS and the Eurostat.

Moreover, in 2008 the NBP:

- Conducted statistical and analytical works on improving methods and procedures for seasonal adjustment of statistical data. The task included the development of comprehensive methodology of seasonal adjustment of M3 money supply and its components.
- Participated in the work of the task force established by the ECB and Eurostat to determine the requirements of users regarding the newly designed tool for seasonal adjustment of economic data (Task Force on SA Tools Users' Requirements).
- Implemented the complete functionality and developed the reporting information system SIS (FINREP and COREP packages) which is used for the collection and provision of data used to analyse the banking sector stability conducted by the NBP, for supervisory purposes performed by the Polish Financial Supervision Authority, as well as for the needs of the Bank Guarantee Fund.
- Developed a set of experimental leading and parallel indicators of economic activity in Poland. The indicators are used to assess the current and future economic situation in Poland. In parallel, the NBP conducted research on the synchronisation of business cycles in Poland with the cycles of other EU countries.
- Cooperated with the Eurostat in the Euroindicators Working Group on developing and implementing advanced methods of statistical analysis of time series in the NBP.

11.2. Harmonisation with ECB statistical requirements

In 2008, work related to the harmonization of NBP statistics with ECB requirements were continued in the following areas:

- monetary and financial statistics,
- financial accounts statistics,
- general government sector statistics,
- real sector statistics,
- balance of payments statistics.

The work consisted in issuing opinions on the changes proposed by the ECB in the existing requirements and analysing the possibility of implementing the proposed solutions by the Polish reporting entities. The NBP exercised those responsibilities, *inter alia*, through the participation in the work of the ECB Statistics Committee and the working and expert groups operating within it, in the Eurostat working groups and in the Committee on Monetary, Financial and Balance of Payments Statistics (CMFB).

The Bank also studied the possibility of implementing the SDMX standard in the NBP with regard to data collection, reporting, processing and exchange. The changes in the SDMX-ML standard, both regarding statistical concepts and IT tools, were monitored on a current basis.

11.2.1. Harmonisation of monetary and financial statistics

The NBP provides the ECB with harmonised data on the consolidated balance sheet of monetary financial institutions (MFIs)³⁹ and interest rate statistics⁴⁰ on a regular basis. In 2008, the NBP participated in the work of the ESCB on the modification of the scope of reporting data obtained from monetary financial institutions. The work was completed in December 2008 with the amendment of the ECB regulation on monetary data provided by MFIs (ECB/2008/32).

The NBP also participated in the works of the ECB and ESCB expert group on reconciliation of monetary and supervisory statistics (Joint Expert Group on Reconciliation). The works aim at harmonisation of definitions in those statistical areas. In future, this may contribute to the reduction of reporting obligations of monetary financial institutions. Therefore, the National Bank of Poland suspended works on the new reporting system for monetary statistics in order to use the solutions developed by the ESCB in the best possible way.

The NBP continued works on the development of a reporting system for other financial intermediaries, primarily investment funds. The Bank participated in ECB works concerning the regulation on the statistics of institutions involved in assets securitisation. As part of the preparations for implementing the European requirements,⁴¹ the NBP prepared necessary draft legal regulations. The works on the fundamentals of the system processing investment funds data continued. In order to reduce reporting obligations of investment fund management companies, the NBP developed a method of joint collection of statistical data from those institutions, both for the purposes of the balance of payment statistics and the monetary and financial statistics. The data will be collected within the framework of the developed system for foreign trade statistics (PEGAZ).

11.2.2. Harmonisation of quarterly financial accounts

In December 2008, the NBP for the first time published on its website quarterly financial accounts, including balance sheet data, the so-called financial balance sheets, for the period from the fourth quarter of 2003 to the second quarter of 2008, as well as data concerning transactions from the first quarter 2004 to the second quarter of 2008. The data were prepared according to the principles of the *European System of Accounts 1995 (ESA95)* and take into account the requirements of the European Central Bank. Financial accounts were compiled on the basis of data from NBP information systems and data obtained from external sources (mainly GUS and the KNF).

11.2.3. Harmonisation of general government sector statistics

In 2008, experts of the GUS, MF and the NBP participated in the works of the Working Group on General Government Statistics appointed by the President of the Central Statistical Office. It continued works on the methodology for calculating revenues and expenditure of the sector.

³⁹ Regulation No. 2423/2001 of the European Central Bank of 22 November 2001 concerning the consolidated balance sheet of the monetary financial institutions sector (ECB/2001/13).

⁴⁰ Regulation No. 63/2002 of the European Central Bank of 20 December 2001 concerning statistics on interest rates applied by monetary financial institutions to deposits and loans vis-a-vis households and non-financial corporations (ECB/2001/18).

⁴¹ Regulation No. 958/2007 of the European Central Bank of 27 July 2007 concerning statistics on the assets and liabilities of investment funds (ECB/2007/8) and Regulation (EC) No. 24/2009 of the European Central Bank of 19 December 2008 concerning statistics on the assets and liabilities of financial vehicle corporations engaged in securitisation transactions (ECB/2008/30).

11.2.4. Harmonisation of real sector statistics

In 2008, the NBP continued the activities within the European Committee of Central Balance Sheet Data Offices, as well as its working group BACH (*Bank for the Accounts of Companies Harmonised* – a balance sheet database of non-financial entities). As a result, the NBP provided the BACH database with aggregated data on non-financial entities for the years 1995–2007 in the required breakdowns. The data series were prepared in accordance with Main Industrial Grouping (MIG) classification. The activities will be continued in the following years.

The NBP also participated in the project called *Operacja 2007* (Operation 2007), coordinated by the Central Statistical Office and aimed to harmonise national classifications of activity and goods and services with the European guidelines within the framework of adjustment to world classifications adopted by the UN. As a result of the works in 2008, the Council of Ministers adopted a regulation of 29 October 2008 introducing a new Polish Classification of Products and Services to be applied for the purpose of statistics, records, documentation and accounting, as well as in official registers and information systems of public administration.

11.2.5. Harmonisation of the balance of payments statistics

In 2008, the NBP conducted work on the new system of data collection and processing in the field of balance of payment statistics. The new system is to rely to a larger extent on data coming directly from foreign trade participants. The work has been conducted in the scope of the project *Development of the new system for foreign trade statistics* (PEGAZ). The new system will allow to meet the new ECB requirements with regard to monthly balance of payments and quarterly investment position broken down by geographical regions. It will also improve the quality of conducted analyses thanks to an increased number of analytical breakdowns available, as well as easy and quick access to data. The solutions applied in the new system will adjust this statistical area to the new methodological standards of the International Monetary Fund.

The activities related to the project in 2008 included the following:

- Development of the project of an IT system;
- Widening of the scope of the project by data from investment funds collected for the purposes of monetary and financial statistics;
- Consultations of the draft legal regulation with a selected group of reporting entities;
- Elaboration of the contents of forms and instructions.

Moreover, the NBP:

- Finished the works to increase the frequency of compiling the international investment position and began to make available the quarterly international investment position on a regular basis;
- Took part in the activities of the Working Group on Foreign Sector Statistics for the Purposes of National Accounts and Balance of Payments, appointed by the President of the Central Statistical Office.

The most important activities in 2008

- The NBP continued to work on the new reporting systems – monetary statistics system, system for foreign trade statistics and investment funds statistics system.
- The NBP took an active part in the works of the ESCB which concerned setting up statistics for other financial intermediaries and modification of the reporting requirements in respect of the consolidated balance sheet of monetary financial institutions as well as interest rate statistics.
- The NBP for the first time published quarterly financial accounts, which met the ECB requirements.
- The NBP fully implemented and developed the SIS reporting information system in connection with the FINREP and COREP packages.

LEGISLATIVE ACTIVITY⁴²

⁴² The responsibilities in this area are carried out, *inter alia*, pursuant to Article 7, Article 12, Article 16 section 3, Article 17 section 3 para. 2 and section 4 of the Act on the NBP, and pursuant to the provisions of other acts in accordance with authorisations contained therein for NBP governing bodies to issue legal acts.

12.1. Legislative activity of NBP governing bodies

In 2008, 113 legal acts were issued by the governing bodies of the National Bank of Poland, including 23 issued by the President of the NBP (2 of them being announcements), 70 issued by the NBP Management Board, and 20 issued by the Monetary Policy Council. Of all the legal acts issued by the governing bodies of the National Bank of Poland, 24 were published in *Monitor Polski* (the Official Gazette of the Republic of Poland), and 32 were published in the Official Journal of the National Bank of Poland.

12.2. Participation of the NBP in the state authorities' work on draft normative and non-normative acts

Pursuant to the Act on the National Bank of Poland, the NBP cooperated with the state authorities by issuing opinions on draft normative and non-normative acts which concerned economic policy and were relevant for the banking system. Within the framework of this cooperation, the NBP worked to ensure the stability of the financial system, the safety and development of the banking system, and the monetary stability.

In 2008, the National Bank of Poland issued opinions on:

- 143 documents received in the course of inter-ministerial consultations,
- 946 documents received prior to their examination by the Committee of the Council of Ministers.

The most important draft legal acts on which the NBP issued opinions in 2008, which do not pertain directly to the banking sector (legal acts on the banking sector are discussed in detail in section 12.3), include:

- Law of 4 September 2008 amending the acts in order to harmonise IT terminology (Journal of Laws No. 171, item 1056);
- Law of 4 September 2008 amending the Public Procurement Law and certain other acts (Journal of Laws No. 171, item 1058);
- Act of 5 September 2008 amending the Act on Registered Pledge (Journal of Laws No. 180, item 1113);
- Law of 23 October 2008 amending the Civil Code, and amending the Foreign Exchange Law (Journal of Laws No. 228, item 1506);
- Law of 7 November 2008 amending the Act on Provision of Services by Electronic Means (Journal of Laws No. 216, item 1371);
- Act of 21 November 2008 on Savings-Pensions (Journal of Laws No. 228, item 1507);
- Law of 5 December 2008 amending the Bankruptcy and Rehabilitation Law and the Act of Court Costs in Civil Law Cases (Journal of Laws No. 234, item 1572);
- Act of 19 December 2008 on Funds of Life Savings-Pensions (on 12 January 2009 the President of the Republic of Poland vetoed the Act);

- Law of 19 December 2008 amending the Act on Freedom of Economic Activity and amending certain other acts (Journal of Laws of 2009, No. 18, item 97);
- Draft Act on Public Finance (Sejm printed matter No. 1181) and draft Act on Provisions implementing the Act on Public Finance (Sejm printed matter No. 1182).

Moreover, the NBP issued opinions on 32 documents out of approximately 2,400 documents received in relation to the meetings of the European Committee of the Council of Ministers (KERM). The most important included:

- *Issues related to Poland's integration with the euro area;*
- *Road map of the euro adoption by Poland;*
- *The Convergence Programme 2007 update;*
- *Draft Regulation of the Council of Ministers on Establishing the Government Plenipotentiary for the Euro Introduction by the Republic of Poland;*
- *Draft Position of the Polish Government on a non-legislative EU document: Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee, the Committee of the Regions and the European Central Bank – The introduction of the euro in Cyprus and Malta;*
- *Draft Position of the Polish Government on a non-legislative EU document: Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee, the Committee of the Regions and the European Central Bank – Seventh report on the practical preparations for the future enlargement of the euro area;*
- *Draft Act on the Financial Stability Committee;*
- *Draft Position of the Government of the Republic of Poland on the Proposal for a Directive of the European Parliament and of the Council on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS);*
- *Draft Position of the Polish Government on the Proposal for a Regulation of the European Parliament and of the Council on credit rating agencies;*
- *Draft Position of the Polish Government on the White Paper on the Integration of EU Mortgage Credit Markets.*

In 2008, NBP employees participated in the work of 24 consultative conferences and legal committees, as well as 106 meetings of Sejm committees and subcommittees, and meetings of Senate committees:

- The NBP also cooperated in the development of solutions regarding major areas of the state's operation by participating in the work of the following bodies;
- Polish Financial Supervision Authority (Komisja Nadzoru Finansowego);
- Financial Stability Committee (Komitet Stabilności Finansowej);
- Accounting Standards Committee (Komitet Standardów Rachunkowości);

- Export Insurance Policy Committee (Komitet Polityki Ubezpieczeń Eksportowych);
- Financial Market Development Council (Rada Rozwoju Rynku Finansowego);
- Trilateral Commission for Social and Economic Affairs (Trójstronna Komisja ds. Społeczno-Gospodarczych).

12.3. Draft legislation pertaining to the operation of the banking system

12.3.1. Laws (adopted or at the stage of legislative preparation) developed at the National Bank of Poland

- Act of 5 March 2009 amending the Act on the National Bank of Poland and the Foreign Exchange Law, concerning the submission of statistical data to the NBP;
- Draft Act amending the Act on the National Bank of Poland, concerning the issue of balance sheet losses of the NBP, submitted to the Minister of Finance.

12.3.2. Other laws

Adopted acts

- Law of 4 September 2008 amending the Banking Law Act (Journal of Laws No. 192, item 1179);
- Law of 4 September 2008 amending the Act on Trading in Financial Instruments and certain other acts (the President of the Republic of Poland forwarded the Act to the Constitutional Tribunal);
- Law of 4 September 2008 amending the Act on Investment Funds, the Banking Law and the Act on Financial Market Supervision (Journal of Laws No. 231, item 1546);
- Law of 23 October 2008 amending the Act on the Bank Guarantee Fund and amending certain other acts (Journal of Laws No. 209, item 1315);
- Act of 7 November 2008 on the Financial Stability Committee (Journal of Laws No. 209, item 1317);
- Act of 12 February 2009 on Support Granted to Financial Institutions by the State Treasury (Journal of Laws No. 39, item 308).

Laws under consideration and opinion

- Draft Act amending the Act on Counteracting Introduction into Financial Circulation of Property Values Derived from Illegal or Undisclosed Sources and on Counteracting the Financing of Terrorism, and amending certain other Acts (Sejm printed matter No. 1660);

- Draft Act amending the Act on Settlement Finality in Payment and Securities Settlement Systems and on the Rules on Oversight of These Systems, and amending certain other acts;
- Draft Act on Payment Services.

12.4. Participation of the NBP in consulting Community laws and draft national legislation of the EU Member States and other documents

The NBP, as a member of the ESCB, participates in the process of consulting Community laws and draft national legislation (consultations pursuant to Article 105 of the Treaty establishing the European Community and the Statute of the ESCB and of the ECB). In 2008, the NBP participated in issuing opinions on 95 legal acts, the most important of which include:

- Two draft Acts amending the Act on the Bank Guarantee Fund (ECB opinions issued at the request of the Minister of Finance of the Republic of Poland);
- Draft Act amending the Act on Trading in Financial Instruments and certain other acts (ECB opinion issued at the request of the Minister of Finance of the Republic of Poland);
- Draft Act on the Financial Stability Committee (ECB opinion issued at the request of the Minister of Finance of the Republic of Poland);
- Draft Act amending the Act on the National Bank of Poland and amending certain other acts (ECB opinion issued at the request of the Minister of Finance of the Republic of Poland);
- Draft Act on Support Granted to Financial Institutions by the State Treasury (ECB opinion issued at the request of the Minister of Finance of the Republic of Poland);
- Draft Regulation amending rules and manner of replacement of notes and coins which cease to be legal tender in Poland due to wear and tear or damage (ECB opinion issued at the request of the President of the National Bank of Poland);
- Draft Slovak Regulation on notes and coins circulation;
- Draft Amendment of the Act on the Czech National Bank.

The NBP also participated in consultations on documents and Community legal acts in relation to the activities of other Community bodies. The most important documents on which the NBP issued opinions include the following:

- Draft Council Conclusions on clearing and settlement of securities;
- Draft Communication from the Commission on the recapitalisation of financial institutions;
- Draft Council Conclusions on the White Paper on the Integration of EU Mortgage Credit Markets.

The most important activities of the NBP in 2008

- The draft Acts amending the Act on the National Bank of Poland were prepared at the NBP, concerning the submission of statistical data to the NBP and covering the balance sheet losses of the NBP.
- The NBP participated in issuing opinions on laws and other documents concerning the functioning of the economy and the banking system.
- In the framework of consultations conducted by the ECB and in relation to works of other EU bodies, the NBP took part in issuing opinions on drafts of domestic and Community legal acts.

INTERNATIONAL ACTIVITY⁴³

⁴³ The responsibilities in this field are exercised, *inter alia*, on the basis of Article 5, Article 11 sections 2 and 3, Article 23 section 7 of the Act on the NBP and on the basis of the provisions of the Statute of the ECB and the Statute of the ESCB.

13.1. Activities related to the performance of duties arising from Poland's membership in the European Union

13.1.1. Cooperation within the European System of Central Banks

The NBP representatives participated in the works of the ESCB within the same scope as the representatives of central banks of other EU Member States which remain outside the euro area.

In 2008, the President of the NBP participated in quarterly meetings of the General Council of the ECB, i.e. the ECB's decision-making body. The responsibilities of the Council include issuing opinions on legislative acts passed by the ECB Governing Council, cooperation in the performance of statistical reporting responsibilities and participation in the determination of irrevocable exchange rates in countries joining the euro area.

In 2008, the General Council addressed, *inter alia*, the following issues: economic development of the euro area, monetary and fiscal policy, the structure of the EU banking sector, the ERM II, monitoring of the activity of central banks as regards the so-called prohibition of monetary financing (which follows from Article 101 of the Treaty) and the prohibition of privileged access (which follows from Article 102 of the Treaty), social dialogue within the ESCB and the so-called global imbalances. In relation to the preparation of the *Convergence Report 2008* by the ECB, an additional meeting took place in the form of a teleconference.

The NBP representatives were members of 12 Committees of the ESCB⁴⁴ and task forces of the ESCB. Participating in the works of those bodies they discussed and prepared solutions concerning the following issues:

- changes in the ECB's capital key used for determining the shares of national central banks in the capital and foreign exchange reserves of the ECB;
- legal instruments related to ERM II;
- SEPA issues;
- functioning of the TARGET2 system.

The NBP also participated in issuing an opinion on the ECB's publication entitled *Statistical preparedness of the non-euro area Member states – 6th progress report (2007)*.

Moreover, in 2008, the NBP intensified its cooperation with the National Bank of Slovakia with regard to the issues related to the euro introduction.

13.1.2. The NBP's participation in the work of other Community bodies

In 2008, NBP representatives took part in the work of the following EU bodies:

- ECOFIN Council (participation in unofficial meetings);

⁴⁴ These are: International Relations Committee, Monetary Policy Committee, External Communications Committee, Internal Auditors Committee, Banking Supervision Committee, Legal Committee, Market Operations Committee, Information Technology Committee, Payment and Settlement Systems Committee, Statistics Committee, Accounting and Monetary Income Committee.

- committees and working groups of the EU Council and the European Commission;⁴⁵
- the Committee for Monetary, Financial and Balance of Payments Statistics (CMFB);
- and the Eurostat working groups.

The NBP also participated in public consultation of the European Commission on the amendment of decisions establishing the Lamfalussy level 3 Committees (Committees of Supervisors): Committee of European Banking Supervisors (CEBS), Committee of European Securities Regulators (CESR) and Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS).

NBP representatives participated in the works of expert groups dealing in international financial law (UNCITRAL, UNIDROIT).

13.2. Collaboration with international economic and financial institutions

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

In February 2008, the second mission of the OECD Secretariat⁴⁶ visited Poland to prepare the 10th Review of the Polish Economy, which was devoted mainly to tax policy. The activities (including meetings with the NBP experts) resulted in a report published in June 2008.

Within the framework of cooperation with the OECD, the National Bank of Poland implemented the following activities:

- cooperated with the National Coordinator of Co-operation between Poland and the OECD, the Ministry of Economy, the Ministry of Finance and the Poland's Permanent Representative to the OECD;
- submitted its actions with regard to technical assistance for central banks of countries undergoing transformations and educational activity to the OECD project entitled *Financial Education*;
- participated in the meetings of the Inter-Ministerial Team for the Organisation for Economic Cooperation and Development (OECD) at the Ministry of Economy. The issues discussed at the meetings included the 10th review of the Polish economy, the programme document entitled *Priorities of Poland's membership in OECD*, Poland's involvement in the implementation of the regional part of the OECD Eurasia Programme (covering the countries of the Southern Caucasus and Ukraine), the OECD enlargement process and the enhanced engagement programmes, as well as the *2008–2010 OECD Programme of Work and Budget*;
- participated in the works on the joint declaration of the ministers of finance and economy of the OECD member countries on Sovereign Wealth Funds.

⁴⁵ Economic and Financial Committee, PAN II Group of the European Commission, Counterfeit Coin Experts Group affiliated with the European Anti-Fraud Office (OLAF).

⁴⁶ The first mission took place in November 2007.

13.2.2. The World Bank Group and the International Monetary Fund

As in the previous years, NBP representatives participated in:

- The spring meetings of the Board of Governors of the World Bank (WB) and the International Monetary Fund (IMF) in Washington (April 2008). The issues discussed during the meetings included ongoing activity of the IMF and the World Bank, crisis on global financial markets, prices of food and energy resources, reform of the International Monetary Fund, as well as the economic situation of Poland and the functioning of the banking sector in Poland.
- The Annual Meetings of the Board of Governors of the World Bank and the International Monetary Fund in Washington (October 2008). The discussion was dominated by the current situation on financial markets and its impact on the operations of the IMF and the WB, and on the economies of the member countries. It also covered the activities of the offices of executive directors of the WB and the IMF, as well as the economic situation of Poland and the functioning of the Polish banking sector in the context of the global financial crisis.

Furthermore:

- In January 2008, an IMF mission visited Poland to get to know the current economic situation of Poland and to evaluate the implementation of the economic, budget and monetary policy. Statistical data were also collected for the IMF's annual report on Poland, which was approved in April 2008.
- In July 2008, the NBP, along with the IMF and the Ministry of Finance, organised an international conference entitled *8th IMF Public Debt Managers' Forum*. The issues discussed during the conference included, *inter alia*, risk management, regionalisation of debt securities markets, cash flow management and public debt management in the context of full membership in the EMU. The participants of the conference included 63 representatives of the institutions responsible for public debt management from 28 countries, mainly from the so-called emerging markets, as well as the representatives of international organisations and the private sector.

13.2.3. The European Bank for Reconstruction and Development

The 17th Annual Meeting of the Board of Governors of the European Bank for Reconstruction and Development (EBRD) was held in Kiev (Ukraine) in May 2008. The President of the NBP proposed to concentrate the EBRD's activities in the future on support of the countries less advanced in the economic transformation process, with a relatively low level of GDP *per capita*, as well as of the projects with higher operational risk. He also supported the diversification of the EBRD's activity.

Furthermore:

- In February 2008, the President of the NBP met in Warsaw with Jean Lemierre, the President of the EBRD, and in December 2008 with his successor, Thomas Mirow.
- In November 2008, the EBRD issued a cyclical publication – *Transition Report 2008*, entitled *Growth in Transition*. The National Bank of Poland organised a conference for the presentation of the report in January 2009.

13.2.4. Coordination activity of the NBP regarding cooperation with international financial institutions

In December 2008, the first meeting of Poland's representatives to international financial institutions (WB, IMF, EBRD) with the representatives of the Ministry of Finance, Ministry of Economy, Ministry of Foreign Affairs and the NBP was organised on the initiative of the NBP. The issues discussed during the meeting included, *inter alia*, the ongoing reform of the WB and the IMF, increasing Poland's activity in those institutions, the exchange of information and coordination of positions. The discussion also concerned the issue of further use by Poland of funds offered by international financial institutions in the context of a gradual change of Poland's status from aid recipient to aid donor (graduation) in the context of the global financial crisis.

13.2.5. The Bank for International Settlements (BIS)

In 2008, the President of the NBP participated in six meetings of the BIS Council of Governors.

The annual General Meeting of BIS Shareholders in June 2008 adopted the 78th Annual Report and approved the balance sheet of the Bank as at 31 March 2008. The profit and loss account was also approved, which indicated a net profit of SDR 544.7 million after the deduction of administrative expenses, out of which 144.7 million were allocated for the payment of dividends.⁴⁷

The NBP holds 8,000 BIS shares with a nominal value of SDR 10 million, and received the dividend amounting to SDR 2.12 million (a 3.9% increase as compared to 2007).

13.2.6. The International Bank for Economic Cooperation (IBEC)

In 2008, the representatives of the NBP and of the Ministry of Finance participated in the meetings of the IBEC Council and in working meetings.

The financial statements of the IBEC for 2007 were approved by their auditors.

13.3. Technical and training assistance for central banks

Technical assistance offered by the National Bank of Poland – the TCT (Technical Cooperation for Transition) Initiative – enjoys great interest of central banks in countries undergoing transformation. The number of assistance measures in 2008 was almost twice as high as in 2007.

The NBP organised 20 study visits (Albania, Bosnia and Herzegovina, China, Kazakhstan, Kyrgyzstan, Moldova, Mongolia, Tajikistan, Ukraine, Vietnam), three seminars, five traineeships (Albania, Armenia, Montenegro, Mongolia and Russia) and 19 expert visits (Belarus, Moldova, Kazakhstan, Serbia and Tunisia).

⁴⁷ Paid out in a convertible SDR basket currency and amounting to SDR 255 per share.

The topics of the training and study visits included mainly financial risk management, accounting, statistics, inflation projection, payment system, use of econometric models, internal audit, management of foreign currency reserves, security of information systems and personnel management.

The training offer was extended by several-day-long thematic workshops. In 2008, four workshops were organised on safety of transport of values in the central bank, internal audit, financial stability and financial risk management.

The total of 228 persons (excluding expert visits) from 22 countries benefited from technical and TCT training assistance offered by the NBP in 2008.

The preparations for the twinning project of the NBP and Deutsche Bundesbank for the benefit of the National Bank of Ukraine were continued. The project is scheduled for the second half of 2009.

In view of the development of technical assistance offered by the NBP and aiming at achieving the position of the regional leader in this regard and an equal partner for the most active ESCB central banks, the Management Board of the National Bank of Poland adopted the *Strategy for development of technical assistance granted by the National Bank of Poland by 2011*. The *Strategy* lays down, *inter alia*, objectives of the NBP technical assistance, main areas of assistance activity of the Bank and the main supported areas. The number of measures is to be gradually increased and organisational changes are to be implemented.

The most important activities in 2008

- NBP representatives participated in the activities of committees and working groups of the ESCB and other EU bodies.
- The NBP, along with the IMF and the Ministry of Finance, organised an international conference entitled *8th IMF Public Debt Managers' Forum*.
- The NBP initiated the coordination of cooperation with international financial institutions (WB, IMF and EBRD).
- The Management Board of the NBP adopted the *Strategy for development of technical assistance granted by the National Bank of Poland by 2011*.
- The NBP carried out a record number of projects in the area of technical and training assistance.

INTERNAL DEVELOPMENT OF THE NBP⁴⁸

⁴⁸ The responsibilities in this field are exercised, *inter alia*, pursuant to Articles 7 and 8, 10 and 11, Article 17 section 1, section 3 para. 2 and section 4, as well as Articles 56 and 57 of the Act on the NBP.

14.1. Human resources management

14.1.1. NBP staffing

In 2008, the average staffing at the NBP was 3,968 full-time posts and declined by 456 posts, i.e. 10.3%, as compared to 2007. The decline resulted from the sectioning off of the General Inspectorate for Ban the continued rationalisation of staffing in NBP regional branches – natural dismissals (retirements) and not hiring new employees to replace those dismissed⁴⁹.

Personnel expenses along with markups were lower than the figure for 2007 by 5.0%. In comparable conditions, i.e. after excluding the costs of the GINB employees, personnel expenses along with markups in 2008 were by 9.1% higher than in 2007.

Women dominated the staff and accounted for 57.8% of total headcount (compared to 57.8% in 2007). The staff up to the age of 35 accounted for 18.7% (20.2% in 2007) of the total number of employees, while employees over 55 years of age represented 11.7% (10.7% in 2007). As at the end of 2008, the number of NBP employees with higher education constituted 54.1% of all staff (as compared to 55.7% in 2007).

14.1.2. Developing staff qualifications

One of the essential tools of the human resources policy of the NBP is the support of the employees' development and improvement of their professional qualifications. In order to increase the effectiveness of those measures, individual approach is applied for determining the needs and selecting the methods of skills development. The emphasis is put on balancing the needs of employees and the organisation.

The main objectives of training activity in 2008, stemming from the *NBP Plan of activity for the years 2007–2009*, included the provision of professional, competent and reliable personnel and the best possible preparation of employees for the functioning of the NBP within the ESCB structure. Training activities contributing to efficient functioning of the NBP as an organisation were continued.

In 2008, 10,165 employees took part in training sessions organised by the NBP.⁵⁰ The number increased by 10% as compared to 2007 (9,204 people).

14.2. Organisational changes

In 2008, the following organisational changes were introduced at the NBP:

- On 1 January 2008, the Economic Institute was established, within the framework of works aimed at improving the performance of analytical and research tasks at the NBP (*cf. Annual Report 2007*).
- On 11 January 2008, the scope of tasks of the Foreign Exchange Department and the Financial Risk Management Department was adjusted to the modified decision-making

⁴⁹ In relation with the adoption of the decision about the beginning of the process of optimization of work of NBP regional branches by the Management Board of the NBP on 26 September 2008.

⁵⁰ Some employees attended training sessions more than once.

process with regard to foreign exchange reserves management, introduced by the Resolution No. 33/2007 of the Management Board of the NBP of 22 November 2007 on foreign exchange reserves management.

- As at 11 December 2008, changes were introduced to the Rules of Procedure of the NBP specifying that the members of the NBP Management Board, apart from the tasks specified directly in the Act on the National Bank of Poland, the tasks stemming from the Rules of Procedure and tasks exercised within the authorisation of the NBP President for supervision over a department or an organisational unit, exercise also other tasks entrusted to them and specified in separate regulations.

On 5 November 2007, the Management Board of the NBP introduced organisational changes allowing the President of the NBP to authorise designated members of the Management Board of the NBP to exercise direct supervision over NBP departments and organisational units on his behalf. The Monetary Policy Council took a different stand on the subject and issued Resolution No. 1/2008 of 29 January 2008 concerning the restoration of the organisational state compliant with the Act on the National Bank of Poland (*cf. Annual Report 2007*).

At the request of the President of the NBP, the matter was examined by the Supreme Chamber of Control in 2008. The Supreme Chamber of Control ruled that the introduced solution did not violate the provisions of the Act on the NBP and the assignment of management tasks to Vice Presidents and of supervisory tasks to the members of the Management Board was the exclusive competence of the President of the NBP and the President of the NBP was responsible for the consequences of those decisions.

14.3. Strategic management

The measures for development of strategic management methods at the NBP covered in 2008 the strategic analysis, formulation of the NBP strategy and the planning of the process of its implementation and monitoring.

The strategic analysis included the continuation of studies on the strategic management methods used in other central banks and a survey on organisational culture at the NBP.

Numerous consultations with the Management Board of the NBP and the Monetary Policy Council were conducted and cooperation with academic authorities and external experts was established within the framework of works on formulating the NBP strategy. The works finished with an official adoption of the document entitled *Strategy for the Management of the National Bank of Poland in Years 2009–2012* by the Management Board of the NBP on 9 October 2008.

The process of the *Strategy* communication and works on the methods of its implementation began.

14.4. Risk management

In 2008, activities focused on two priority tasks related to the development of the risk management system (RMS) at the NBP:

- description and analysis of the main processes of the NBP for the purposes of risk management;

- the development of a methodology for estimating operational losses at the NBP.

Additionally, the following activities were undertaken within the framework of RMS implementation:

- the *Methodology for development, monitoring and reporting of Key Risk Indicators at the NBP within the framework of the operational risk management* was introduced;
- the NBP risk maps were developed (on the basis of quarterly reporting of risk managers);
- ongoing analyses of operational and financial risks were conducted and the activities aimed at their reductions were undertaken;
- the Business Continuity Plan (BCP) was tested and developed;
- operation of the *Risk Base* was improved;
- possibilities of applying selected elements of the New Capital Accord for the purposes of risk management at the NBP were analysed.

The implementation of the above tasks was coordinated by the Risk Management Commission.

14.5. IT support to the banking system and the NBP

In 2008, the following information and communication technology activities were carried out:

- The NBP server infrastructure was modernised by introducing new virtualisation technologies. It allowed significant savings and amore effective use of equipment. A reliable hardware environment for reporting systems was launched.
- Works were conducted in relation with the construction of the system allowing to conduct analyses and create reports on personnel information and human resources management.
- A prototype of the system allowing to conduct analyses and create reports on the labour market in the whole country and in individual regions.
- Works continued on the development of the *NBPCollect* system to be launched in 2009 (cf. Chapter *Services to Central Government*).
- Works on the creation of the PEGAZ system for foreign trade statistics were continued (cf. Chapter *Statistical activity*).
- Works on the implementation of the SORBNET-EURO-TARGET2 system were finished (cf. Chapter *Development of the payment system*).
- The provision of services to the Polish Financial Supervision Authority began, in particular with regard to the reporting information system (SIS) maintenance and development. The relevant agreements on cooperation between the NBP and the office of the Polish Financial Supervision Authority were negotiated and signed.

14.6. Safety and security

In 2008, works were conducted on maintaining appropriate security standards at the NBP, regarding in particular the protection of classified information and personal data, IT system security management, provision of cryptographic and certification services, security of facilities, persons and cash, as well as business continuity.

Furthermore:

- In the fourth quarter of 2008, the National Certification Centre began to exchange the certification of the Minister of Economy in the system of the national public key infrastructure. The process will be finished in mid-2009.
- The critical functions carried out at the NBP were reviewed, NBP business continuity plan for critical functions identified at the NBP was maintained and further developed. Additionally, tests and exercises were carried out to check its functioning.
- The service of providing access to the certificate database of the enbepe Electronic Banking system was launched for the Ministry of Finance.
- The modernisation of the fleet of vehicles used for transporting cash was continued.

14.7. Internal audit

In 2008, 58 audits covering 33 topics were conducted, including 3 audits at the request of the ESCB's Internal Auditors Committee and 4 special investigations. The works of 21 organisational units of the Head Office and 16 regional branches of the NBP were audited.

The audits resulted in conclusions aimed at improving the applied organisational solutions.

Furthermore:

- An international conference of representatives of central banks from the Baltic states belonging to the ESCB and workshops on IT audits for the Balkan countries were organised.
- The implementation of the methods of operation and principles of International Standards for the Professional Practice of Internal Auditing was continued.

The most important activities in 2008

- The number of training sessions for employees increased by 10% as compared to 2007.
- The modernisation of server infrastructure allowed significant savings.

INDEPENDENT AUDITOR'S OPINION AND CONDENSED
FINANCIAL STATEMENTS OF THE NATIONAL BANK
OF POLAND AS AT 31 DECEMBER 2008 ⁵¹

⁵¹ The responsibilities in this field are exercised, *inter alia*, on the basis of the provisions of the Chapter 10 (Art. 60 to 70) of the Act on the NBP.

15.1. Independent auditor's opinion

PRICEWATERHOUSECOOPERS **OPINIA BIEGŁEGO REWIDENTA O
SKRÓCONYM SPRAWOZDANIU FINANSOWYM
DLA RADY POLITYKI PIENIĘŻNEJ I ZARZĄDU
NARODOWEGO BANKU POLSKIEGO**PricewaterhouseCoopers Sp. z o.o.
Al. Armii Ludowej 14
00-638 Warszawa, Polska
Telefon +48 (0) 22 523 4000
Faks +48 (0) 22 508 4040
www.pwc.com/pl

Załączone skrócone sprawozdanie finansowe Narodowego Banku Polskiego z siedzibą w Warszawie, ul. Świętokrzyska 11/21 (zwanego dalej „Bankiem” lub „NBP”) zostało sporządzone przez Zarząd Banku na podstawie zbadanego pełnego rocznego sprawozdania finansowego NBP za okres obrotowy od 1 stycznia do 31 grudnia 2008 r. („sprawozdania finansowego NBP”). Sprawozdanie finansowe NBP zostało sporządzone na podstawie przepisów Ustawy z dnia 29 sierpnia 1997 r. o Narodowym Banku Polskim (Dz. U. z 2005 r. Nr 1, poz. 2 z późniejszymi zmianami, dalej „Ustawa o NBP”), Uchwały nr 16/2003 Rady Polityki Pieniężnej (dalej „RPP”) z dnia 16 grudnia 2003 r. w sprawie zasad rachunkowości, układu aktywów i pasywów bilansu oraz rachunku zysków i strat Narodowego Banku Polskiego (Dz. Urz. NBP z 2003 r. Nr 22, poz. 38 z późniejszymi zmianami, dalej „Uchwała w sprawie zasad rachunkowości”), Uchwały Nr 57/2003 Zarządu Narodowego Banku Polskiego z dnia 30 grudnia 2003 r. w sprawie sposobu wykonywania zadań z zakresu rachunkowości w Narodowym Banku Polskim (z późniejszymi zmianami), Uchwały Nr 9/2006 RPP z dnia 18 grudnia 2006 r. w sprawie zasad tworzenia i rozwiązywania rezerwy na pokrycie ryzyka zmian kursu złotego do walut obcych w Narodowym Banku Polskim (Dz. Urz. NBP z 2006 r. Nr 13, poz. 16).

Badanie sprawozdania finansowego NBP, na podstawie którego sporządzono skrócone sprawozdanie finansowe, przeprowadziliśmy zgodnie z normami wykonywania zawodu biegłego rewidenta, wydanymi przez Krajową Radę Biegłych Rewidentów w Polsce. W dniu 30 marca 2009 r. wydaliśmy opinię bez zastrzeżeń o sprawozdaniu finansowym NBP.

Naszym zdaniem przedstawione w dalszej części skrócone sprawozdanie finansowe jest we wszystkich istotnych aspektach zgodne w zaprezentowanym zakresie z pełnym rocznym sprawozdaniem finansowym NBP, które stanowiło podstawę do jego sporządzenia.

Dla pełnego zrozumienia sytuacji majątkowej i finansowej Banku oraz jej wyniku finansowego za okres obrotowy od 1 stycznia do 31 grudnia 2008 r., należy czytać pełne sprawozdanie finansowe NBP, wraz z opinią i raportem z badania biegłego rewidenta dotyczącą tego sprawozdania finansowego.

Działający w imieniu PricewaterhouseCoopers Sp. z o.o. i przeprowadzający badanie:




Antoni F. Reczek
Prezes Zarządu
PricewaterhouseCoopers Sp. z o.o.

Spółka wpisana na listę podmiotów
uprawnionych do badania sprawozdań
finansowych pod numerem 144

Biegły Rewident
Numer ewidencyjny 90011/503

Warszawa, 21 maja 2009 r.

PricewaterhouseCoopers Sp. z o.o. wpisana jest do Krajowego Rejestru Sądowego prowadzonego przez Sąd Rejonowy dla m. st. Warszawy, pod numerem KRS 000044885, NIP 528 021 02 48. Kapitał akcyjowy wynosi 10 285 300 złotych. Siedzibą Spółki jest Warszawa, Al. Armii Ludowej 14.

This document is a free translation of the Polish original. Terminology current in Anglo-Saxon countries has been used where practicable for the purposes of this translation in order to aid understanding. The binding Polish original should be referred to in matters of interpretation in the upper left-hand corner of the document the business name and logo of the company Pricewaterhouse Coopers, in the upper left-hand corner of the document the business name and postal contact address as follows Pricewaterhouse Coopers, Spółka z ograniczoną odpowiedzialnością – Limited liability company, ulica Armii Ludowej 14 postal code 00-638 Warsaw, Poland, Telephone number: +48 (0) 22 523 4000, Fax number: +48 (0) 22 508 4040, company website: www.pwc.com/pl.

Independent certified auditors' review report on the condensed financial statements for the Monetary Policy Council and the Management Board of the National Bank of Poland

The enclosed condensed financial statements of the National Bank of Poland with its principal registered office Warsaw at ul. Świętokrzyska 11/21 (hereinafter referred to as "the Bank" or "the NBP") were drawn up by the Management Board of the Bank in accordance with the audited complete annual consolidated financial statements of the NBP for the accounting year commenced on 1 January 2008 and ended 31 December 2008, prepared in compliance with provisions of the Act of 29 August 1997 on the National Bank of Poland (Dziennik Ustaw – Polish Journal of Laws No. 1/2005, item 2 as amended, hereinafter referred to as "the Act on the NBP"), Resolution of the Monetary Policy Council No. 16/2003 (hereinafter referred to as "the MPC") of 16 December 2003 on the accounting principles, composition of assets and liabilities in the balance sheet and the profit and loss account of the National Bank of Poland (Dziennik Urzędowy NBP – the Official Journal of the NBP No. 22/2003, item 38 as amended, hereinafter referred to as the "Resolution on the accounting principles"), Resolution of the Management Board of the National Bank of Poland No. 57/2003 of 30 December 2003 on the procedures for performing accounting tasks in the National Bank of Poland (as amended), Resolution of the Monetary Policy Council No. 9/2006 of 19 December 2006 concerning the principles for creating and releasing a reserve for the risk of the zloty to foreign currency exchange rate fluctuations at the National Bank of Poland (Dziennik Urzędowy NBP – the Official Journal of the NBP No. 13/2006, item 16).

We have audited the complete annual Consolidated Financial Statements of the National Bank of Poland, underlying the abbreviated financial statement in accordance with the professional standards, i.e. *General principles for the review of financial statements*, issued and approved by the National Council of Certified Auditors in the Republic of Poland. On 30 March 2009, we issued an unqualified opinion on the Financial Statements of the National Bank of Poland.

In our opinion, the condensed financial statements presented hereinbelow are consistent in all material aspects, to the extent presented therein, with the underlying complete annual Consolidated Financial Statements of the NBP which provided the basis for the establishment hereof.

For full understanding of the Bank's assets and financial standing as well as its financial performance in the year commenced on 1 January 2008 and ended 31 December 2008, the NBP's complete financial statements together with the Auditors' Opinion and Auditors' Report concerning the aforementioned Statements should be read.

Auditor in charge of the audit in the name and on behalf of Pricewaterhouse Coopers, Spółka z ograniczoną odpowiedzialnością

signed on the Polish original
Antoni F. Reczek (-) [illegible hand-written signature]

Antoni F. Reczek
President of the Management Board
Certified Auditor with the Registration Number
90011/503
Warsaw, 21 May 2009

signed on the Polish original
Pricewaterhouse Coopers, Spółka
z ograniczoną odpowiedzialnością
(-) [illegible hand-written inscription]

The company entered to the registry of
entities authorized to conduct audits of
financial statements under the official
registration number: 2144

At the bottom of the official letterhead of the company an imprinted inscription of the following contents: Pricewaterhouse Coopers, Spółka z ograniczoną odpowiedzialnością has been entered to the National Court Register operated and maintained by the Court of Law with the jurisdiction over the capital city of Warsaw, under the official National Court Register number of 0000044655, tax identification number 526-021-02-28 equity capital PLN 10 363 900.00 ,- The official registered seat of the company is Warsaw ulica Armii Ludowej 14.

The financial statements of the National Bank of Poland for the period ending on 31 December 2008 were prepared on 30 March 2009. The independent certified auditor issued its unqualified opinion thereon on 30 March 2009. These condensed financial statements were based on the above-mentioned complete financial statements of the NBP.

15.2. Legal principles for maintaining accountancy records at the NBP

The financial statements of the NBP were prepared on the basis of accounting books complying with the following regulations:

- the Act on the National Bank of Poland of 29 August 1997;
- Resolution No. 16/2003 of the Monetary Policy Council of 16 December 2003 regarding the accounting principles, the composition of assets and liabilities in the balance sheet and the profit and loss account of the National Bank of Poland as amended;
- Resolution No. 57/2003 of the Management Board of the National Bank of Poland of 30 December 2003 regarding the way of performing tasks related to accounting at the National Bank of Poland, as amended;
- Resolution No. 9/2006 of the Monetary Policy Council of 19 December 2006 concerning the principles for creating and releasing a reserve at the National Bank of Poland for the risk of the zloty to foreign currency exchange rate fluctuations.

15.3. Basic accounting principles at the NBP

Pursuant to Article 67 of the Act on the NBP, the NBP accounting principles should conform to the standards applied in the European System of Central Banks. Basic accounting principles adhered to at the NBP include:

The principle of true and fair view

The NBP applies the accounting principles so as to ensure a true and fair view of the economic and financial standing and the financial performance, in accordance with the true nature and economic importance of economic events.

The going concern principle

Pursuant to Article 58 of the Act on the NBP, the NBP shall not be declared bankrupt.

The prudence principle

The valuation of assets and liabilities and recognition of revenues as part of the profit and loss account is performed with caution. In accordance with this principle, unrealised gains are not recognised as income in the profit and loss account, but are shown on the liabilities side of the balance sheet. Unrealised expenses are, however, recognised in the profit and loss account as the reporting date.

The materiality principle

A simplified method for grouping economic operations in accounts, for the valuation of assets and liabilities and for the recognition of income and expense may be applied at the NBP, provided that it does not adversely affect either the true and fair view of the material and financial standing or financial performance.

The comparability principle

The accounting principles are applied throughout. In subsequent financial years, the grouping of economic operations in accounts, the valuation of assets and liabilities, the determination of profit and the preparation of financial statements are similar, so that the information included therein is comparable through subsequent years. The value of assets and liabilities shown in the accounting books as at the end of the year is recognised in the same amount in the accounting books that are opened for the subsequent financial year.

The accrual basis/An economic approach

All economic events in a given financial year are recognised in accounting books for that year:

- Foreign currencies and gold in conformity with the international standards of purity, which were purchased or sold in a spot or derivative transaction, as well as debt securities purchased or sold in a derivative transaction, are recognised on off-balance sheet accounts from the contract date to the settlement date;
- Debt securities purchased or sold in a spot transaction and cash received or deposited by the NBP to be repaid are recognised in the balance sheet accounts on the settlement day.
- Interest, discount and premium on assets and liabilities and on off-balance sheet instruments are recognised in the financial result at the end of each operating day.⁵²

Events after the balance sheet date

The balance sheet and the profit and loss account recognise the events of which the information was obtained after the balance sheet date and before the approval of the annual financial statements if these materially influence their contents.

Principles for the recognition of assets, liabilities, income and expense

Assets, liabilities, income and expense are recognised in accounting books if:

- it is probable that any future economic benefits will flow in or liabilities will be paid,
- the risks or benefit related to an asset or liability have been transferred to the NBP,
- the value of an asset or liability and income or expense may be estimated reliably.

⁵² Less the interest on funds accumulated in nostro accounts, interest due for payment from the required reserves (interest payment day) and interest on assets and liabilities from Bank's internal operations (as at the end of reporting period, at latest at the end of a month).

All income and expense regarding a given fiscal year are recognised in the financial result of that fiscal year. The following principles are observed:

- unrealised income is not recognised in the profit and loss account, with the exception of income due to a decrease in the revaluation account of gold,
- unrealised costs are recognised in the profit and loss account as at the balance sheet date,⁵³
- deferred income or expense is recognised in assets or liabilities.

Provisions for future liabilities are recognised in accounting books, where the NBP is liable from past events or identified risk and, the discharge of duty or occurrence of identified risk are likely to diminish economic benefits at the NBP, provided the amount of duty and the amount for covering identified risk may be assessed in a reliable manner.

Provisions for future liabilities not used due to the cessation – either in whole or in part – of the duty or risk which justified their creation are dissolved and included in the in the profit and loss account.

Provisions for future liabilities are established, revalued and dissolved at the end of a reporting period, not later than at the end of a month, except for provisions for future liabilities to the employees, which are established, revalued and dissolved on the balance sheet day.

A provision for the risk of the zloty to foreign currency exchange rate fluctuation is recognised in accounting books in the assessed amount, which would cover the identified risk of the zloty to foreign currency exchange rate fluctuation established in accordance with generally accepted and consistently applied methods of assessing financial risk. The provision is established, revalued and dissolved and recognised in profit and loss account on the balance sheet day. The establishment of the provision may not lead to a balance sheet loss in the current year.

Outstanding issues

Outstanding issues not laid down in the NBP accounting regulations are resolved as provided for, as at the date of drawing up the financial statements, by:

- guidelines of the European Central Bank,
- reports and decisions of the Accounting and Monetary Income Committee – AMICO of the ECB,
- preparatory work regarding ECB guidelines and international accounting standards, with a view to presenting the true and fair view of the financial statements.

15.4. Information about significant events after the balance sheet date, not recognised in the financial statements

On 1 January 2009, the ECB's capital subscription key was adjusted⁵⁴ (this being conducted on the five-yearly update). Respectively, the NBP's share in the ECB's subscribed capital rose from

⁵³ With the exception of unrealised expense from debt securities, not eligible into the category of "held to maturity" which are included into the financial profit upon reclassification of those securities into the portfolio of debt securities held to maturity.

⁵⁴ Art. 29 of the Statutes of the European System of Central Banks and the European Central Bank.

4.8748% to 4.8954%. On 2 January 2009, the NBP transferred the amount of EUR 83 068.61 to the ECB, as a result of which the NBP's paid-up share in the ECB's capital rose to EUR 19 740 488.44.

In virtue of Resolution No. 1/1/OK/2009 of 8 January 2009 (the Official Journal of the NBP No. 1/2009, item 1), the Management Board of the NBP adopted a decision on early redemption of 10-year floating interest bonds issued on 28 February 2002 and set the redemption day for 1 March 2012. Early redemption of 10-year NBP bonds with the nominal value of PLN 7 816 403.5 thous. held by banks on 22 January 2009 was designed to provide additional liquidity to the banking sector.

The Act of 23 October 2008 on the amendment to the Act on the Bank Guarantee Fund and to other acts (Polish Journal of Laws No. 209/2008, item 1315) repealed and abrogated regulations with reference to the payment of contribution by the NBP to the BGF. Respectively, as from 2009 the NBP shall incur no costs in this respect.

15.5. Certified auditor and its selection

The NBP annual financial statements drawn up as at 31.12.08 are subject to examination and evaluation by a certified auditor, i.e. PricewaterhouseCoopers Sp. z o. o. with its principal place of business in Warsaw. The certified auditor was selected in 2007 by the Monetary Policy Council pursuant to Article 69 section 1 of the Act on the National Bank of Poland. The selection was made by unlimited tender pursuant to the Public Procurement Act of 29 January 2004 (Polish Journal of Laws No. 164/2006, item 1163, as amended) for the period of three years (auditing financial statements for the years 2007, 2008 and 2009).

15.6. Amendments to the accounting principles in the financial year 2008

On 16 December 2008, the MPC adopted resolution No. 17/2008 amending resolution No. 16/2003. The need to amend resolution No. 16/2003 resulted from amendments to the ECB guidelines. Resolution No. 17/2008 came into force on 31 December 2008. Most specifically, it introduced modifications with reference to the recognition and valuation of debt securities. The objective of those amendments was to define the category of debt securities held to maturity and set forth their valuation principles.

As no debt securities became eligible for the "held to maturity" category following the amendment to Resolution No. 16/2003, the amendment to accounting principles had no impact on the economic and financial standing of the NBP presented in the NBP's financial statements of 2008.

In order to render financial statements more transparent, the presentation of the following items of the NBP's balance sheet has been re-formatted:

- the net position from off-balance sheet items in foreign currencies adjusted to the average cost of holdings of foreign currency,
- the net position from off-balance sheet items in foreign currencies valuation to the average NBP exchange rate.

Before the end of September 2008 the net position adjusted to the average cost of foreign currency holdings had been shown jointly with the net position related to exchange rate valuation:

- for off-balance sheet receivables – in the balance sheet assets, item 10.3 "Off-balance sheet instruments revaluation differences",
- for off-balance sheet liabilities – in the balance sheet liabilities, item 10.1 "Off-balance sheet instruments revaluation differences",

Whereas at the current moment:

- debit balances in net position from off-balance sheet items in foreign currencies adjusted to the average cost of foreign currency holdings are shown in the balance sheet assets, item 10.5 "Sundry",
- credit balances in net position from off-balance sheet items in foreign currencies adjusted to the average cost of foreign currency holdings are shown in the balance sheet liabilities, item 10.3 "Sundry",
- debit balances in net position from off-balance sheet items in foreign currencies revaluation to the average NBP exchange rate are shown in the balance sheet assets, item 10.3 "Off-balance sheet instruments revaluation differences",
- credit balances in net income/expense from off-balance sheet items in foreign currencies revaluation to the average NBP exchange rate are shown in the balance sheet assets, item 10.1 "Off-balance sheet instruments revaluation differences".

The foregoing changes were of compositional character only, they translated into the volume of balance sheet total, but were of no material importance in terms of the Bank's total earnings.

The financial statements prepared as at 31 December 2008 a new composition of the profit and loss account was applied. The change affected the expense of gold and silver used to mint collector coins and had neutral impact on the total volume of earnings in 2007. Most specifically, whilst in 2007 the expense related to gold and silver used to mint collector coins came under the item "Other expenses", in 2008 it was transferred to the item "Issue of notes and coin expense". Furthermore, the items "Deposit of valuables", "Numismatic collection" and "Third party fixed assets accepted for use" – shown as "Other off-balance sheet items" in 2007 – were moved to off-balance sheet items in the financial year 2008. No receivables from interests due from Bank Handlowo-Kredytowy SA in liquidation, accrued after the day of putting the bank into liquidation were shown in off-balance sheet items.

15.7. Data comparability

In order to guarantee comparability of data in the financial statements, the balance sheet as at 31 December 2007 and profit and loss account for the year 2007 were drawn up in accordance with the principles of composition effective as at 31 December 2008.

Adjustments related to restatements upon introducing the new manner of presenting off-balance sheet instruments' revaluation differences affected the following items of the balance sheet:

- assets – item 10.5 "Sundry" – increase by PLN 175.3 thous.,
- liabilities – item 10.1 "Off-balance sheet instruments revaluation differences" – increase by PLN 175.3 thous.

The foregoing movements are stated in Tables 13–14.

Table 13

Reformatting the composition of the balance sheet – assets

Item	Balance as at		Change	
	31.12.2007	31.12.2007		
	data from the approved financial statements	comparable data	PLN thousand	in %
10. Other assets	6 462 436.5	6 462 611.8	175.3	0.0
10.1. Tangible fixed assets and intangible assets	958 167.3	958 167.3	0.0	0.0
10.2. Other financial assets	5 300 130.8	5 300 130.8	0.0	0.0
10.3. Off-balance sheet instruments revaluation differences	0.0	0.0	0.0	–
10.4. Accruals and prepaid expenses	16 794.4	16 794.4	0.0	0.0
10.5. Sundry	187 344.0	187 519.3	175.3	0.1
TOTAL ASSETS	170 439 025.5	170 439 200.8	175.3	0.0

Source: NBP data.

Table 14

Reformatting the presentation of the balance sheet – liabilities

Item	Balance as at		Change	
	31.12.2007	31.12.2007		
	data from the approved financial statement	comparative data	PLN thousand	in %
10. Other liabilities	281 359.9	281 535.2	175.3	0.1
10.1. Off-balance sheet instruments' revaluation differences	0.0	175.3	175.3	–
10.2. Accruals and income collected in advance	236 110.0	236 110.0	0.0	0.0
10.5. Sundry	45 249.9	45 249.9	0.0	0.0
TOTAL LIABILITIES	170 439 025.5	170 439 200.8	175.3	0.0

Source: NBP data.

The amendments to the presentation of the profit and loss account pertained to the expense of gold and silver used to mint collector coins. The following items were affected:

- item 9 "Issue of notes and coin expense" – increase by PLN 40 113.1 thous.,
- item 10 "Other expenses" – decline by PLN 40 113.1 thous.

The movements are illustrated in Table 15.

Table 15

Reformatting the presentation of the NBP profit and loss account

Item	Data for the year		Change	
	2007	2007		
	data from the approved financial statement	comparative data	PLN thousand	in %
9. Issue of notes and coin expense	261 075.8	301 188.9	40 113.1	15.4
10. Other expense	68 525.0	28 411.9	-40 113.1	-58.5

Source: NBP data.

Changes to the format of NBP off-balance sheet items presentation are depicted in Tables 16 and 17.

Table 16

Reformatting the presentation of the quantitative register of off-balance items

Item	Balance as at		Change	
	31.12.2007	31.12.2007		
	data from the approved financial statement	comparative data	thousand pieces	in %
Deposit of valuables	7.4	0.0	-7.4	-100.0
Numismatic collection	258.8	0.0	-258.8	-100.0

Source: NBP data.

Table 17

Reformatting the presentation of the qualitative register of off-balance items

Item	Balance as at		Change	
	31.12.2007	31.12.2007		
	data from the approved financial statement	comparative data	PLN thousand	in %
Third party fixed assets accepted for use	3 476.4	0.0	-3 476.4	-100.0

Source: NBP data.

In the further part of the report the analysis will be made against the figures of 2007 adjusted to enable comparability.

15.8. The effect of GIBS dissolution on the economic and financial position and profit and loss account of the NBP

Pursuant to the Act of 21 July 2006 on the supervision of financial markets (Polish Journal of Laws No. 157/2006, item 1119 as amended), the General Inspectorate of Banking Supervision (GIBS) was dissolved as from 31 December 2007. The provisions of the Act stipulated that the employees of the GIBS became employees of the Polish Financial Supervision Authority (PFSA) as of 1 January 2008.

Under the agreement of 20 December 2007 on the allotment of property used to carry out banking supervision activities by GIBS and the Commission for Banking Supervision concluded by the President of the Council of Ministers and the President of the NBP, in 2008 both fixed and intangible assets with the total balance sheet value of PLN 7 665.5 thous. were transferred, free of charge, to the PFSA. These were items of workplace equipment of GIBS employees in Warsaw and in the NBP regional branches.

The following tables illustrate the selected items of assets and liabilities of the NBP's balance sheet drawn up as at 31 December 2007 and income and expense items – recognizing GIBS activity within the NBP structure in 2007.

Table 18

NBP balance sheet items at 31 December 2007 with consideration of GIBS operations – assets

Item	Balance as at 31.12.2007	Balance as at 31.12.2007 excluding GIBS	Difference
	PLN thousand		
ASSETS			
10. Other assets	6 462 611.8	6 454 310.2	-8 301.6
10.1. Tangible fixed assets and intangible assets	958 167.3	950 501.8	-7 665.5
10.2. Other financial assets	5 300 130.8	5 300 130.8	0.0
10.3. Off-balance sheet instruments revaluation differences	0.0	0.0	0.0
10.4. Accruals and prepaid expenses	16 794.4	16 161.9	-632.5
10.5. Sundry	187 519.3	187 515.7	-3.6
TOTAL	6 462 611.8	6 454 310.2	-8 301.6

Source: NBP data.

The amounts stated in tables 18–20 and related to GIBS activity will be included in the comparative analyses while discussing the individual items of the financial statements drawn up as at 31 December 2008.

In 2008 the following costs were incurred due to PFSA operations:

- cost of free of charge transfer of fixed and intangible assets – PLN 7 665.5 thous.,
- cost of materials – PLN 57.1 thous.,
- cost of external services – PLN 440.8 thous.,
- taxes – PLN 180,0 thous.

Table 19

NBP balance sheet items at 31 December 2007 with consideration of GIBS operations – liabilities

Item	Balance as at 31.12.2007	Balance as at 31.12.2007	Difference
		excluding GIBS	
	PLN thousand		
LIABILITIES			
10. Other liabilities	281 535.2	281 527.9	-7.3
10.1. Off-balance sheet instruments revaluation differences	175.3	175.3	0.0
10.2. Accruals and income collected in advance	236 110.0	236 102.7	-7.3
10.3. Sundry	45 249.9	45 249.9	0.0
10.4. Financial result	-12 427 261.7	-12 352 469.8	74 791.9
TOTAL	-12 145 726.5	-12 070 941.9	74 784.6

Source: NBP data.

Table 20

NBP profit and loss account of 2007 with consideration of GIBS operations

Item	Data for 2007	Data for 2007	Difference
		excluding GIBS	
	PLN thousand		
1. Net position on interest, discount and premium	4 173 680.8	4 173 680.8	0.0
1.1. Interest, discount and premium income	7 159 708.4	7 159 708.4	0.0
1.2. Interest, discount and premium expense	2 986 027.6	2 986 027.6	0.0
2. Net position on financial operations	-15 467 336.1	-15 467 336.1	0.0
2.1. Income on financial operations	471 878.6	471 878.6	0.0
2.2. Expense arising from financial operations	1 167 209.0	1 167 209.0	0.0
2.3. Unrealised expense	15 103 024.3	15 103 024.3	0.0
2.4. Income on release of provisions against risk and reversal of write- downs on financial assets	331 018.6	331 018.6	0.0
2.5. Expense arising from establishment of provisions against risk and write- downs on financial assets	0.0	0.0	0.0
3. Net position on fee and commission	-9 639.1	-9 639.1	0.0
3.1. Fee and commission income	17 705.1	17 705.1	0.0
3.2. Fee and commission expense	27 344.2	27 344.2	0.0
4. Income from equities	9 805.7	9 805.7	0.0
5. Other income	118 616.7	118 584.4	-32.3
A. Net income total [1 + 2 + 3 + 4 + 5]	-11 174 872.0	-11 174 904.3	-32.3
6. Personnel expense and payroll surcharges	418 416.6	364 232.7	-54 183.9

7. Other administrative expense	339 730.3	321 301.9	-18 428.4
8. Depreciation	164 642.0	162 434.1	-2 207.9
9. Issue of notes and coin expense	261 075.8	261 075.8	0.0
10. Other expense	68 525.0	68 521.0	-4.0
B. Financial results of the current year [A – 6 – 7 – 8 – 9 – 10]	-12 427 261.7	-12 352 469.8	74 791.9

Source: NBP data.

The foregoing costs (net of cost of free of charge transfer of property item) were taken into account while calculating the price of services rendered by the NBP to the PFSA – rental of premises and IT services.

At the same time, the year 2008 saw the following income related to provision of services to the PFSA.

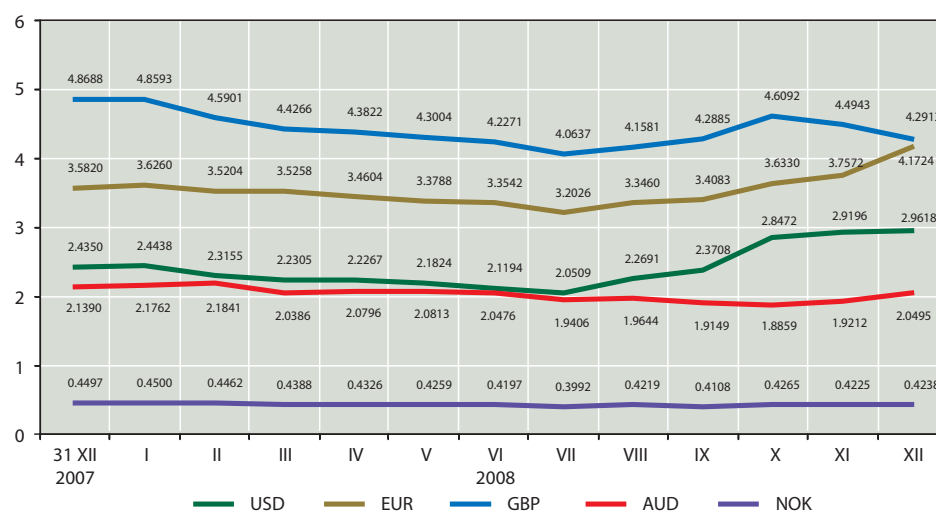
- income from office space rental – PLN 2 512.4 thous.,
- other income from rental and lease – PLN 43.7 thous.,
- income from the sale of IT services – PLN 11 356.1 thous.
- income from settlement of accruals and income collected in advance – PLN 0.7 thous.,
- other sale income – PLN 48.6.

15.9. Movements in liabilities

The balance sheet total of the National Bank of Poland as at 31 December 2008 stood at PLN 210 630 978.0 thousand. This represented an increase by PLN 40 191 777.2 thousand (23.6%) as compared to the balance of PLN 170 439 200.8 thousand as at 31 December 2007.

Figure 20

Average NBP exchange rate for foreign currencies in 2008



Source: NBP data.

The volume of the balance sheet total was determined to a large extent by the quotations of the Polish currency vis-à-vis the reserve currencies. Figure 20 shows the developments of the average NBP exchange rate for five foreign currencies: USD, EUR, GBP, AUD and NOK in 2008.

Throughout 2008, the US dollar and the euro appreciated vis-à-vis the Polish zloty by 21.6% and 16.5% respectively whereas the Pound Sterling, Norwegian krone and Australian dollar depreciated by 11.9%, 5.8% and 4.2% respectively, over the discussed period.

15.9.1. Assets

Table 21

Assets

Item	Balance as at		Change	
	31.12.2007 comparative data	31.12.2008	31.12.2007 – 31.12.2008	
	PLN thousand			in %
1. Gold and gold receivables conforming to international standards of purity	6 738 574.4	8 476 939.7	1 738 365.3	25.8
2. Claims on non-residents denominated in foreign currency	153 838 172.4	175 772 863.9	21 934 691.5	14.3
2.1. Receivables from the IMF	629 742.8	1 147 747.8	518 005.0	82.3
2.2. Balances with foreign institutions, securities, loans granted and other foreign assets	153 208 429.6	174 625 116.1	21 416 686.5	14.0
3. Claims on residents denominated in foreign currency	0.0	1 418.2	1 418.2	–
4. Claims on non-residents denominated in domestic currency	0.0	0.0	0.0	–
5. Claims on other domestic monetary financial institutions related to monetary policy operations denominated in domestic currency	1 552 000.0	17 675 387.8	16 123 387.8	1 038.9
5.1. Main refinancing operations	0.0	0.0	0.0	–
5.2. Long-term refinancing operations	0.0	0.0	0.0	–
5.3. Fine-tuning operations	0.0	15 357 645.4	15 357 645.4	–
5.4. Structural operations	0.0	0.0	0.0	–
5.5. Marginal lending	1 552 000.0	2 317 742.4	765 742.4	49.3
6. Other claims on other domestic monetary financial institutions denominated in domestic currency	1 847 841.9	1 481 856.0	-365 985.9	-19.8
7. Debt securities of residents denominated in domestic currency	0.0	0.0	0.0	–
8. Claims on general government denominated in domestic currency	0.3	0.0	-0.3	-100.0
9. Items in course of settlement	0.0	0.0	0.0	–
10. Other assets	6 462 611.8	7 222 512.4	759 900.6	11.8
10.1. Tangible fixed assets and intangible assets	958 167.3	927 125.4	-31 041.9	-3.2
10.2. Other financial assets	5 300 130.8	5 629 023.3	328 892.5	6.2
10.3. Off-balance sheet instruments revaluation differences	0.0	333 658.0	333 658.0	–

10.4. Accruals and prepaid expenses	16 794.4	18 526.7	1 732.3	10.3
10.5. Sundry	187 519.3	314 179.0	126 659.7	67.5
TOTAL ASSETS	170 439 200.8	210 630 978.0	40 191 777.2	23.6

Source: NBP data.

The share of main assets in the balance sheet total as at 31 December 2007 and 31 December 2008 is presented in Table 22.

Table 22**Composition of assets**

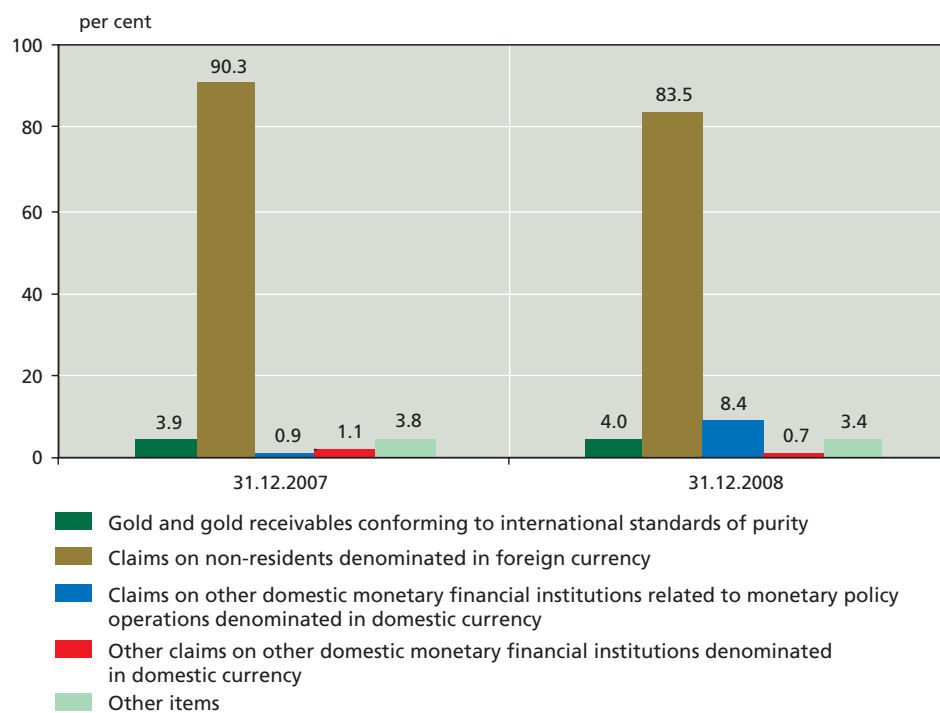
Item	Balance as at		Change
	31.12.2007 comparative data	31.12.2008	31.12.2007 – 31.12.2008
	in %		pps
1. Gold and gold receivables conforming to international standards of purity	3.9	4.0	0.1
2. Claims on non-residents denominated in foreign currency	90.3	83.5	-6.8
2.1. Receivables from the IMF	0.4	0.6	0.2
2.2. Balances with foreign institutions, securities, loans granted and other foreign assets	89.9	82.9	-7.0
3. Claims on residents denominated in foreign currency	0.0	0.0	0.0
4. Claims on non-residents denominated in domestic currency	0.0	0.0	0.0
5. Claims on other domestic monetary financial institutions related to monetary policy operations denominated in domestic currency	0.9	8.4	7.5
5.1. Main refinancing operations	0.0	0.0	0.0
5.2. Long-term refinancing operations	0.0	0.0	0.0
5.3. Fine-tuning operations	0.0	7.3	7.3
5.4. Structural operations	0.0	0.0	0.0
5.5. Marginal lending	0.9	1.1	0.2
6. Other claims on other domestic monetary financial institutions denominated in domestic currency	1.1	0.7	-0.4
7. Debt securities of residents denominated in domestic currency	0.0	0.0	0.0
8. Claims on general government denominated in domestic currency	0.0	0.0	0.0
9. Items in course of settlement	0.0	0.0	0.0
10. Other assets	3.8	3.4	-0.4
10.1. Tangible fixed assets and intangible assets	0.6	0.4	-0.2
10.2. Other financial assets	3.1	2.7	-0.4
10.3. Off-balance sheet instruments revaluation differences	0.0	0.2	0.2
10.4. Accruals and prepaid expenses	0.0	0.0	0.0
10.5. Sundry	0.1	0.1	0.0
TOTAL ASSETS	100.0	100.0	–

Source: NBP data.

Figure 21 illustrates the comparison of the share of assets in the NBP balance sheet total between 2007 and 2008.

Figure 21

Share of assets in NBP balance sheet in 2007 and 2008



Source: NBP data.

Claims on non-residents denominated in foreign currency were the main asset item both as at 31 December 2007 and as at 31 December 2008 (90.3% and 83.5% of the balance sheet total, respectively).

The following items increased their share in the composition of assets:

- claims on other domestic monetary financial institutions related to monetary policy operations denominated in domestic currency (item 5) – by 7.5 percentage points, from 0.9% up to 8.4%,
- gold and gold receivables conforming to international standards of purity (item 1) – by 0.1 percentage point, from 3.9% up to 4.0% .

The shares of other items in the balance sheet total reported a decline between 2008 and 2007:

- claims on non-residents denominated in foreign currencies (item 2) – by 6.8 percentage points, from 90.3% down to 83.5%,
- other claims on other domestic monetary financial institutions denominated in domestic currency (item 6) – by 0.4 percentage points, from 1.1% down to 0.7%,
- other assets (item 10) – by 0.4 percentage point, from 3.8% down to 3.4%.

15.9.1.1. Gold and gold receivables conforming to international standards of purity

Table 23

Gold and gold receivables conforming to international standards of purity

Item	Balance as at:		Change	
	31.12.2007*	31.12.2008	31.12.2007 – 31.12.2008	
	PLN thousand		in %	
1. Gold and gold receivables conforming to international standards of purity	6 738 574.4	8 476 939.7	1 738 365.3	25.8

* Comparative data in conformity with the approved financial statements.

Source: NBP data.

As at 31 December 2008 the NBP held 3 308 775.164 ounces of gold conforming to international standards of purity, either kept in vaults or placed in deposits with foreign banks. With insignificant quantitative movements affecting this item in comparison with 31 December 2007, the movement in the equivalent value denominated in zloty resulted from the rise in the value of an ounce of gold. This was due both to the growth in the market value of one ounce of gold (from USD 836.50 USD up to USD 865.00 USD per ounce), and the increase in the exchange rate USD/PLN.

15.9.1.2. Claims on non-residents denominated in foreign currency

Table 24

Claims on non-residents denominated in foreign currency

Item	Balance as at:		Change		Composition	
	31.12.2007*	31.12.2008	31.12.2007 – 31.12.2008		31.12. 2007	31.12. 2008
	PLN thousand				in %	
2. Claims on non-residents denominated in foreign currency	153 838 172.4	175 772 863.9	21 934 691.5	14.3	100.0	100.0
2.1. Receivables from the IMF	629 742.8	1 147 747.8	518 005.0	82.3	0.4	0.7
2.2. Balances with foreign institutions, securities, loans granted and other foreign assets	153 208 429.6	174 625 116.1	21 416 686.5	14.0	99.6	99.3

* Comparative data in conformity with the approved financial statements.

Source: NBP data.

The item "Claims on non-residents denominated in foreign currencies" comprises assets denominated in foreign currencies, the main item of the official reserve assets of the NBP⁵⁵. As at the end of 2008, the balance of the NBP official reserve assets declined by the equivalent of EUR 554.0 mio. On the other hand, as the zloty depreciated both vis-à-vis the USD and EUR, the value of those assets expressed in zloty posted a growth.

⁵⁵ Official reserve assets of the NBP denominated in foreign currencies include: share in IMF holdings of currency, current accounts and deposits in foreign currency in foreign banks, foreign securities, deposits (loans granted) in foreign currency placed under reverse repo transactions in debt securities, foreign currency resource and monetary gold.

The year 2008 saw significant movements in the composition of the item under discussion. As a result of deterioration of economic indices in the world economy and the financial crisis, liquidity constraints appeared in the interbank market and general uncertainty prevailed among financial institutions. This triggered action to reduce the NBP's exposure to credit risk. Accordingly, both the volume and time horizon of investments in interbank deposits declined in favour of investments in interest-bearing securities.

In addition to investments in securities denominated in foreign currencies and the NBP's accounts maintained with foreign institutions, this item also comprises receivables from the International Monetary Fund in virtue of the quota paid up by the Republic of Poland in foreign currencies. Those dues rose in 2008, most specifically due to the loans extended by the IMF for Turkey and Pakistan.

15.9.1.3. Claims on residents denominated in foreign currency

Table 25

Claims on residents denominated in foreign currency

Item	Balance as at:		Change	
	31.12.2007*	31.12.2008	31.12.2007 – 31.12.2008	
	PLN thousand		in %	
3. Claims on residents denominated in foreign currency	0.0	1 418.2	1 418.2	–

* Comparative data in conformity with the approved financial statements.

Source: NBP data.

The item "Claims on residents denominated in foreign currencies" comprises claims on the National Clearing House Joint-stock company, in order to cover part of the fee paid by the NBP for the participation in TARGET2 system.

15.9.1.4. Claims on other domestic monetary financial institutions related to monetary policy operations denominated in domestic currency

The item "Claims on other domestic monetary financial institutions related to monetary policy operations" comprises NBP's receivables from transactions conducted with bank and related to monetary policy. In 2008 this category primarily included fine-tuning repurchase agreement operations (repos), conducted as an element of the *Confidence Pact* in order to provide the banking sector with temporary liquidity. Whereby, by way of tender, the NBP purchases from banks Treasury securities with different maturities (in 2008, for 6, 14, 28 and 91 days). These are registered as loans extended in domestic currency with the agreement to repurchase the debt securities.

This item also comprises marginal lending extended to banks and pledged on securities. In 2008, banks tended to take recourse to marginal lending on the last days of periods of maintaining the required reserve in their current accounts held with the NBP.

Table 26

Claims on other domestic monetary financial institutions related to monetary policy operations denominated in domestic currency

Item	Balance as at:		Change		Composition	
	31.12.2007*	31.12.2008	31.12.2007 – 31.12.2008		31.12. 2007	31.12. 2008
	PLN thousand			in %		
5. Claims on other domestic monetary financial institutions related to monetary policy operations denominated in domestic currency	1 552 000.0	17 675 387.8	16 123 387.8	1 038.9	100.0	100.0
5.1. Main refinancing operations	0.0	0.0	0.0	–	0.0	0.0
5.2. Long-term refinancing operations	0.0	0.0	0.0	–	0.0	0.0
5.3. Fine-tuning operations	0.0	15 357 645.4	15 357 645.4	–	0.0	86.9
5.4. Structural operations	0.0	0.0	0.0	–	0.0	0.0
5.5. Marginal lending	1 552 000.0	2 317 742.4	765 742.4	49.3	100.0	13.1

* Comparative data in conformity with the approved financial statements.

Source: NBP data.

15.9.1.5. Other claims on other domestic monetary financial institutions denominated in domestic currency

The item "Other claims on other domestic monetary financial institutions denominated in domestic currency" comprises NBP's receivables from transactions conducted with banks and not related to monetary policy. Loans extended to banks represent the main element of this item, most specifically the refinancing loan for central investments. The decline in this item results from the repayment of quarterly installments of the loan together with interest. The balance sheet as at 31 December 2008 also states the stand-by loan not paid by the NBP before the closure of the interbank account, which helped the Bank manage liquidity in the course of the operational day.

Table 27

Other claims on other domestic monetary financial institutions denominated in domestic currency

Item	Balance as at:		Change	
	31.12.2007*	31.12.2008	31.12.2007 – 31.12.2008	
	PLN thousand			in %
6. Other claims on other domestic monetary financial institutions denominated in domestic currency	1 847 841.9	1 481 856.0	-365 985.9	-19,8

* Comparative data in conformity with the approved financial statements.

Source: NBP data.

15.9.1.6. Other assets

The main component of this item are the share and equity in domestic and foreign entities held by the NBP and the Republic of Poland's share paid to the International Monetary Fund in zloty, stated in item 10.2. The increase in the value of this item of other assets most specifically resulted from the overstatement of the value of the Republic of Poland's share in the IMF, in accordance with the instruction and the SDR rate determined by the IMF.

Fixed tangible assets and intangible assets also represent a significant item of the category of other assets, which also comprises off-balance sheet instruments revaluation differences as well as accruals and prepaid expenses.

Table 28**Other assets**

Item	Balance as at:				Change	Composition		
	31.12.2007			31.12.2008		31.12.2007 – 31.12.2008	31.12. 2007	31.12. 2008
	data from the approved financial statement	comparative data						
		incl. GIBS	excl. GIBS					
PLN thousand						in %		
1	2	3	4	5	6 = 5 – 4	7 = 6/4*100		
10. Other assets	6 462 436.5	6 462 611.8	6 454 310.2	7 222 512.4	768 202.2	11.9	100.0	100.0
10.1. Tangible fixed assets and intangible assets	958 167.3	958 167.3	950 501.8	927 125.4	-23 376.4	-2.5	14.7	12.8
10.2. Other financial assets	5 300 130.8	5 300 130.8	5 300 130.8	5 629 023.3	328 892.5	6.2	82.1	77.9
10.3. Off-balance sheet instruments revaluation differences	0.0	0.0	0.0	333 658.0	333 658.0	–	0.0	4.6
10.4. Accruals and prepaid expenses	16 794.4	16 794.4	16 161.9	18 526.7	2 364.8	14.6	0.3	0.3
10.5. Sundry	187 344.0	187 519.3	187 515.7	314 179.0	126 633.3	67.5	2.9	4.4

Source: NBP data.

15.9.2. Liabilities

The share of the main components of liabilities in the balance sheet total as at 31 December 2007 and 31 December 2008 is set out in Table 30.

Figure 22 illustrates the comparison of the composition of liabilities in the NBP balance sheet total in 2007 and 2008.

Item 1. "Notes and coins in circulation" was the main liability item. Its share in the balance sheet total was 48.9% as at 31.12.08, as compared to 50.4% at the end of December 2007.

Increase in the share in the composition of liabilities concerned the following items:

- revaluation differences (item 12) – by 11.8% percentage points, from 2.9% up to 14.7%.

Table 29

Liabilities

Item	Balance as at:		Change	
	31.12.2007 comparable data	31.12.2008	31.12.2007 – 31.12.2008	
	PLN thousand		in %	
1. Notes and coins circulation	85 994 300.3	102 134 706.3	16 140 406.0	18.8
2. Liabilities to other domestic monetary financial institutions related to monetary policy operations in domestic currency	33 158 651.9	42 984 742.8	9 826 090.9	29.6
2.1. Current accounts (covering the minimum reserve accounts)	16 998 121.9	24 075 231.9	7 077 110.0	41.6
2.2. Deposit facility	301 508.9	501 048.0	199 539.1	66.2
2.3. Fixed-rate deposit	0.0	0.0	0.0	–
2.4. Other monetary policy operations	15 859 021.1	18 408 462.9	2 549 441.8	16.1
3. Other liabilities to other domestic monetary financial institutions in domestic currency	50 262.3	91 511.6	41 249.3	82.1
4. Liabilities to other residents in domestic currency	19 216 353.0	18 896 517.6	-319 835.4	-1.7
4.1. Liabilities to central government	19 160 506.4	18 856 296.9	-304 209.5	-1.6
4.2. Other liabilities	55 846.6	40 220.7	-15 625.9	-28.0
5. Liabilities to non-residents in domestic currency	372 177.6	154 412.3	-217 765.3	-58.5
6. Liabilities to residents in foreign currencies	11 316 885.4	9 691 526.7	-1 625 358.7	-14.4
7. Liabilities to non-residents in foreign currencies	19 806 587.7	6 982 763.0	-12 823 824.7	-64.7
8. Liabilities to the IMF	5 137 373.4	5 447 397.6	310 024.4	6.0
9. Items in the course of settlement	0.0	0.0	0.0	–
10. Other liabilities	281 535.2	883 769.6	602 234.4	213.9
10.1. Off-balance sheet instruments revaluations differences	175.3	144 017.9	143 842.6	82 055.1
10.2. Accruals and income collected in advance	236 110.0	228 272.6	-7 837.4	-3.3
10.3. Sundry	45 249.9	511 479.1	466 229.2	1 030.3
11. Provisions for future liabilities	98 689.9	118 025.8	19 335.9	19.6
12. Revaluation differences	4 964 295.8	31 063 882.3	26 099 586.5	525.7
12.1. Revaluation account	1 618 039.8	1 618 039.8	0.0	0.0
12.2. Loss/gain on exchange rate valuation of assets, liabilities and off-balance instruments in foreign currencies	2 404 463.0	22 980 583.5	20 576 120.5	855.7
12.3. Assets and liabilities price valuation difference	941 793.0	6 465 259.0	5 523 466.0	586.5
13. Capital and reserves	2 469 350.0	3 639 634.1	1 170 284.1	47.4
13.1. Registered capital	1 500 000.0	1 500 000.0	0.0	00.0
13.2. Reserve capital	969 350.0	0.0	-969 350.0	-100.0
13.3. Reserves	0.0	2 139 634.1	2 139 634.1	–
14. Financial profit/loss	-12 427 261.7	-11 457 911.7	969 350.0	-7.8
14.1. Financial profit/loss of the current year	-12 427 261.7	0.0	12 427 261.7	-100.0
14.2. Loss of the previous year	0.0	-11 457 911.7	-11 457 066.7	–
TOTAL LIABILITIES	170 439 200.8	210 630 978.0	40 191 777.2	23.6

Source: NBP data.

- financial result (item 14) – by 1.9 percentage points (decline in loss),
- claims on other domestic monetary financial institutions related to monetary policy operations denominated in domestic currency (item 2) – by 0.9 percentage points, from 19.5% up to 20.4%,
- funds and reserve (item 13) – by 0.2 percentage points; from 1.5% up to 1.7%,
- other liabilities (item 10) – by 0.2 percentage points; from 0.2% up to 0.4%,

Table 30

Liabilities composition

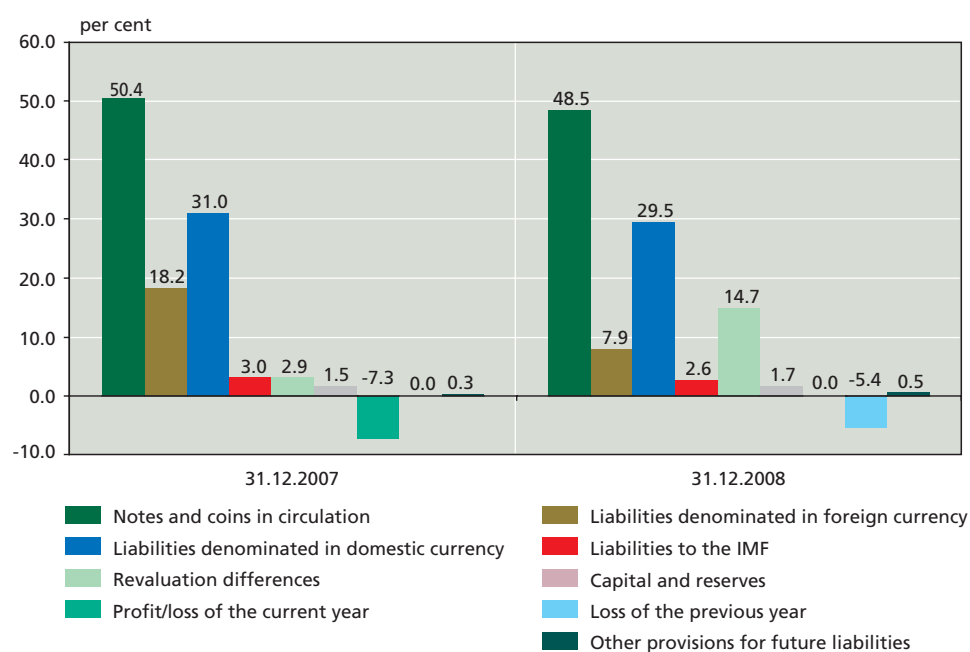
Item	Balance as at:		Change
	31.12.2007 comparative data	31.12.2008	31.12.2007 – 31.12.2008
	in %		pps
1. Notes and coins in circulation	50.4	48.5	-1.9
2. Liabilities to other domestic monetary financial institutions related to monetary policy operations in domestic currency	19.5	20.4	0.9
2.1. Current accounts (covering the minimum reserve accounts)	10.0	11.4	1.4
2.2. Deposit facility	0.2	0.2	0.0
2.3. Fixed-interest deposits	0.0	0.0	0.0
2.4. Other monetary policy operations	9.3	8.8	-0.5
3. Other liabilities to other domestic monetary financial institutions in domestic currency	0.0	0.0	0.0
4. Liabilities to other residents denominated in domestic currency	11.3	9.0	-2.3
4.1. Liabilities to general government	11.2	9.0	-2.2
4.2. Other liabilities	0.1	0.0	-0.1
5. Liabilities to non-residents denominated in domestic currency	0.2	0.1	-0.1
6. Liabilities to residents in foreign currency	6.6	4.6	-2.0
7. Liabilities to non-residents in foreign currency	11.6	3.3	-8.3
8. Liabilities to the IMF	3.0	2.6	-0.4
9. Items in course of settlement	0.0	0.0	0.0
10. Other liabilities	0.2	0.4	0.2
10.1. Off-balance sheet instruments revaluation differences	0.0	0.1	0.1
10.2. Accruals and income collected in advance	0.2	0.1	-0.1
10.3. Sundry	0.0	0.2	0.2
11. Provisions for future liabilities	0.1	0.1	0.0
12. Revaluation differences	2.9	14.7	11.8
12.1. Revaluation account	0.9	0.7	-0.2
12.2. Differences on exchanges rate valuation of assets, liabilities and off-balance sheet instruments in foreign currency	1.4	10.9	9.5

12.3. Assets and liabilities price valuation differences	0.6	3.1	2.5
13. Capital and reserves	1.5	1.7	0.2
13.1. Authorised capital	0.9	0.7	-0.2
13.2. Reserve capital	0.6	0.0	-0.6
13.3. Reserves	0.0	1.0	1.0
14. Financial result	-7.3	-5.4	1.9
14.1. Profit/loss of the current year	-7.3	0.0	7.3
14.2. Loss of the previous year	0.0	-5.4	-5.4
TOTAL LIABILITIES	100.0	100.0	-

Source: NBP data.

Figure 22

Share of liabilities in NBP balance sheet in 2007 and 2008



Source: NBP data.

The shares of other items in the balance sheet total decreased in 2008 in comparison with 2007:

- liabilities denominated in foreign currency (items 6 and 7) – by 10.3 percentage points, from 18.2% down to 7.9%;
- liabilities to other residents denominated in domestic currency (item 4) – by 2.3 percentage points, from 11.3% down to 9.0%;
- liabilities to the IMF (item 8) – by 0.4% percentage point, from 3.0% down to 2.6%;
- liabilities to non-residents denominated in domestic currency (item 5) – by 0.1 percentage point, from 0.2% down to 0.1%.

15.9.2.1. Notes and coins in circulation

The balance of notes and coins in circulation amounted to PLN 102 134 706.3 thous. as at 31 December 2008, which represents an increase of PLN 16 140 406.0 thous. (18.8%) compared to the end of 2007. The balance of notes and coins in circulation averaged PLN 91 326 936.8 thous. in 2008.

Table 31**Notes and coins in circulation**

Item	Balance as at:		Change	
	31.12.2007*	31.12.2008	31.12.2007 – 31.12.2008	
	PLN thousand		in %	
1. Notes and coins in circulation**	85 994 300.3	102 134 706.3	16 140 406.0	18.8

* Comparative data in conformity with the approved financial statements.

** Pursuant to § 10 section 1 item 1 of resolution No. 16/2003, the value of notes and coins in circulation is the nominal value of notes and coins issued, reduced by the nominal value of notes and coins held in NBP cashier's offices and strongroom, deposited in other banks' strongrooms and the nominal value of notes and coins withdrawn from circulation due to wear.

Source: NBP data.

15.9.2.2. Liabilities to other domestic monetary financial institutions related to monetary policy operations in domestic currency**Table 32****Liabilities to other domestic monetary financial institutions related to monetary policy operations in domestic currency**

Item	Balance as at:		Change		Composition	
	31.12.2007*	31.12.2008	31.12.2007 – 31.12.2008		31.12. 2007	31.12. 2008
	PLN thousand				in %	
2. Liabilities to other domestic monetary financial institutions related to monetary policy operations in domestic currency	33 158 651.9	42 984 742.8	9 826 090.9	29.6	100.0	100.0
2.1. Current accounts (covering the minimum reserve accounts)	16 998 121.9	24 075 231.9	7 077 110.0	41.6	51.3	56.0
2.2. Deposit facility	301 508.9	501 048.0	199 539.1	66.2	0.9	1.2
2.3. Fixed-interest deposits	0.0	0.0	0.0	–	0.0	0.0
2.4. Other monetary policy operations	15 859 021.1	18 408 462.9	2 549 441.8	16.1	47.8	42.8

* Comparative data in conformity with the approved financial statements.

Source: NBP data.

The principal components of this category of liabilities are current account balances of domestic banks (including the required reserve accounts) and liabilities from other operations of monetary policy. In 2008, the NBP continued basic open market operations, which covered NBP money market bills with 7-day maturity. Furthermore, transactions under the *Confidence Pact* were

conducted in 2008 Q4. Repurchase agreement operations (repos) were used to provide liquidity to the banking sector for the last three months of the year. At the same time, the NBP conducted FX swap operations (USD/PLN, EUR/PLN and CHF/PLN) in order to provide banking sector with foreign currencies and contain the level of liquidity denominated in domestic currency. A small-scale issue of NBP money market bills with maturity of less than 7-days – carried out under fine tuning operations – additionally reduced liquidity. Excess liquidity was placed with the NBP as marginal deposit facility. On 31 December 2008 – the first day of the new reserve maintenance period – the balance of deposits slid down to stand at PLN 501 048.0 thous.

15.9.2.3. Other liabilities to other domestic monetary financial institutions in domestic currency

Table 33

Other liabilities to other domestic monetary financial institutions in domestic currency

Item	Balance as at:		Change	
	31.12.2007*	31.12.2008	31.12.2007 – 31.12.2008	
	PLN thousand		in %	
3. Other liabilities to other domestic monetary financial institutions in domestic currency	50 262.3	91 511.6	41 249.3	82.1

* Comparative data in conformity with the approved financial statements.

Source: NBP data.

The major components of the item "Other liabilities to domestic monetary financial institutions in domestic currency" are the balances of settlement operated in KIR – domestic payment system, traceable to the NBP customers' payment orders not settled by KIR SA on 31 December 2008 and/or payments misdirected by commercial banks and received in the last settlement session.

15.9.2.4. Liabilities to other residents denominated in domestic currency

Table 34

Liabilities to other residents denominated in domestic currency

Item	Balance as at:		Change		Composition	
	31.12.2007*	31.12.2008	31.12.2007 – 31.12.2008		31.12.2007	31.12.2008
	PLN thousand				in %	
4. Liabilities to other residents denominated in domestic currency	19 216 353.0	18 896 517.6	-319 835.4	-1.7	100.0	100.0
4.1. Liabilities to general government	19 160 506.4	18 856 296.9	-304 209.5	-1.6	99.7	99.8
4.2. Other liabilities	55 846.6	40 220.7	-15 625.9	-28.0	0.3	0.2

* Data comparative and compliant with the data from the officially approved financial statements.

Source: NBP data.

This primary components of this item are liabilities to the public sector (which account for 99.7% of this position), and include general government institutions (i.a. state-run targeted funds) and social security funds. These liabilities include primarily current accounts, auxiliary accounts and term deposit accounts in domestic currency operated by the NBP. The period under analysis saw the decline in this item, as funds decreased in the current accounts of the central government.

*15.9.2.5. Liabilities to non-residents denominated in domestic currency***Table 35****Liabilities to non-residents denominated in domestic currency**

Item	Balance as at:		Change	
	31.12.2007*	31.12.2008	31.12.2007 – 31.12.2008	
	PLN thousand		in %	
5. Liabilities to non-residents denominated in domestic currency	372 177.6	154 412.3	-217 765.3	-58.5

* Comparative data in conformity with the approved financial statements.

Source: NBP data.

This item mainly comprises funds held in the current accounts of the European Commission and World Bank Group. The reason for a fall in liabilities to non-residents denominated in domestic currency over that period can be sought in the decrease in funds in the current account of the European Commission.

*15.9.2.6. Liabilities to residents in foreign currency***Table 36****Liabilities to residents in foreign currency**

Item	Balance as at:		Change	
	31.12.2007*	31.12.2008	31.12.2007 – 31.12.2008	
	PLN thousand		in %	
6. Liabilities to residents in foreign currency	11 316 885.4	9 691 526.7	-1 625 358.7	-14.4

* Comparative data in conformity with the approved financial statements.

Source: NBP data.

This category mainly covered monetary assets accumulated in foreign currency current accounts held by general government institutions. The period under analysis saw a decline in this item, in the wake of a drop in funds in the current accounts held by the Ministry of Finance.

*15.9.2.7. Liabilities to non-residents in foreign currency***Table 37****Liabilities to non-residents in foreign currency**

Item	Balance as at:		Change	
	31.12.2007*	31.12.2008	31.12.2007 – 31.12.2008	
	PLN thousand		in %	
7. Liabilities to non-residents in foreign currency	19 806 587.7	6 982 763.0	-12 823 824.7	-64.7

* Comparative data in conformity with the approved financial statements.

Source: NBP data.

Liabilities to non-residents denominated in foreign currencies are mainly composed of term deposits in foreign currencies with the agreed commitment to repurchase debt securities. The value of those deposits suffered a significant slump in 2008.

15.9.2.8. Liabilities to the IMF

Table 38

Liabilities to the IMF

Item	Balance as at:		Change	
	31.12.2007*	31.12.2008	31.12.2007 – 31.12.2008	
	PLN thousand		in %	
8. Liabilities to the IMF	5 137 373.4	5 447 397.6	310 024.2	6.0

* Data comparative and compliant with the data from the officially approved financial statements.

Source: NBP data.

The movements in the balance of liabilities in 2008 were attributable to:

- increase – due to overstatement – in the Republic of Poland's quota in the IMF contributed in zloty in accordance with the order and SDR rate set by the IMF,
- decrease – due to purchase by the IMF of EUR foreign currency and transfer thereof for the benefit of Turkey and Pakistan under a loan extended to those states

15.9.2.9. Other liabilities

Table 39

Other liabilities

Item	Balance as at:				Change	Composition		
	31.12.2007			31.12.2008		31.12.2007 – 31.12.2008	31.12.2007	31.12.2008
	data from the approved financial statement	comparative data						
		incl. GIBS	excl. GIBS					
1	PLN thousand				in %			
	2	3	4	5	6 = 5 – 4	7=6/4*100		
10. Other liabilities	281 359.9	281 535.2	281 527.9	883 769.6	602 241.7	213.9	100.0	100.0
10.1. Off-balance sheet instruments' revaluation differences	0.0	175.3	175.3	144 017.9	143 842.6	82 055.1	0.1	16.3
10.2. Accruals and income collected in advance	236 110.0	236 110.0	236 102.7	228 272.6	-7 830.1	-3.3	83.8	25.8
10.3. Sundry	45 249.9	45 249.9	45 249.9	511 479.1	466 229.2	1 030.3	16.1	57.9

Source: NBP data.

The main component of this item is the balance of adjustment to the average expense of the off-balance sheet instruments holdings recognized under the item "Sundry". This item also includes accruals and prepaid expense and deferred income as well as off-balance sheet instruments revaluation differences.

15.9.2.10. Provisions for future liabilities

Table 40

Provisions for future liabilities

Item	Balance as at:		Change	
	31.12.2007*	31.12.2008	31.12.2007 – 31.12.2008	
	PLN thousand		in %	
11. Provisions for future liabilities	98 689.9	118 025.8	19 335.9	19.6

* Comparative data in conformity with the approved financial statement.

Source: NBP data.

The main component of this item are provisions for future liabilities to the employees. These include statutory and optional severance packages and compensation disbursed on the dissolution of employment contracts for reasons not attributable to employee, retirement and disability packages, jubilee bonuses and provisions from unused holiday leaves. This item increased in 2008 most specifically because provisions were established under the Employees Assistance Scheme with reference to the reorganization of NBP regional branches.

15.9.2.11. Revaluation accounts

Table 41

Revaluation accounts

Item	Balance as at:		Change	
	31.12.2007*	31.12.2008	31.12.2007 – 31.12.2008	
	PLN thousand		in %	
12. Revaluation accounts	4 964 295.8	31 063 882.3	26 099 586.5	525.7

* Comparative data in conformity with the approved financial statement.

Source: NBP data.

The main component of this item are positive differences on exchange rate valuation of assets and off-balance sheet instruments in foreign currencies. Moreover, the item comprises assets and liabilities price valuation differences and gold revaluation account. Increase in this item can be traceable to zloty depreciation *vis-à-vis* foreign currencies.

15.9.2.12. Capital and reserves

Table 42

Capital and reserves

Item	Balance as at:		Change	
	31.12.2007*	31.12.2008	31.12.2007 – 31.12.2008	
	PLN thousand		in %	
13. Capital and reserves	2 469 350.0	3 639 634.1	1 170 284.1	47.4

* Comparative data in conformity with the approved financial statement.

Source: NBP data.

The item "Capital and reserves" contains authorised capital and reserve capital as well as reserves (except for provisions for future liabilities).

The item "Capital and reserves" contains authorised capital and reserve capital as well as reserves (except for provisions for future liabilities). Increase in the item in the period under analysis resulted from:

- establishment of provisions in the amount of PLN 2 139 634.1 thous. for the risk of the zloty to foreign currency exchange rate fluctuation,
- use of reserve capital of PLN 969 350.0 thous. to cover the loss reported in the financial statement of 2007.

15.9.2.13. Financial result

The PLN 12 427 261.7 thous. loss reported in the financial statement as at 31 December 2007 declined in 2008 as a result of using the reserve capital of PLN 969 350.0 thous.

With the establishment of provisions to cover the risk of the zloty to foreign currency exchange rate fluctuation in the amount of PLN 2 139 634.1 thous. the NBP's balance sheet as of 2008 stood at zero.

Table 43

Financial result

Item	Balance as at:			Change	Composition		
	31.12.2007		31.12.2008		31.12.2007 – 31.12.2008	31.12. 2007	31.12. 2008
	data from the approved financial statement*	data excluding GIBS		PLN thousand				in %
	1	2	3	4	5 = 4 – 3	6 = 5/3*100	
14. Financial result	-12 427 261.7	-12 352 469.8	-11 457 911.7	894 558.1	-7.2	100.0	100.0
14.1. Financial result of the current year	-12 427 261.7	-12 352 469.8	0.0	12 352 469.8	-100.0	100.0	0.0
14.2. Loss of the previous year	0.0	0.0	-11 457 911.7**	-11 457 911.7	–	0.0	100.0

* Comparative data in conformity with the approved financial statement.

** Data inclusive of GIBS (excluding GIBS the loss of previous years would have come up to PLN 11 383 119.8 thous.).

Source: NBP data.

15.9.3. Off-balance sheet items

The main components in off-balance sheet items are receivables and liabilities in foreign currencies and in domestic currency from spot and derivative transactions.

The growth in the value of individual positions reflected most of all the policy measures that the NBP undertook within the framework of the *Confidence Pact*. In order to enable banks to obtain currency funds in 2008 Q4 the NBP initiated derivative swap transactions with banks on USD/PLN, EUR/PLN and CHF/PLN currency pairs (those concluded on USD/PLN and CHF/PLN pairs remained outstanding as at the end of the year). The Bank obtained funds denominated in CHF *via* swap transactions on the currency pair EUR/CHF concluded with the National Bank of Switzerland.

Table 44

Off-balance sheet item – receivables and liabilities due from spot and derivative transactions

Item	Balance as at:		Change	
	31.12.2007	31.12.2008	31.12.2007 – 31.12.2008	
	PLN thousand			in %
1. Receivables from spot and derivative transactions in foreign currency	1 024.3	4 501 023.6	4 499 999.3	439 324.3
2. Liabilities from spot and derivative transactions in foreign currency	0.0	2 363 577.2	2 363 577.2	–
3. Receivables from spot and derivative transactions in domestic currency	0.0	351 642.5	351 642.5	–
4. Liabilities from spot and derivative transactions in domestic currency	1 024.3	2 489 088.9	2 488 064.6	242 903.9

Source: NBP data.

Moreover, the off-balance sheet items include the value of financial and guarantee collateral received by the NBP (no off-balance sheet items occurred as at 31 December 2008, which would pertain to collateral extended), and the amount of contingency receivables claimed by the NBP and currency values accepted for collection.

Table 45

Other off-balance sheet items

Item	Balance as at:		Change	
	31.12.2007	31.12.2008	31.12.2007 – 31.12.2008	
	PLN thousand			in %
1. Financial collateral	0.0	7 058.0	7 058.0	–
2. Guarantee collateral	15 437.7	16 271.5	833.8	5.4
3. Contingent receivables	269.0	269.0	0.0	0.0
4. Foreign currency accepted for collection	0.7	6.5	5.8	828.6

Source: NBP data.

Interest from Bank Handlowo-Kredytowy SA under liquidation accrued after the bank's insolvency was declared (i.e. as from 1 April 1992) amount to PLN 1 183 103.7 thous. Their balance remained unchanged in comparison with the preceding reporting period.

15.10. Movements in the NBP profit and loss account

In 2008, the NBP posted a profit of PLN 2 139 634.1 thous. The profit was assigned to establish a provision for the risk of the zloty to foreign currency exchange rate fluctuation, recognised in item 2 of the profit and loss account (expense arising from establishment of provisions against foreign exchange risk). Accordingly, the NBP's profit and loss account stood at zero.

Table 46

Profit and loss account in 2007 and 2008

Item	Data for the year			Change	
	2007		2008		
	comparative data				
	including GIBS	excluding GIBS	PLN thousand		in %
1	2	3	4	5 = 4 - 3	6 = 5/3*100
Financial results	-12 427 261.7	-12 352 469.8	0.0	12 352 469.8	-100.0
1. Net interest, discount and premium position	4 173 680.8	4 173 680.8	3 136 277.6	-1 037 403.2	-24.9
– interest, discount and premium income	7 159 708.4	7 159 708.4	7 019 326.4	-140 382.0	-2.0
– interest, discount and premium expense	2 986 027.6	2 986 027.6	3 883 048.8	897 021.2	30.0
2. Net position on financial operations, of which:	-15 467 336.1	-15 467 336.1	-2 132 886.9	13 334 449.2	-86.2
– income on financial operations	471 878.6	471 878.6	4 175 699.2	3 703 820.6	784.9
– unrealised losses related to exchange rate valuation	15 014 602.5	15 014 602.5	2 646 747.1	-12 367 855.4	-82.4
– expense of establishing provisions against foreign exchange risk	–	–	2 139 634.1	2 139 634.1	–
3. Net fee and commission position	-9 639.1	-9 639.1	-3 779.3	5 859.8	-60.8
4. Income from equities	9 805.7	9 805.7	8 679.4	-1 126.3	-11.5
5. Other income	118 616.7	118 584.4	241 219.8	122 635.4	103.4
6. Personnel expense and payroll surcharges	418 416.6	364 232.7	397 443.9	33 211.2	9.1
7. Administrative expense	339 730.3	321 301.9	361 971.0	40 669.1	12.7
8. Depreciation	164 642.0	162 434.1	94 841.6	-67 592.5	-41.6
9. Issue of notes and coin expense	301 188.9	301 188.9	339 461.5	38 272.6	12.7
10. Other expense	28 411.9	28 407.9	55 792.6	27 384.7	96.4

Source: NBP data.

The movement in the NBP's profit and loss account of 2008 in relation to the preceding year most specifically reflects the lower level of unrealised expense on exchange rate adjustment of assets in liabilities denominated in foreign currencies; this category declined by PLN 2 367 855,4 thous. The shifts in other item of the profit and loss account partially offset the positive impact of this development. They pushed the NBP's profit and loss account of 2008 down by PLN 15 385.6 thous. overall. The decline in interest, discount and premium in 2008 by PLN 1 037 403.2 thous. (24.9%) in comparison to 2007 resulted mainly from the growth in expense by PLN 897 021.2 thous. (30.0%). The bearing of this increase was additionally reinforced by a decline in income of PLN 140 382.0 thous. (2.0%).

2008 observed a growth in expense from income from interest, discount and premium, most specifically:

- expense from interest on accounts held at the NBP (increase by PLN 761 562,6 thous.), which was traceable to higher costs of interest on accounts operated in:

- foreign currencies (rise by PLN 315 101.4 thous.), which primarily reflected a higher balance on the central government current and auxiliary accounts over the year, as well as increased amounts committed to repos and reverse repos transactions, with extended and received commitment to buy back debt securities,
- in domestic currency (rise by PLN 446 461.2 thous.), which primarily reflected higher balance in those accounts, most specifically in the required reserve accounts,
- interest expense, discount and premium on securities (rise by PLN 129 546.8 thous.), which can be attributable most of all to:
 - increase in premium expense on foreign securities by PLN 210 439.2 thous, which resulted from a higher share of debt securities in the investment composition of official currency reserves and rise in prices of foreign securities,
 - increase by PLN 105 439.3 thous. in interest expense on NBP bond, following the rise in bond interest rate (determined in accordance with Treasury bond yields),
 - drop by PLN 186 331.7 thous. in the discount expense of the NBP money market bills. This was due to the lower issue of bonds, as excess liquidity declined in the banking sector.

Decline in interest income, discount and premium on securities was mainly due to:

- lower interest income, discount and premium on foreign securities (drop by PLN 307 519.0 thous.); the fundamental factor behind this development was the decrease in the average return on those instruments correlated with the growth in their prices and shrinking share of discount securities in the investment composition of reserves and lower average annual exchange rate of the zloty *vis-à-vis* foreign currencies;
- higher income from funds accumulated in bank accounts (growth by PLN 185 515.9 thous.), most specifically owing to:
 - growth by PLN 187 864.5 thous. in the income from term deposits (extended loans) with received commitment to repurchase securities denominated in foreign currencies, the primary reason for this development was expanded commitment to repo and reverse repo transactions, with extended and received commitment to repurchase debt securities;
 - growth by PLN 137 316.3 thous. in income from term deposits (extended loans) with received commitment to repurchase securities denominated in domestic currency, as a result of relevant transactions under the *Confidence Pact*;
 - fall by PLN 140 237.7 thous. in income from term deposits, the primary reason for which was shrinking share of this instrument in the investment composition of the official currency reserves and drop in the interest on deposits denominated in USD and GBP;
- decline in interest income on loans and advances (drop by PLN 22 675.2 thous.), the direct cause of which can be sought in lower income from refinancing loan for central investments resulting from the repayment of loan installment.

The increase in income on financial operations by PLN 13 334 449.2 thous. in 2008 in comparison to the preceding year was principally fuelled by:

- drop by PLN 12 367 855.4 thous. in the unrealised costs from the exchange rate revaluation of assets and liabilities denominated in foreign currencies; these costs were in 2008 paid on the revaluation of Pound Sterling and Norwegian krone holdings,

- hike by PLN 2 575 886.5 thous. in the income from realised foreign exchange gains,
- rise by PLN 1 114 115.9 thous. in the income from cashed price gains.

The positive contribution of the foregoing items to the total profit from financial operations weakened in effect of movements in other items, most specifically due to the occurrence of expense of establishing the provision for the risk of the zloty to foreign currency exchange rate fluctuations.

Whereas the position of fees and commissions ended with a loss at the level of PLN 3 779.3 thous. in 2008, it was lower by PLN 5 859.8 thous. than that posted in the previous reporting period. The decline in loss was the effect of growth by PLN 10 552.9 thous. in this item of income, and can be predominantly attributed to the NBP's participation in TARGET 2 system and higher income from payment orders effected. On the other hand, positive contribution of higher income from fees and commission was partially offset by the increase of PLN 4 693.1 thous. in the relevant expense, most specifically this related to the NBP's participation in TARGET2 system.

The decline by PLN 1 126.3 thous. (11.5%) in 2008 in the income from share and equity in comparison to the corresponding figures of the preceding year was directly linked to the decline in the income from equity in the Bank for International Settlements.

Other income stood at the level of PLN 241 219.8 thous., i.e. higher by PLN 122 635.4 thous. (103.4%) than in 2007. Most of this growth can be credited to increased (by PLN 110,014.6 thous.) income from the sale of collector coins and collector banknotes.

In 2008, personnel expense (payroll surcharges inclusive) rose over the preceding year by PLN 33,211.2 thous. (9.1%). This increase was primarily a result of the adopted staffing policy of the NBP. On the other hand, staffing reduction *vis-à-vis* 2007 had a dampening impact on this item of the profit and loss account.

Growth by PLN 40 669.1 thous. (12.7%) in the administrative expense in 2008 in comparison to the preceding reporting period primarily resulted from:

- establishment in 2008 of provision for the disbursement of statutory severance packages and additional financial benefits for the employees made redundant due to the reorganization of the NBP regional branches, and the assistance of employment counselors and co-financing trainings designed to enhance or change professional qualifications of the leaving employees, in the total amount of PLN 17 240.0 thous.,
- growth by PLN 15 326.0 thous. in the mandatory contribution for the Bank Guarantee Fund,⁵⁶
- growth by PLN 6 684.9 thous. in the expense of bank information and promotion and educational activities.

Depreciation expense declined in 2008 by PLN 67 592.5 thous. (41.6%) as a result of legislation amendments, *i.a.* longer time limits for using fixed assets and intangible and legal assets, which led to the decline in depreciation charge for most items of assets.

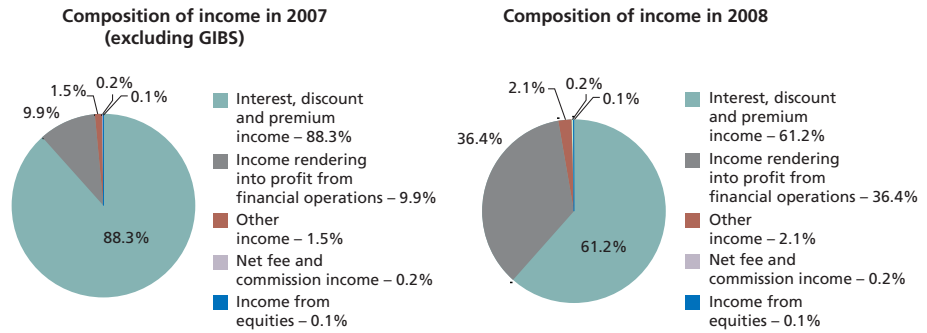
Growth by PLN 38 272.6 thous. (12.7%) in the cost of coins and banknotes issue derived from extended coin issue, principally in response to rising demand for general circulation coins and expanded issue of collector coins. The contribution of higher cost of coins to the increase in the

⁵⁶Under the Act of 23 October 2008 on the amendment to the Act on the Bank Guarantee Fund and to other acts (Polish Journal of Laws No. 209/2008, item 1315), as from 2009 the National Bank of Poland will not effect contributions to the Bank Guarantee Fund.

total amount of coins and banknotes issue was partially offset by lower cost of banknote issue. The NBP reduced its purchase in this respect, having rationalized their holdings.

Figure 23

Composition of income in 2007 and 2008



Source: NBP data.

Increase by PLN 27 384.7 thous. (96.4%) in other expense as compared to the preceding reporting period was principally stimulated by the growth in other operational expense, and most of all in the nominal value of collector coins and banknotes, which counts towards expense upon sale.

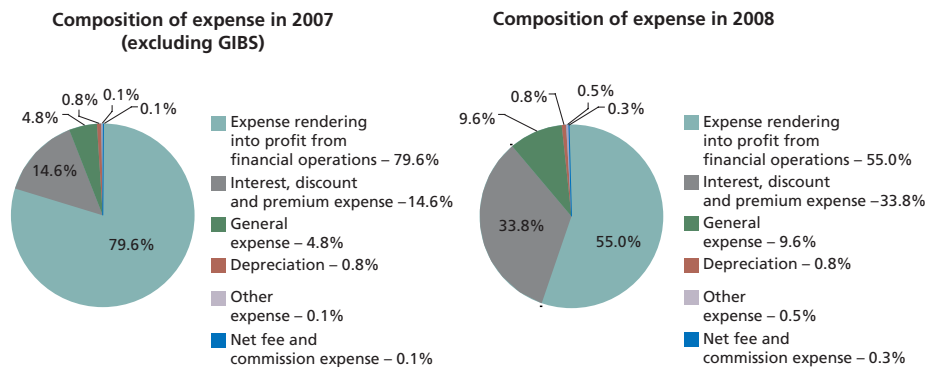
Figure 23 presents the movements in the composition of the NBP's income in 2007 and 2008.

In 2008, there were significant movements in income composition. Whereas the share of income rendering into profit from financial operations increased by 26.5 percentage points (which represented a growth from 9.9% in 2007 to 36.4% in 2008), the share of interest income, discount and premium declined by 27.1 percentage points (which represented a decrease from 88.3% in 2007 to 61.2% in 2008).

Figure 24 shows the movements in the composition of the NBP's expense in 2007 and 2008.

Figure 24

Composition of expense in 2007 and 2008



Source: NBP data.

The key movements in the composition of expense pertained to the rise in the share interest expense, discount and premium, which went up by 19.2 percentage points (from 14.6% in 2007 to 33.8% in 2008) and of the general expense which soared by 4.8 percentage points (from 4.8% in 2007 to 9.6% in 2008). These changes coincided with the decline in the share of expense contributing to the profit from financial operations, which shrunk by 24.6 percentage points (from 79.6% in 2007 to 55.0% in 2008).

2008
Annual Report

NBP

2008
Annual Report

NBP



APPENDICES

Appendix 1

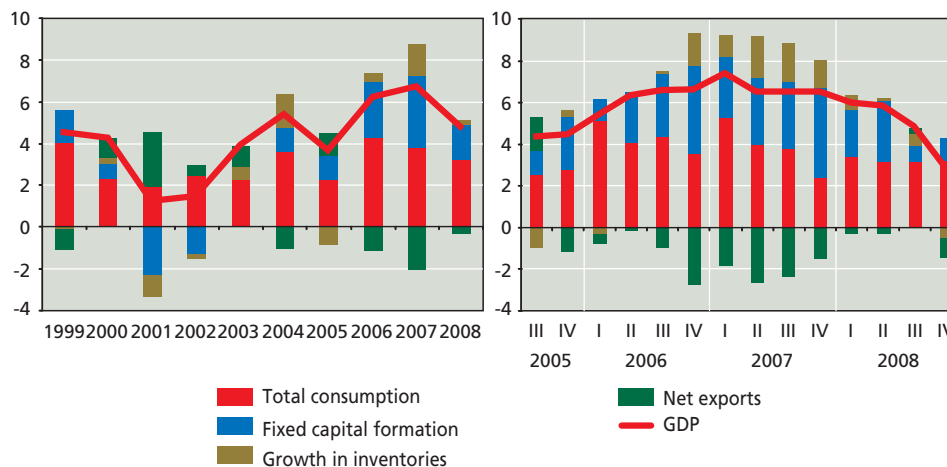
GDP and aggregate demand⁵⁷

In 2008 domestic demand grew by 5.0% y/y, i.e., less than in the preceding year (8.6% y/y). The lower growth in demand was influenced above all by: growth in gross fixed capital formation which was markedly lower than in the preceding year (7.9% y/y, down from 17.6% y/y in 2007) and slower growth of total consumption (4.1% y/y as compared to 4.7% y/y in 2007). Whereas the growth rate of total consumption slowed down, most specifically reflecting the decline in the growth rate of public consumption (down from 3.7% y/y in 2007 to 0% y/y), private consumption slightly increased (from 5.0% y/y in 2007 to 5.4% y/y). In 2008 the growth rate of capital formation (7.7% y/y) stood close to that of investments (7.9% y/y). Exports rose at a slower pace than imports, just as in the period 2006–2007.

Gross value added⁵⁸ rose in 2008 at 4.9% y/y (as compared to 6.6% y/y in the preceding year). The decline in the growth of gross value added in 2008 was primarily the effect of slower growth in market services (down from 6.4% y/y in 2007 to 5.6% y/y) and in industry (down from 9.9% y/y in 2007 to 3.7% y/y). The growth in value added in construction declined only slightly (from 12.5% y/y in 2007 to 11.3% y/y) in comparison to the industrial sector as a result of still high outlays in residential construction and investments related to the inflow of EU structural funds.

Figure 25

The contribution of aggregate demand components to GDP growth



Source: NBP calculations based on GUS data.

As a result of rising disposable income (by approx. 2.8% y/y) the growth rate of individual consumption in 2008 was marginally higher than a year before. The recovery in the labour market translated into the growth of income from paid employment in 2008 by approx. 6.1% y/y (in current prices, income data according to NBP estimates). The consumption level in 2008 was also determined by a higher than in the preceding year inflow of funds under the Common Agricultural Policy.

In 2008 gross investment outlays rose markedly slower than a year before. Following the recession in the world economy and the crisis in the global financial markets, the availability of

⁵⁷ The cut-off date for the data accounted for in this Appendix is 20 April 2009.

⁵⁸ GDP equals total added value increased by taxes on products (including import duties) and product subsidies.

credit to enterprises as well as the external demand for their products suffered a decline. Consequently, enterprises negatively assessed the anticipated demand and their development prospects. Despite their good financial situation and high profits in 2008 they markedly lowered the growth rate of investment outlays.

Table 47

GDP and domestic demand 2001–2008

Specification	2001	2002	2003	2004	2005	2006	2007	2008
Growth rate (% , y/y)								
GDP	1.2	1.4	3.9	5.3	3.6	6.2	6.7	4.8
Domestic demand	-1.3	0.9	2.7	6.0	2.4	7.3	8.6	5.0
Consumption	2.3	3.0	2.6	4.0	2.7	5.2	4.7	4.1
– private consumption	2.3	3.4	2.0	4.4	2.0	5.0	5.0	5.4
– capital formation	-13.4	-7.2	3.3	14.7	1.4	16.1	23.7	7.7
Gross fixed capital formation	-9.7	-6.3	-0.1	6.4	6.5	14.9	17.6	7.9
Exports	3.1	4.8	14.2	14.0	8.0	14.6	9.1	5.8
Imports	-5.3	2.6	9.3	15.2	4.7	17.3	13.6	6.2
Contribution of net exports to GDP growth (percentage points)	2.6	0.5	1.1	-0.8	1.1	-1.1	-2.1	-0.3
GDP structure in current prices (%)								
Domestic demand	103.7	103.4	102.6	102.4	100.7	101.8	102.8	103.4
– consumption	82.9	84.8	83.8	82.3	81.5	80.8	78.5	78.7
– capital formation	20.8	18.6	18.7	20.1	19.3	21.1	24.3	24.7
Net exports	-3.7	-3.4	-2.6	-2.4	-0.7	-1.8	-2.8	-3.4

Source: GUS data.

Both exports and imports continued to rise in 2008. However, the growth rate of trade tumbled down in comparison to the preceding year, and in 2008 Q4 both exports and imports dropped in comparison to the corresponding period of the preceding year. In 2008 the contribution of net exports to growth was close to -0.3 p.p. In consequence, the current account deficit widened slightly (in relation to GDP from 4.7% in 2007 to approx. 5.4% in 2008).

Appendix 2

Prices of consumer goods and services

Price index of consumer goods and services

In 2008, the average annual price index of consumer goods and services amounted to 4.2%, i.e. a level higher than the NBP's upper limit for deviations from the target (3.5%). In the first half of the year, the index, similarly to the preceding year, showed a rising tendency; in this period the annual growth in consumer goods and services prices rose from 4.0% in January to 4.8% in July and August 2008. In the next months the growth gradually decreased to reach 3.3% in December 2008. The following factors contributed to such a path of the consumer goods and services price index: the annual growth rate of prices of food and non-alcoholic beverages which was still high in the first half of the year and decreased in the second half, a significant rise in energy prices in the first half of the year and their slackening growth in the last months of the year, as well as the inflation index net of food and energy prices which was rising steadily almost throughout the whole reported period.

Prices of food and non-alcoholic beverages

Strong price shocks observed in the market for agricultural commodities in the second half of 2007 had an impact on the annual growth of prices of food and non-alcoholic beverages in the whole of 2008. In the first months of 2008, the annual growth rate of these prices remained at a high level (6.8–7.8%) and started decreasing in August to reach 3.2% in December. The decline in the annual growth rate of these prices was a result of, among others, the disappearance of the shocks (i.e. the disappearance of the negative base effect). It was also influenced by the decline in prices in international markets for a number of agricultural commodities, which was connected with a favourable supply situation and a global decline in demand, triggered by the global economic growth slowdown.

Energy prices

In the first half of 2008 the annual growth of energy prices showed a rising tendency (from 6.9% in January to 9.9% in July 2008) and began decreasing gradually to 5.6% in December 2008. Three factors had a significant impact on energy prices in this period: changes in fuel prices linked to a great extent to changes in oil prices in the global markets, changes in prices determined by the Energy Regulatory Office, and changes to domestic prices of coal, which translated into the rise in heating-fuel prices.

The high growth rate of energy prices in 2008 was, to a great extent, the result of large rises in regulated prices (electric energy, gas and hot water prices), approved by the Energy Regulatory Office in various months of the year. On the other hand, fuel prices were determined by changes in oil prices in the global markets as well as changes in the zloty exchange rate *vis-à-vis* the US dollar in which oil contracts are quoted. The strong rise in world oil prices observed until July 2008 translated into a rise in fuel prices in Poland whereas the fall in oil prices observed from August to the end of 2008 contributed to a decline in fuel prices in the domestic market. The transmission of changes in international oil prices to fuel prices in Poland was mitigated by changes in the zloty exchange rate against the dollar in which fuel contracts are quoted. The strong appreciation of the zloty until July 2008 worked against the rise in fuel prices, while its depreciation in the next few months led to the decline in fuel prices in Poland being far weaker than the decline of oil prices in the world.

Inflation net of food and energy prices (core inflation)

In 2008, the annual growth in prices of consumer goods and services net of food and energy rose gradually from 1.6% in January to 2.9% in November and decreased slightly to 2.8% in December. In the first half of 2008 monthly price changes in this group of goods and services were higher than in the second half of the year. A marked rise in the annual growth rate of services prices and a slight rise in the growth rate of non-food products were conducive to a rise in inflation net of food and energy prices.

The rise in services prices in the reported period was mainly caused by rises in prices connected with home maintenance, including charges for waste disposal,⁵⁹ sewage and water supply services as well as the costs of flat management and administration. In the first half of the year, prices of other services also rose significantly, mainly in the group "restaurants and hotels" and services connected with recreation, culture and health.

The strong rise in the annual core inflation index in August 2008 (to 2.7% from 2.2% in July) was caused, to a great extent, by the positive base effect linked to a fall in the price of Internet services in August 2007.⁶⁰ Price rises of tobacco products triggered by the rise in the excise tax⁶¹ also contributed to the rise in inflation net of food and energy prices observed in 2008. On the other hand, a factor that slightly pushed down the growth of prices in this group of products was a further fall in the prices of goods largely imported from low-cost countries (clothes, footwear and electronic equipment).

Table 48

Changes in prices of the main groups of consumer goods and services in 2007–2008

	CPI	Food and non-alcoholic beverages	Energy	of which:		Core inflation net of food and energy prices	of which:					
				fuels	energy carriers		Goods	Excise products (alcohol, tobacco)	Other goods	Services	Home maintenance	Other services
Structure of weights in CPI basket (%)												
2007	100.0	26.2	16.1	4.0	12.1	57.7	30.4	5.7	24.7	27.3	6.1	21.2
2008	100.0	25.7	15.0	4.2	10.9	59.3	31.4	5.7	25.7	27.9	6.0	22.0
Change in relation to the corresponding period of the previous year (%)												
I 2007	1.6	2.8	3.0	-3.9	5.2	0.7	-1.4	1.6	-2.0	3.0	2.9	3.0
II	1.9	3.2	3.5	-1.3	5.1	0.8	-1.2	1.7	-1.8	3.1	3.1	3.1
III	2.5	4.3	4.8	4.0	5.1	1.0	-1.0	1.8	-1.6	3.2	3.3	3.1
IV	2.3	4.6	2.9	2.6	3.1	1.1	-0.7	1.9	-1.3	3.2	3.6	3.1
V	2.3	4.3	2.5	0.8	3.1	1.4	-0.4	1.9	-1.0	3.4	3.7	3.3
VI	2.6	4.4	3.4	4.1	3.2	1.5	-0.2	2.5	-0.8	3.5	4.0	3.3
VII	2.3	4.4	3.1	2.7	3.2	1.1	0.1	3.6	-0.7	2.2	4.2	1.6
VIII	1.5	2.8	2.1	-0.5	3.1	0.8	0.3	4.4	-0.6	1.3	4.3	0.4
IX	2.3	5.1	2.8	2.5	2.9	0.9	0.4	4.8	-0.6	1.4	4.5	0.5
X	3.0	6.6	4.3	7.6	3.2	1.0	0.4	5.0	-0.6	1.6	4.6	0.7
XI	3.6	7.6	5.8	13.2	3.4	1.1	0.5	5.1	-0.6	1.8	4.7	0.9
XII	4.0	7.9	7.1	18.1	3.7	1.3	0.7	5.4	-0.4	2.0	4.8	1.2

⁵⁹ From January 2008 to December 2008, the growth rate of waste disposal prices rose by 38.1% y/y, which resulted from large rises in charges to local governments. Pursuant to the Regulation of the Council of Ministers, starting from January 2008 most charges for the use of environment were raised, including waste storage (up to PLN 75/Mg in 2008, i.e. by around 200%).

⁶⁰ In August 2007 one of the internet providers introduced a promotional price reduction for its services.

⁶¹ Under the process of adjusting excise tax rates in Poland to minimum rates required by EU legislation, in January 2008 a higher excise tax rate on tobacco products was introduced. The strong rise in their prices triggered by the excise tax rise was observed in the second half of 2008, which was the result of the fact that producers had large inventories of the products manufactured in the previous year.

I 2008	4.0	7.8	6.9	17.0	3.4	1.6	0.2	5.4	-0.9	3.3	8.8	1.8
II	4.2	7.3	8.6	13.8	6.8	1.8	0.3	5.6	-0.8	3.4	9.2	1.8
III	4.1	7.0	7.8	10.1	7.0	2.0	0.6	5.7	-0.5	3.5	9.5	2.0
IV	4.0	6.8	6.8	6.0	7.2	2.1	0.5	5.9	-0.6	3.8	9.5	2.3
V	4.4	7.0	9.0	7.0	9.8	2.1	0.4	6.0	-0.8	3.9	9.8	2.3
VI	4.6	7.6	9.3	7.5	10.0	2.2	0.4	5.8	-0.8	4.1	9.9	2.6
VII	4.8	7.8	9.9	8.2	10.6	2.2	0.2	5.6	-1.0	4.4	10.1	2.9
VIII	4.8	6.9	9.8	6.8	10.9	2.7	0.3	6.4	-1.1	5.5	10.3	4.2
IX	4.5	5.1	9.5	3.7	11.7	2.9	0.6	7.1	-0.9	5.5	10.2	4.2
X	4.2	4.0	9.7	1.9	12.7	2.9	0.6	7.5	-0.9	5.5	10.3	4.2
XI	3.7	2.9	8.2	-6.4	14.0	2.9	0.7	8.1	-1.0	5.5	10.3	4.2
XII	3.3	3.2	5.6	-15.0	13.8	2.8	0.5	8.2	-1.2	5.4	10.3	4.0
I-XII 2007	2.5	4.9	3.8	4.1	3.7	1.0	-0.2	3.3	-1.0	2.5	4.0	2.0
I-XII 2008	4.2	6.1	8.4	4.7	9.9	2.3	0.4	6.4	-0.9	4.5	9.9	3.0
Share in CPI (pp)												
I 2007	1.6	0.7	0.5	-0.2	0.6	0.4	-0.4	0.1	-0.5	0.8	0.2	0.6
II	1.9	0.8	0.6	-0.1	0.6	0.5	-0.4	0.1	-0.5	0.8	0.2	0.6
III	2.5	1.1	0.8	0.2	0.6	0.6	-0.3	0.1	-0.4	0.9	0.2	0.7
IV	2.3	1.2	0.5	0.1	0.4	0.7	-0.2	0.1	-0.3	0.9	0.2	0.7
V	2.3	1.1	0.4	0.0	0.4	0.8	-0.1	0.1	-0.2	0.9	0.2	0.7
VI	2.6	1.1	0.6	0.2	0.4	0.9	-0.1	0.1	-0.2	1.0	0.2	0.7
VII	2.3	1.1	0.5	0.1	0.4	0.6	0.0	0.2	-0.2	0.6	0.3	0.4
VIII	1.5	0.7	0.3	0.0	0.4	0.4	0.1	0.2	-0.2	0.4	0.3	0.1
IX	2.3	1.3	0.5	0.1	0.4	0.5	0.1	0.3	-0.2	0.4	0.3	0.1
X	3.0	1.7	0.7	0.3	0.4	0.6	0.1	0.3	-0.2	0.4	0.3	0.1
XI	3.6	2.0	0.9	0.5	0.4	0.6	0.2	0.3	-0.1	0.5	0.3	0.2
XII	4.0	2.1	1.1	0.7	0.5	0.8	0.2	0.3	-0.1	0.6	0.3	0.3
I 2008	4.0	2.0	1.0	0.6	0.4	1.0	0.1	0.3	-0.2	0.9	0.5	0.4
II	4.2	1.9	1.3	0.5	0.7	1.1	0.1	0.3	-0.2	0.9	0.5	0.4
III	4.1	1.8	1.2	0.4	0.8	1.2	0.2	0.3	-0.1	1.0	0.6	0.4
IV	4.0	1.7	1.0	0.2	0.8	1.2	0.2	0.3	-0.2	1.1	0.6	0.5
V	4.4	1.8	1.3	0.3	1.1	1.2	0.1	0.3	-0.2	1.1	0.6	0.5
VI	4.6	1.9	1.4	0.3	1.1	1.3	0.1	0.3	-0.2	1.2	0.6	0.6
VII	4.8	2.0	1.5	0.4	1.1	1.3	0.1	0.3	-0.3	1.2	0.6	0.6
VIII	4.8	1.7	1.5	0.3	1.2	1.6	0.1	0.4	-0.3	1.5	0.6	0.9
IX	4.5	1.3	1.4	0.2	1.3	1.7	0.2	0.4	-0.2	1.5	0.6	0.9
X	4.2	1.0	1.5	0.1	1.4	1.7	0.2	0.4	-0.2	1.5	0.6	0.9
XI	3.7	0.8	1.2	-0.3	1.5	1.7	0.2	0.5	-0.3	1.5	0.6	0.9
XII	3.3	0.8	0.9	-0.7	1.5	1.6	0.2	0.5	-0.3	1.5	0.6	0.9
I-XII 2007	2.5	1.3	0.6	0.2	0.4	0.6	-0.1	0.2	-0.3	0.7	0.2	0.4
I-XII 2008	4.2	1.6	1.3	0.2	1.1	1.4	0.1	0.4	-0.2	1.3	0.6	0.7

Source: NBP calculations based on GUS data.

Appendix 3

Balance of payments⁶²

In 2008 the current account deficit of the balance of payments amounted to EUR 19.6 billion (as compared to EUR 14.6 billion in 2007). The current account deficit in relation to GDP rose from 4.7% in 2007 to 5.4% in 2008. The deterioration in the current account balance was connected with the deepening of the deficit in goods and – although to a lesser extent – with the lowering of the surplus in transfers. The positive balance of services and the negative balance of income continued at a level similar to the one reported in 2007.

Even though since 2008 Q2 the recession in EU-15 economies, Poland's major trading partners, has been deepening, in the first quarters of 2008 the growth of Polish export was slightly above the 2007 average, stimulated by relatively brisk sales to CIS and CEEC. Exports grew on the back of higher sales of machinery and transport equipment, i.a. because Polish branches of car manufacturers launched the production of new car models. On the other hand, a slight decline occurred in exports of goods most sensitive to changes in the business climate, i.e. car parts and consumer durables, these segments being dominated by foreign enterprises and corporate trade. Furthermore, the appreciation of the zloty in the first half of 2008 tended to contain the growth in exports of goods at a less advanced stage of processing.

Over the first three quarters of 2008 imports also grew relatively fast, reflecting the continuation of a strong domestic demand (both consumer and investment), relatively robust demand of export-oriented companies (primarily from the automobile sector) and the prices of commodities (especially oil) rising over the first six months of 2008.

A visible drop in economic activity in the world's major economies in 2008 Q4 which contributed to the decline in the value of international trade, led to a decline also in Polish exports and imports (by 5.0% and 0.8% y/y respectively). The drop in exports was observed across most product groups. A clear decline was recorded in the value of export of intermediate goods and cars. The scale of the decline in imports was lower due to the continuation of relatively robust imports of consumer goods coupled with lower imports of intermediate goods (due to a considerable reduction in exports) and investment goods.

In 2008 as a whole the value of exports rose by 12.5%⁶³ (the slowest growth since Poland's accession to the European Union in 2004), whereas the value of imports grew by 15.7%.⁶⁴ In effect of the higher growth in imports than in exports, the foreign trade deficit in Poland deepened for the third consecutive year (up to EUR 24.8 billion as compared to EUR 18.6 billion in 2007 according to preliminary GUS data) primarily due to the deepening of the deficit in trade with China (by EUR 2.5 billion to EUR -10.4 billion) and with Russia (by EUR 2.0 billion to EUR -7.8 billion). Meanwhile, the positive balance of trade with the European Union member states remained broadly similar to that in 2007 (deficit deepened in trade with the EU-15 countries, whereas the surplus in trade with the new member states widened).

Although 2008 saw sizable fluctuations in the exchange rate, these had a limited impact on the changes in the value of Polish foreign trade due to the large significance of corporate trade. Between January and July 2008 the exchange rate of the zloty continued to appreciate (the

⁶² The cut-off date for the data accounted for in this Appendix is 20 April 2009.

⁶³ This was due to the growth in the volume of exports by 5.3% (as compared to the 9.4% growth in 2007) and in transaction prices by 6.8% (as compared to the 5.9% growth in 2007).

⁶⁴ This was due to the 5.7% rise in the volume of imports (compared to 15.1% in 2007) and the 9.5% increase in transaction prices (compared to 3.8% in 2007). As a result of higher growth in transaction prices in imports than in exports, the terms of trade in Polish foreign trade deteriorated to 97.5 (as against 102.0 in 2007).

nominal exchange rate strengthened *vis-à-vis* the euro and the US dollar by 11% and 17% respectively). August 2008 saw a change in the exchange-rate trends followed by currencies of a number of developing countries, including the zloty which began to depreciate (between August and December 2008 the nominal exchange rate of the zloty weakened *vis-à-vis* the euro and the US dollar by 39% and 69% respectively). In the whole 2008 the nominal exchange rate of the zloty weakened against the euro by 23% and against the US dollar by 41%. The real effective exchange rate⁶⁵ deflated by the index of unit labour costs in manufacturing (ULC)⁶⁶ strengthened by 11% in the first six months of 2008, but weakened by 11% in the second half of the year. In the whole 2008 the real effective exchange rate deflated by ULC depreciated by 2%.

In 2008 the main financial indices reflecting the external equilibrium of the Polish economy suffered deterioration as against the preceding years. However, the ratio to GDP of the current account balance, the current and capital account balance and the balance on trade in goods remained at a secure level. The growing use of funds from the European Union was conducive to improving the ratio of the current and capital account balance to GDP. In the context of the global financial crisis the conditions for access to foreign financing worsened, and the inflow of foreign direct investments weakened. In 2008 the current account deficit was financed in 44% with the inflow of foreign capital in the form of direct investments (as compared to 90% in 2007).

Table 49**Selected warning indicators for Poland**

Warning indicator	2004	2005	2006	2007	2008
Current account balance/GDP (%)	-4.0	-1.2	-2.7	-4.7	-5.4
Current account balance + capital balance/GDP (%)	-3.5	-0.9	-2.1	-3.6	-4.3
Balance on the trade in goods/GDP (%)	-2.2	-0.9	-2.0	-4.0	-4.6
Direct investment/current account balance (%)	116.1	184.4	115.8	90.3	44.0
(Current account balance + capital balance + direct investment)/GDP (%)	1.1	1.4	1.0	0.6	-2.0
Foreign debt servicing/exports of goods and services (%)	35.4	32.3	29.7	33.7	34.1
Foreign reserves expressed in terms of monthly imports of goods and services	4.0	4.7	3.9	3.9	3.4

Source: NBP calculations based on GUS and NBP data.

⁶⁵ In the case of the effective exchange rate deflated by unit labour costs, the calculations were based on quarterly data.

⁶⁶ An index reflecting production costs is a measure to assess changes in the competitive position of domestic producers in international markets. Furthermore, as most trade has so far involved products of the manufacturing industry, the real exchange rate deflated by unit labour costs in manufacturing is an appropriate competitiveness measure. Calculations are based on ULC estimates for 2008 Q4.

Appendix 4

Money and credit⁶⁷

In 2008 the growth of household loans slowed down gradually. This concerned both consumer and housing loans. The key factor affecting lending was the global financial crisis which started to intensify in September 2008, limiting the supply of CHF-denominated mortgage loans. On the demand side, lending was limited due to the deteriorating economic climate

In 2008 the growth of corporate loans remained at a stable level. Yet, a change was observed in the structure of granted loans; the growth of housing loans noted a marked decline, while the growth of investment loans increased. The change in the debt structure reflects the process of enterprises continuing subsequent stages of started investments.

The intensification of the global financial crisis and the related falls in asset prices drove changes in the structure of households' financial assets. Slides in Warsaw Stock Exchange indexes contributed to the decline in the share of investment funds and stocks in the structure of households' financial assets. On the other hand, a growing interest in making bank deposits was observed, reinforced at the end of 2008 by the banks' policy aimed at increasing the deposit base by offering high interest on deposits. However, the growth of corporate loans gradually declined throughout 2008.

The growth rate of the M3 aggregate rose until July 2008 and then began to decline. Despite a considerable increase in currency in circulation in 2008 Q3 connected with a temporary decline in confidence in the banking system following the collapse of Lehman Brothers, a fall in M3 liquidity was observed throughout the year as a result of household and corporate funds being transferred to fixed-term deposit accounts (deposits for maximum 2 years).

Loans to households

In 2008 the nominal value of households' bank debt increased by PLN 113.8 billion to approx. PLN 367 billion, while in 2007 the growth in households' bank debt amounted to approx. PLN 70 billion. Such a high rise in bank debt was largely driven by exchange rate fluctuations. After adjustment for exchange rate fluctuations, the rise in debt was lower by approx. PLN 28 billion.⁶⁸

The fastest growth was recorded in housing loans. Yet, their growth rate gradually declined from 55.9% y/y in January to 42.1% y/y in December 2008, with the average annual growth rate in this loan category at 59.9%. As compared with 2007, this meant a decline in the average annual growth of housing loans by approx. 10 percentage points.

The rapid rise in the value of housing loans in the first half of 2008 was mainly driven by higher household income and a high level of competition in this segment of the banking market, translating into a low cost of credit and a rising value of real estate used as mortgage collateral. However, as a result of the global financial crisis, in the second half of 2008 banks tightened their loan-granting policies and limited the supply of household loans. Banks justified their measures (*inter alia*, increased margins and non-interest costs of credit, lower LTVs), by rising credit risk connected with the anticipated deterioration of economic conditions, and by unfavourable

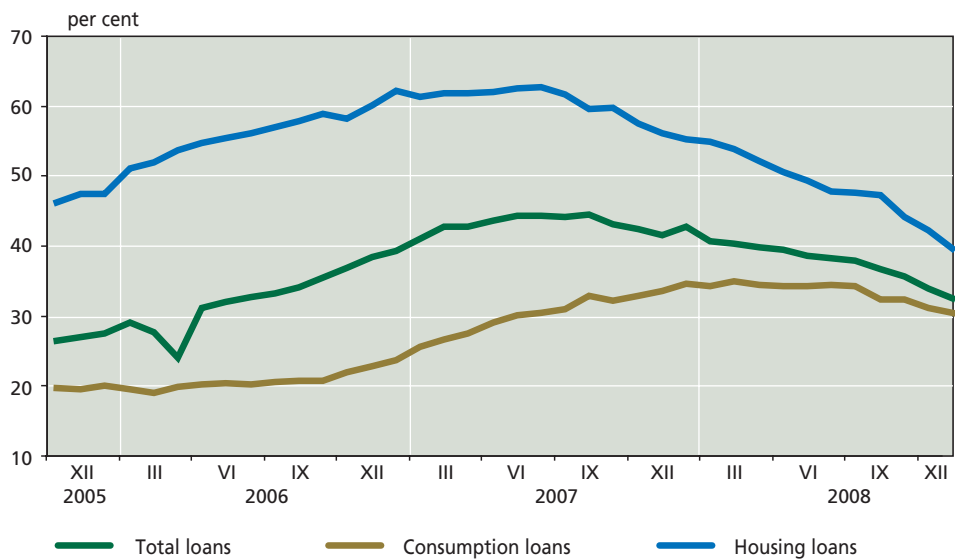
⁶⁷ Official NBP monetary data remain under the influence of exchange rate developments. Due to the strong appreciation of the zloty until July 2008, followed by its considerable weakening, this factor was of considerable importance in 2008. Consequently, unless otherwise noted, monetary data presented in the Appendix refer to figures adjusted for seasonal fluctuations of the zloty exchange rate with respect to the main currencies.

⁶⁸ In 2007 after adjustment for exchange rate fluctuations, the rise in debt was PLN 17.0 billion higher than suggested by nominal values.

assessment of their current and expected financial condition. However, the most important limitation on the supply side was the strong reduction – since October 2008 – in the availability of CHF-denominated loans, which was reflected in the changing structure of new loans.

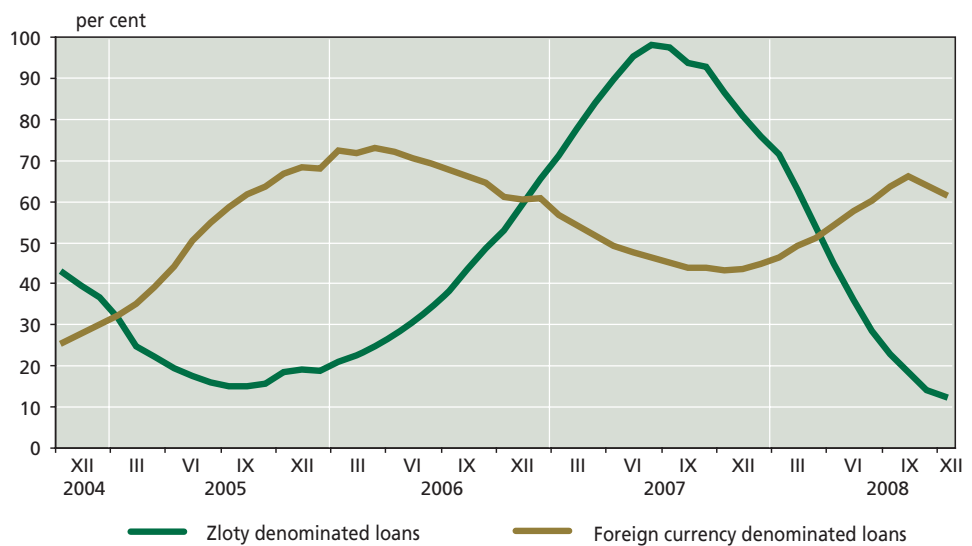
The share of foreign-currency-denominated loans in housing loans to households increased from 43% in January to 67% in October 2008. Subsequent months brought a sudden decline in the share of foreign-currency-denominated loans in the number of total new housing loans (down to 39% in December 2008), driven, on the one hand, by their limited availability, and, on the other hand, by the considerable depreciation of the zloty.

Figure 26
Household bank debt, annual growth rate



Source: NBP data.

Figure 27
Housing loans to households, annual growth rate

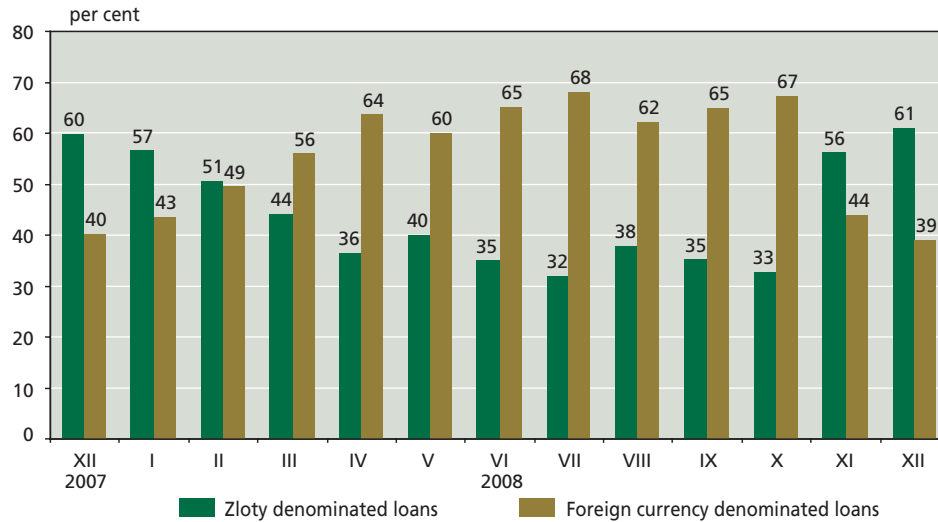


Source: NBP data.

2008 brought no significant changes in the growth of consumer loans, which noted only a slight decline from 33.4% y/y in January to 30.9% y/y in December 2008. The growth rate remaining at a relatively high and stable level was connected with the still good income situation of households.

Figure 28

New housing loan agreements – currency structure



Source: NBP – structure prepared on the basis of information obtained for interest rate reporting purposes from a sample of 20 selected banks whose share in the market for loans to the non-financial sector accounts for approx. 75%.

Loans to enterprises

The nominal value of corporate debt to banks increased in 2008 by PLN 48.3 billion to approx. PLN 216 billion (as compared to an increase of approx. PLN 32 billion in 2007). After adjustment for exchange rate fluctuations, the rise in debt was lower by approx. PLN 5 billion.⁶⁹

In December 2008 the growth in corporate debt to the banking sector amounted to 25.0% y/y as compared with 28.2% in January. The highest growth rate was recorded in August (29.0% y/y), and since then a gradual decline could be observed. This was driven by the tightening of loan-granting criteria and increased uncertainty about future economic climate resulting from the turmoil in the global financial markets and its possible impact on the Polish economy.

One of the main reasons for the sustained relatively high corporate demand for loans was the need to continue the already commenced investment projects. As suggested by the NBP's surveys,⁷⁰ in 2008 Q4 the investment continuation indicator remained at a high level (97.2%), showing only a slight decline of 0.8 percentage points as compared with 2007 Q4. The investment continuation process, involving the shift from the initial stage of investment projects (i.e. land and real estate purchases) to the stage of financing expenditures directly contributing to the increase in production capacity, was reflected in changes in the growth of various categories of corporate debt. The growth of property loans decreased from 68.1% y/y in January to 28.5% y/y in December 2008, coupled with a rise in the growth rate of investment loans from 10.9% y/y to 31.2% y/y. At the same time, the growth of working-capital loans and loans on current account decreased from 27.7% y/y in January to 20.5% y/y in December 2008.

⁶⁹ In 2007, after adjustment for exchange rate fluctuations, the rise in debt was PLN 3.2 billion higher than indicated by nominal values.

⁷⁰ See: *Information on the condition of the enterprise sector, including the economic climate in 2008 Q4*, NBP.

Figure 29
Corporate bank debt, annual growth rate



Source: NBP data.

According to balance of payments data, foreign debt continued to be a major source of corporate financing. Yet, the growth rate of EUR-denominated foreign debt in 2008 was considerably lower compared to 2007 (11.7% y/y against 21.1% y/y respectively). This was a result of the data from 2008 Q4, when the value of debt fell by EUR 5.1 billion. This was connected with a significant tightening of lending conditions for the corporate sector. Enterprises were granted mainly non-trade loans which increased by 18.4% y/y in 2008. At that time, the value of trade loans declined by 1.8% y/y; a fall was also recorded in debt resulting from debt securities held by foreign portfolio investors (by 4.4% y/y).

Financial assets of households

The crisis has not spared the household sector whose financial assets fell in 2008 by PLN 3.6 billion (0.6% y/y). As a result of the securities portfolio revaluation and the cancellation of investment-fund participation units, the value of investment funds' assets decreased by PLN 66.9 billion (52.1% y/y). On the other hand, the value of shares held by households declined by PLN 32.2 billion (52.4% y/y).

During a bear market bank deposits became an attractive alternative to non-banking savings. A factor that contributed to this was gradually rising interest on bank deposits which rose from 4.3% in January to 6.5% in December 2008. As a result, the growth in household deposits amounted to PLN 69.6 billion (26.0%) in 2008, as compared to PLN 24.6 billion (10.1%) in 2007, and at the end of the year household deposits reached the total of approx. PLN 337 billion.

The bankruptcy of the American investment bank Lehman Brothers in September 2008 and the threat of other banks going bankrupt were of considerable importance. Faced with the ensuing global decline in confidence in the financial system and in fear of uncontrolled withdrawal of bank deposits, many countries, including Poland, decided to increase bank deposit guarantees. This was reflected in sizable monthly changes in household deposits. These deposits rose until the end of September 2008 but in October – when growing uncertainty about deposits' security was observed – funds deposited in bank accounts fell by PLN 2.2 billion. In subsequent months, when the situation calmed down, banks again noted a rise in deposits (by PLN 6.5 billion in November and PLN 15.3 billion in December).

Table 50

Financial assets of households – structure

Structure	Values in PLN billion					Change in 2008		Change in 2008 Q4	
	Dec 2007	Mar 2008	Jun 2008	Sep 2008	Dec 2008	PLN billion	%	PLN billion	%
1. Deposits (with banks and credit unions)	267.2	289.6	297.0	310.2	336.8	69.6	26.0	26.6	7.9
2. Shares ^{1, 10}	61.4	54.3	43.6	40.0	29.2	-32.2	-52.4	-10.8	-36.9
3. Investment fund assets ²	128.4	102.6	90.8	80.4	61.6	-66.9	-52.1	-18.8	-30.6
4. Life insurance undertaking ³	63.1	63.0	67.0	70.2	72.9	9.8	15.6	2.7	3.7
5. Treasury bonds ⁴	10.4	10.5	10.3	10.3	12.2	1.8	17.6	1.9	15.3
6. Treasury bills ⁵	0.3	0.2	0.3	0.3	1.3	0.9	291.5	0.9	72.7
7. Notes and coin in circulation (excluding vault cash) ⁶	77.2	77.8	81.9	82.5	90.7	13.6	17.6	8.2	9.0
8. Non-Treasury securities ⁷	3.5	3.5	3.7	4.0	3.2	-0.3	-8.7	-0.8	-25.8
TOTAL (items 1–8)	611.4	601.5	594.6	597.9	607.8	-3.6	-0.6	9.9	1.6

¹ Shares and allotment certificates deposited in accounts in brokerage offices and houses and in trust companies – for semi-annual periods according to GUS data and Polish Financial Supervision Authority (KNF) data, for the end of the Q1 and Q3 according to the KNF data, for remaining periods NBP estimates.

² Does not account for data from funds known to be oriented at legal entities only.

³ Figures represent value of technical provisions in life assurance (including provisions where investment risk is borne by the policy holder).

⁴ According to data of the Ministry of Finance.

⁵ According to data of the Domestic Operations Department of the NBP.

⁶ It was assumed that the whole cash in the market was held by households.

⁷ According to data of the Domestic Operations Department of the NBP based on the reports of money market dealers (banks). The data include: bank bonds in line with the Act on Bonds, bank securities issued in line with the Banking Act, other non-Treasury securities (including corporate bonds and other short-term debt instruments issued in line with the Act of Bonds, Bills of Exchange Law, Civil Code), mortgage bonds, municipal bonds issued by local governments.

⁸ According to preliminary data.

⁹ Own estimates.

¹⁰ Data changed after revision by the Polish Financial Supervision Authority.

Source: NBP data.

Deposits of enterprises

The negative impact of the global financial crisis on the Polish economy manifested itself in the corporate sector's worsening financial performance in 2008 Q4, which was reflected in a strong decline in the growth of corporate deposits in the last few months of the year – although the growth in deposits displayed a downward trend throughout 2008 (from 13.7% y/y in January to 1.1% y/y in December 2008). As a result, in 2008 the growth in deposits amounted to PLN 1.6 billion (as compared with PLN 20.2 billion in 2007), and at the end of 2008 a total of PLN 150 billion was deposited in corporate accounts. Enterprises used the deposited funds to finance their day-to-day activities and to continue their investment projects.

Monetary aggregates

In 2008 the initially observed increase in the growth of the M3 aggregate (from 14.4% y/y in January to 18.7% y/y in July) was followed by a decline to 16.1% y/y in December 2008. At the same time, significant changes in the structure of the M3 aggregate were observed. The level of currency in circulation rose steadily, with its largest growth being recorded in October (by PLN 8.1 billion), which was driven by a temporary fall in confidence in the banking system in response to the intensifying turmoil in international financial markets.

In the first half of 2008, the liquidity of M3 money, measured with the share of cash and current deposits (i.e. M1 money) in M3, reached approx. 57%, and began to fall gradually in the second half of 2008 (to approx. 52% in December). Although the strong growth in currency in circulation, particularly in the last few months of 2008, was conducive to a rise in M3 liquidity, the parallel considerable flow of funds from current accounts held by households and enterprises to higher interest bearing fixed-term deposits contributed to the growth in less liquid components' share in M3. The flow of household savings withdrawn from investment funds was an additional factor leading to the rise in fixed-term deposits (with maturities up to 2 years).

Figure 30

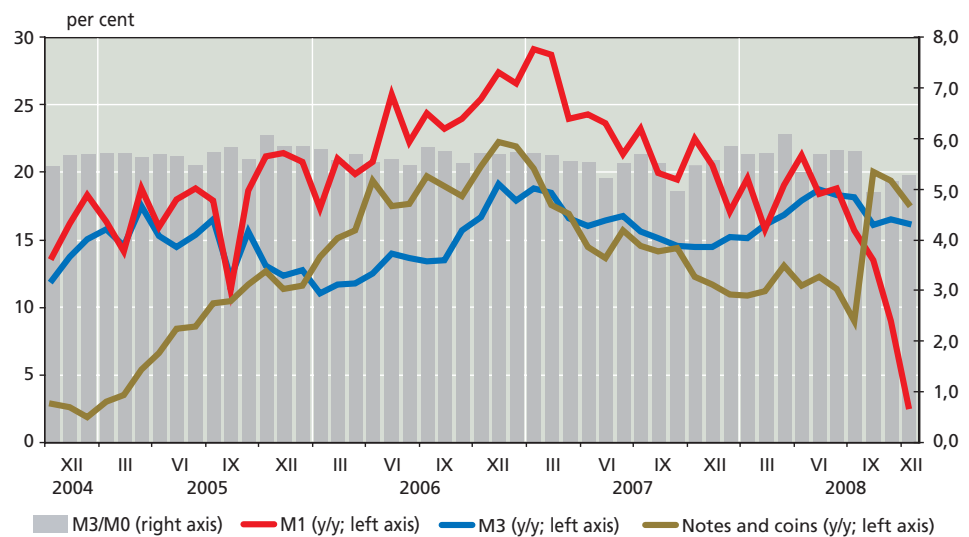
Corporate deposits, annual growth rate



Source: NBP data.

Figure 31

Monetary aggregates



Source: NBP data.

Appendix 5

Inflation projections of the NBP

The *Inflation Report* is an important instrument of the central bank's communication with market participants. The document presents the Monetary Policy Council's assessment of the current and future macroeconomic developments influencing inflation.

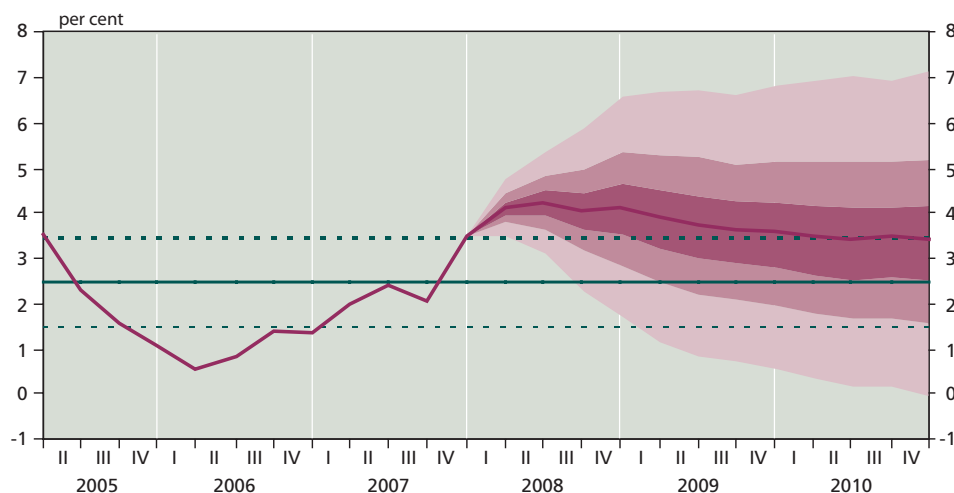
Starting from August 2004 *Inflation Reports* contain inflation projections which are one of the inputs into the Monetary Policy Council decision-making process concerning NBP interest rates. The publication of projection results along with the assessment of the balance of factors affecting inflation enhances the transparency of pursued monetary policy.

The projection presented in Chapter 4 of the *Inflation Report* is prepared by a team of NBP economists with the use of the NECMOD econometric model of the Polish economy (its earlier version – ECMOD – was used until February 2008)⁷¹. The horizon of each projection encompasses the year of its preparation and two subsequent calendar years. The projection is prepared with the assumption of unchanged NBP interest rates.

The fan charts presented below depict the results of projections published in 2008. The fan charts reflect the main sources of uncertainty (e.g. uncertainty connected with food price developments).

Figure 32

Central inflation projection, fan chart of inflation and inflation target of MPC – February 2008

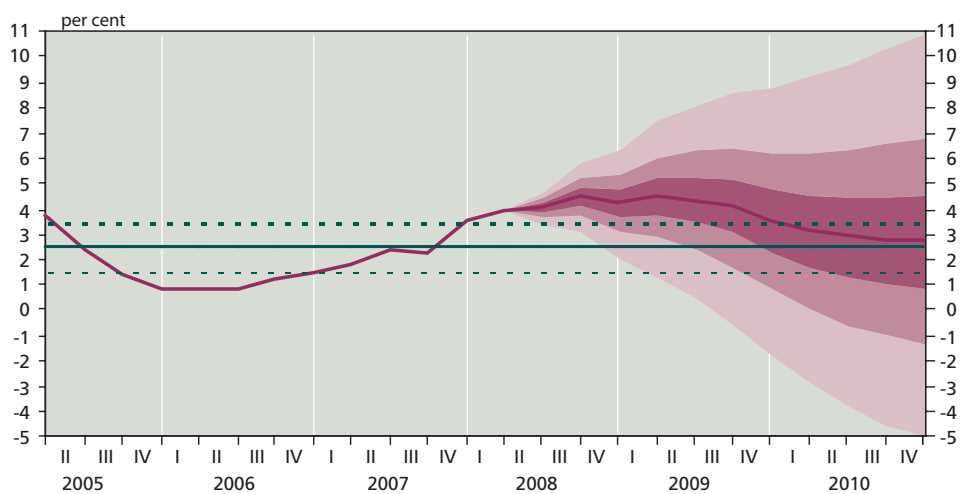


Source: *Inflation Report*, February 2008, NBP.

⁷¹ The description of the ECMOD model was published in Fic T., Kolasa M., Kot A., Murawski K., Rubaszek M., Tarnicka M., "Model gospodarki polskiej ECMOD" [ECMOD – a model of the Polish economy], *Materiały i Studia*, NBP, No. 194, May 2005. The description of the new forecasting model NECMOD is available online on the NBP official website at http://www.nbp.pl/Publikacje/o_polityce_pienieznej/raport_o_inflacji/NECMOD_pl.pdf.

Figure 33

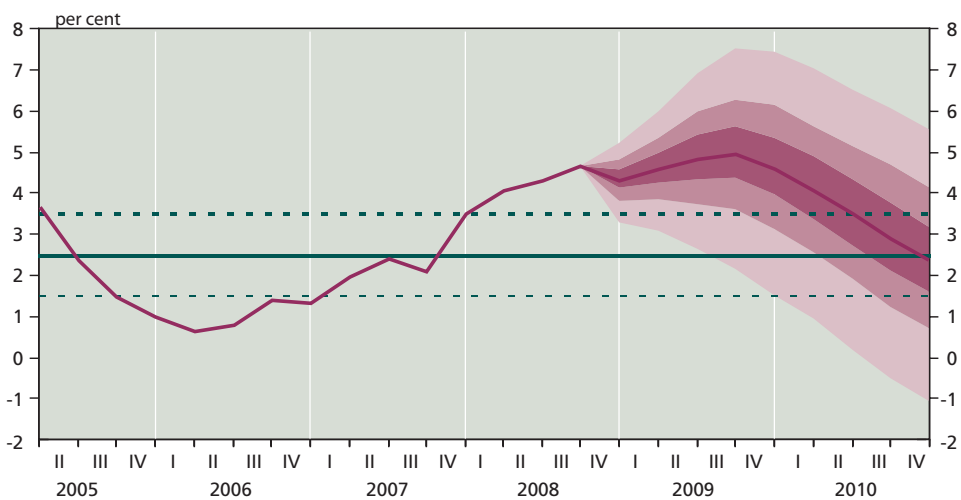
Central inflation projection, fan chart of inflation and inflation target of MPC – June 2008



Source: *Inflation Report*, June 2008, NBP.

Figure 34

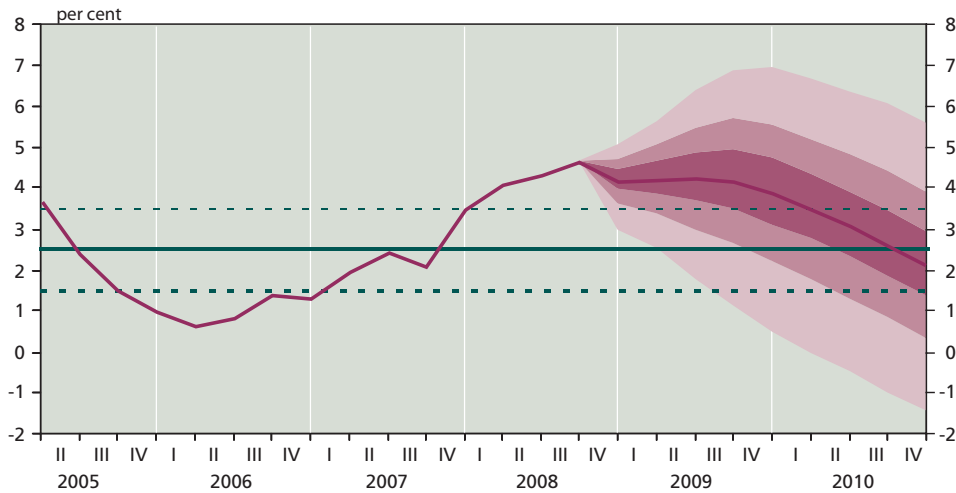
Central inflation projection, fan chart of inflation and inflation target of MPC – October 2008



Source: *Inflation Report*, October 2008, NBP.

Figure 35

Central inflation projection and fan chart of inflation* and inflation target of MPC – October 2008



* After accounting for the quantification of risks for inflation primarily connected with deteriorating outlook of global economic growth between 26 September and 16 October 2008.

Source: *Inflation Report*, October 2008, NBP.

How should fan charts be interpreted?

Every projection of future values of economic indicators is subject to uncertainty. Central banks present the size and scope of quantifiable inflation projection risk through the use of fan charts. The width of the “fan” corresponds to the overall level of risk, which usually changes from quarter to quarter. The further ahead, the wider it gets, as the uncertainty of the assessment of the future usually grows proportionally to the length of the time horizon.

In inflation projections prepared by the NBP, the probability distribution of inflation’s possible realisations is determined for each quarter. The expected values of distributions in particular quarters are adopted as the central projection. At the same time, 30-percent confidence intervals of are constructed around the distribution medians. These constitute the central band of the chart, indicated with the darkest shade of the fan. Thus, the probability of inflation settling within this band is equal to 30%. Next the fan is expanded on both sides so that the probability of the variable running within the extended boundaries increases by another 30 percentage points – 15 points from above, and 15 from below. The subsequent extensions create successive bands of the fan marked with increasingly lighter shades. The entire fan represents a 90-percent confidence band around the medians – there is a 90-percent probability of inflation running within the fan.

For example, the chart from the February 2008 inflation projection shows that the probability of inflation ranging in 2008 Q4 between 1.5% and 2.5% amounts to approx. 10%. Similarly, inflation will be ranging between 2.5% and 3.5% with approx. 20-percent probability. The inflation projection is characterised by slight asymmetry, which reflects approximately equal probabilities of inflation running above as well as below the central path.

The uncertainty presented in the fan charts is consistent with the historical errors of forecasts based on the ECMOD/NECMOD model, which ensures that most kinds of inflation projection uncertainty have been accounted for. The change in the projection’s uncertainty in relation to past forecasting periods is estimated based on the change of uncertainty of exogenous variables.

Appendix 6

Minutes of Monetary Policy Council decision-making meetings held in 2008

Minutes of the Monetary Policy Council decision-making meeting held on 30 January 2008

During the meeting, the Monetary Policy Council discussed the outlook for inflation developments in the context of the past, current and, primarily, anticipated economic situation.

The discussion at the meeting focused on: current inflation developments, including food price changes, situation in the labour market, the outlook for economic growth and the level of interest rates in Poland and abroad. The Council discussed the influence of these factors on the future inflation in Poland.

While discussing current inflation, the Council analysed the causes of the annual growth of consumer prices in December increasing and remaining both above the NBP inflation target of 2.5% and the upper limit for deviations from the target set at 3.5%. It was pointed out that CPI growth in December was primarily driven by the further acceleration of food and fuel prices growth that resulted from global developments. It was emphasized that those developments were beyond the control of domestic monetary policy and that a rise in inflation driven by accelerating growth of food and fuel prices was also observed in many other countries. It was pointed out that in December net core inflation recorded a minor rise and remained relatively low. At the same time, it was emphasised that the remaining four core inflation measures also increased in December. In the opinion of some Council members, the upward trend in net core inflation recorded in the last months of 2007 reflected rising demand pressure. It was also indicated that the rise in inflation in December 2007 resulted also, among other things, from continuing high growth of prices of some services.

While discussing food price developments, some members of the Council indicated that the scale of food price acceleration and the ensuing rise in CPI inflation in Poland and in many other countries significantly exceeded expectations. It was pointed out that accelerating food price growth was driven by external factors, mainly by increased demand for food on the part of rapidly developing emerging economies and a rise in production of biofuels. Some Council members assessed that increased growth of food prices might continue over a longer period due to, among other things, persistently growing demand for food and limited possibilities to augment food supply in the short term. They pointed to the fact that changes in the growth rate of food prices were previously treated as temporary shocks. In the present situation they might prove to be relatively permanent and act asymmetrically, i.e. leading to persistently relatively high inflation. In the opinion of those members, net core inflation is currently less useful an indicator of inflationary pressure than in the situation when shocks on the food markets are relatively short-lived and symmetrical. Other members of the Council indicated that it was difficult to assess the sustainability of the increased growth rate of food prices.

While addressing the future inflation, some members of the Council assessed that in the months to come a rise in net core inflation should be expected, primarily as a result of growth of regulated prices, in particular energy prices, as well as accelerating growth of prices of certain services. Those members assessed that the rise in net core inflation and the continuing high growth of food prices will probably result in CPI inflation remaining above the inflation target throughout 2008. In this context, some Council members pointed out that accelerating inflation resulting from increased growth of food prices and a rise in regulated prices is beyond the scope of domestic monetary policy. Other members, however, emphasized that a rise in CPI inflation might boost inflation expectations. Moreover, they indicated that certain deterioration in inflation expectations

had already been observed. Attention was drawn to the fact that the deterioration in inflation expectations had come about amidst low unemployment rate and tight labour market, which might increase the likelihood of the so-called second round effects.

Some members of the Council assessed that Poland is likely to cease fulfilling the Maastricht price stability criterion within a short time. Other members, however, pointed out that meeting the price stability criterion would become relevant only after the scheduled date of Poland's joining the euro area had been fixed.

While discussing the labour market situation, it was pointed out that wage growth in the corporate sector in December 2007 was lower than in the preceding months, and its decline as compared with November 2007 was stronger than it might result from the statistical effect of the dates of bonus payments in certain sectors being different than in 2006. In the opinion of some Council members, this might suggest that wage pressure in the corporate sector was likely to diminish. Moreover, those members assessed that labour productivity growth in the enterprise sector should follow an upward trend in the coming period due to investments made in the past as well as employment growth lower than in 2007, which would be conducive to reducing unit labour costs in this sector. They also argued that high wage growth did not have to lead to growing inflationary pressure given the good financial standing of enterprises. In this context, they pointed out that, as suggested by the findings of enterprise surveys, the scale of wage increases scheduled for 2008 Q1 in the enterprise sector was moderate and that the wage rises would lead to price increases only in a small part of the surveyed enterprises. They also estimated that considerable pay rises in the public finance sector were rather unlikely as this would require amendments to the Budget Act for 2008.

Other members of the Council pointed out that in December the annual wage growth in the corporate sector continued to outpace labour productivity growth, which was conducive to rising consumption demand and inflationary pressure. Moreover, some members indicated that the recent period had been marked by intensifying wage demands in the public finance sector. They emphasised that a considerable rise in wages in this sector would lead to increasing domestic demand as well as demands of wage increases in other sectors of the economy, which would be conducive to growing inflationary pressure.

In the opinion of some members of the Council, tight labour market reflected in the rapid decline in unemployment rate and a swift labour demand growth would not diminish significantly in the time to come due to economic emigration of Poles and persisting differences in the level of wages between Poland and Western European countries. Other members argued that the expected slowdown in the economic growth in Western European countries might result in certain emigrants returning to Poland, which would be conducive to diminishing wage pressure.

While addressing the changes in external factors affecting the Polish economy, the discussants pointed at further deterioration in the outlook for economic growth in the United States. It was indicated that this increased the likelihood of a slowdown in the world economy, in particular in Great Britain and, consequently, the euro area. Attention was drawn to the simultaneous increase in the uncertainty about the outlook for growth in the world economy. It was argued that considerable drops in equity prices in the global financial markets might – similarly to 2001 – become one of the factors contributing to a deterioration in investor expectations and weakening economic growth in Europe.

While discussing the outlook for economic growth in Poland, it was pointed out that December data on industrial output and retail sales were significantly below expectations. In the opinion of some Council members, those data might point at a gradual decline in the economic growth in Poland, which would ease the demand pressure and, consequently, inflationary pressure. Those members pointed out that the likely slowdown in the world economy might lead to a slowdown in economic growth in Poland. They indicated that the turmoil in the global financial markets in January 2008 also affected the Warsaw Stock Exchange and emphasised that

the resulting possible deterioration in investor expectations might contribute to weakening the economic growth in Poland.

Other members of the Council thought it was currently difficult to assess whether the December data suggested a decline in economic activity in Poland and that only the data referring to the subsequent months would allow an assessment whether there was a decline in GDP growth. Those members pointed out that in 2007 Q3 domestic demand continued to grow faster than GDP suggesting an increase in inflationary pressure. In the opinion of those members, the increase in domestic demand was driven by high growth in lending. Moreover, they assessed that high growth in corporate lending indicated that investment growth might be sustained at a high level, which would be conducive to maintaining fast economic growth. Some discussants pointed out that the fast growth in bank deposits might possibly result in increased lending growth and stronger demand pressure. Moreover, some members of the Council indicated that the slowdown in economic growth in the United States would affect the economic activity in the euro area, and consequently in Poland, after a certain time lag. Those members assessed that the economic slowdown in emerging economies will have a smaller scale than in the United States and the euro area and that the weakening economic growth in Poland would not significantly reduce the labour market tensions.

While discussing exchange rate developments, some Council members pointed out that in 2007 the zloty exchange rate both against the US dollar and against the euro had appreciated, and that in January 2008 the nominal effective exchange rate had been stronger than accounted for in the October projection, which was conducive to diminishing inflationary pressure. It was emphasised that despite the turmoil in the international financial markets observed in January the zloty exchange rate remained stable. On the other hand, some discussants indicated that zloty appreciation might stem from the appreciation of the real equilibrium exchange rate related to the convergence process. Moreover, it was pointed out that it was currently difficult to assess the sustainability of factors which had led to zloty appreciation in the previous period. It was also argued that slump in the global financial markets might increase the likelihood of capital outflow from emerging markets which might be conducive to zloty exchange rate depreciation.

While addressing monetary policy, it was pointed out that in January 2008 interest rates were lowered considerably in the United States and further lowering of interest rates was expected, and that, as anticipated by financial markets, interest rates in the euro area would probably also be reduced. Some Council members indicated that certain central banks eased monetary policy despite high inflation being observed in those countries.

Some members of the Council emphasised that the real interest rate in Poland was high as compared with other countries of the region, and that interest rate increases by the NBP in 2007 were accompanied by zloty appreciation. They pointed out that in January 2008 zloty exchange rate continued to be stronger than accounted for in the October inflation projection. In the opinion of those members, as compared with other countries of the region, monetary conditions in Poland remained tight. They argued that monetary policy tightening increased interest rate disparity between Poland and the United States and the euro area, which might encourage the inflow of short-term capital to Poland and be conducive to zloty exchange rate appreciation. In the opinion of those members, this would weaken the competitiveness of the Polish economy and lead to further increase of external imbalance. Moreover, they pointed out that increasing interest rate disparity would lead to a growing share of loans denominated in foreign currency in total loans, which might weaken the impact of domestic monetary policy on domestic demand. Other Council members argued that as compared with other countries of the region, the share of foreign currency denominated loans in total loans in Poland remained relatively low.

On the other hand, the discussants pointed out that in 2007 the rise in CPI inflation in Poland was stronger than the growth of nominal interest rates, and thus the real interest rate decreased. Some of them also emphasised that in certain countries real interest rates were currently higher than in Poland. At the same time, it was pointed out that the reason for monetary

policy easing by certain central banks was the expected economic slowdown and the financial market turmoil of January 2008.

While discussing the interest rates decision, the majority of the Council members believed that it was necessary to contain the risk of sustained increased CPI inflation and curb the expected growth in net core inflation and a possible boost in inflation expectations. In the opinion of some Council members, the inflation outlook justified a significant increase in interest rates at the January meeting. In the opinion of the majority of the Council, monetary policy tightening should be measured and proceed gradually due to, among other things, the increased uncertainty about the outlook for economic growth in Poland and abroad as well as uncertainty about the potential impact of interest rate increases on zloty exchange rate. In this context, the future path of interest rates in Poland was also discussed.

A motion to raise the key NBP interest rates by 50 basis points was put forward. The motion did not pass. A motion to raise the key NBP interest rates by 25 basis points was put forward and passed. The Council raised the interest rates to the following levels: the reference rate to 5.25%, the Lombard rate to 6.75%, the deposit rate to 3.75% and the rediscount rate to 5.50%.

Publication date: 21 February 2008

Minutes of the Monetary Policy Council decision-making meeting held on 27 February 2008

During the meeting the Monetary Policy Council discussed the outlook for inflation developments in the context of the past, current and, primarily, anticipated economic situation.

The discussion at the meeting focused on: current inflation developments, including changes in regulated prices and food prices, situation in the labour market, the outlook for economic growth and the level of interest rates in Poland and abroad. The Council discussed the influence of these factors on the future inflation in Poland in view of the February inflation projection.

While commenting on the current inflation, the Council analysed the reasons for annual consumer price growth accelerating – as indicated by preliminary information released by GUS (the Polish CSO) – and remaining above the NBP's inflation target of 2.5% and also above the upper limit for deviations from the target, which is set at 3.5%. It was pointed out that the high level of CPI inflation in January was, to a large extent, the result of increased growth of regulated prices, including prices of services connected with flat or house maintenance and energy. Inflation growth was also driven by accelerating prices of other services as well as a further increase in food and fuel prices related to global factors, which are also responsible for the heightened level of inflation observed in many other countries. It was emphasised that inflation growth resulting from increased growth of regulated prices and rising food and fuel prices was in a large part beyond the control of domestic monetary policy. At the same time, it was underlined that the increase in net core inflation in January was probably larger than that of CPI inflation, which was the result of a rise in regulated prices and prices of services.

The Council paid a lot of attention to the outlook for inflation over the monetary policy transmission horizon. It was pointed out that in the months to come a further acceleration in net core inflation should be expected, among other things, due to the rise in regulated prices, particularly prices of energy and natural gas. It was emphasised that a one-off increase of those prices would be pushing up the annual CPI level for the next twelve months. It was emphasised that in view of the February inflation projection based on the ECMOD model, the forecast consumer price growth would remain close to or above the upper limit for deviations from the NBP's inflation target throughout the projection horizon, i.e. till 2010. At the same time, it was underlined that the expected continuation of CPI inflation above the inflation target in the time to come would largely result from factors that are independent from monetary policy, namely an

increase in regulated prices and high growth of food prices. It was also pointed out that high inflation would probably continue in other economies of the region and also in the euro area and the United States. In this context, the Council discussed the optimal monetary policy in a situation when the external conditions are conducive to heightened inflation.

While discussing the probable path of food prices in 2008–2009, some Council members assessed that it was difficult to rapidly increase the global supply of food, and so the food price growth in 2008 and, consequently, CPI inflation might prove higher than accounted for in the February inflation projection. Other members of the Council believed that the food price growth should decelerate in the time to come, which was supported by futures quotations in food markets. They argued that the rise in food prices in 2007 had resulted not only from changes in the geographical structure of global demand but also from considerable supply shocks in global markets, and so the supply of food in 2008 may be significantly higher than in 2007.

Some Council members indicated that, despite a rise in CPI inflation in February, the percentage of respondents expecting faster price growth declined in the surveys of households' inflation expectations. In the opinion of those members, this may decrease the probability of the so-called second-round effects. Those members pointed out that the current structure of inflation expectations was more favourable than in the period of inflation growth in 2004. Other members of the Council, though, emphasised that the above mentioned data pointed to a persistently high percentage of respondents who expected CPI inflation to stabilise at its current, high level.

It was pointed out that even though Poland was still compliant with the Maastricht inflation criterion, there was risk that it might cease fulfilling the criterion in the coming period. At the same time, it was emphasised that except for Poland and Slovakia all the new member states of the European Union which remained outside the euro area failed to comply with this criterion. Attention was drawn to the fact that Poland's possible non-compliance with the inflation criterion in the time to come would, in part, follow from the expected growth in regulated prices, which remained beyond the control of monetary policy. In this context, some Council members pointed to the need to appropriately coordinate the fiscal and monetary policies in the period preceding Poland's accession to the euro area.

While addressing the labour market situation, it was pointed out that the growth of employment and wages in the enterprise sector in January was higher than expected. It was argued that in line with the central path of the February projection of inflation and GDP based on the ECMOD model, the forecast wage growth would outpace labour productivity growth throughout the projection horizon. It was emphasised that the so-far observed and expected increase in unit labour cost was conducive to increased inflationary pressure. Some Council members emphasised that rising unit labour costs may reduce the competitiveness of the Polish economy and bring about further deepening of external imbalance. Moreover, they pointed out that the recently observed wage demands in the public finance sector may be conducive to wage demands in the private sector of the economy.

Other members of the Council believed that the January data on wages and employment in the enterprise sector were difficult to interpret due to the change in the statistical sample of enterprises at the beginning of the year. Those members argued that due to the good financial standing of enterprises the high wage growth did not have to fuel inflationary pressure. Moreover, they pointed out that significant wage increases in the public finance sector in 2008 were rather unlikely, as they would require the budget deficit to be larger than the value assumed in the 2008 Budget Act.

While discussing the changes in external factors affecting the Polish economy, the discussants pointed out that uncertainty persisted as to the growth outlook of the global economy, particularly of the United States and the euro area. Some Council members assessed that the slowdown in the economic growth in the United States may prove rather deep and persistent, among other things, due to problems with access to corporate credit. Those members emphasised that the slowing economic growth in the United States could be conducive to a slowdown in the

world economy, including the euro area and emerging economies. Moreover, they pointed out that irrespective from the growth outlook of the US economy, some Western European countries witnessed factors which could lead to slowing economic growth in those countries in the time to come. Other members of the Council, however, argued that the lower activity in the United States could be a short-lived and small-scale phenomenon, among other things, due to the weakening of dollar exchange rate amidst rising openness of the US economy, still relatively high profitability of enterprises in this country and the considerable contribution of the service sector in GDP.

While discussing the outlook for economic growth in Poland, it was pointed out that the January data on retail sales and industrial output were significantly higher than expected. Some Council members believed that this could be an indication of strong activity of the Polish economy being sustained in 2008 Q1. Those members assessed that GDP growth in emerging economies, including the Polish economy, may remain at a high level in the time to come despite the slowdown observed in developed economies. They emphasised that, in line with the central path of the February projection based on the ECMOD model, throughout the projection horizon domestic demand would be growing faster than GDP, and GDP would remain above its potential level, which should be conducive to increased inflationary pressure. They also pointed out that the rise in the domestic demand was additionally being fuelled by high growth of loans, particularly consumer loans, which had not decreased in any significant way despite NBP interest rate increases. Some Council members also pointed out that the recently observed fast growth in banking sector deposits might potentially result in increased credit growth.

Other members, however, believed that at the moment it was hard to assess whether the January data indeed indicated the continuation of strong economic growth in Poland in the near future and they argued that a more comprehensive assessment of the prospects for GDP growth would only be possible based on data for subsequent months. Moreover, those members pointed out that the likely slowdown in the world economy might contribute to a slowdown in economic growth in Poland.

When discussing exchange rate developments, the discussants indicated that, despite the persisting turmoil in international financial markets, zloty exchange rate was stable, and that the final days of February brought its considerable appreciation. Some Council members believed that it was currently difficult to assess the sustainability of factors which had led to this recent zloty appreciation.

While discussing monetary policy, it was pointed out that further interest rate lowering was expected in the United States and the United Kingdom and that, as anticipated by financial markets, interest rates in the euro area would most probably also be reduced in 2008. Some Council members emphasised that several central banks eased monetary policy despite high inflation being observed in those countries. They also pointed out that the real interest rate in Poland was relatively high as compared to other countries of the region and that, due to the appreciation of the real zloty exchange rate, monetary conditions in Poland remained relatively tight. They argued that monetary policy tightening in Poland would increase interest rate disparity between Poland and the United States and the euro area, which might encourage the inflow of short-term capital to Poland and be conducive to zloty exchange rate appreciation. In the opinion of those members, this would weaken the competitiveness of the Polish economy and lead to further increase of external imbalance. They pointed out that in 2006–2007 in Poland – in contrast to some other countries of the region – the unfavourable trade balance was deepening with exports rising more slowly than imports. Moreover, some Council members assessed that rising interest rate disparity would be increasing the share of loans denominated in foreign currencies in total loans, which might weaken the impact of domestic monetary policy on domestic demand.

Other members of the Council pointed out that the reason for monetary policy easing by certain central banks was the expected economic slowdown and financial market turmoil. Those members emphasised that in Poland, similarly as in many other countries of the region, the level of nominal interest rates necessary to keep inflation at the target level was higher than in the euro

area, among other things, due to the higher economic growth, resulting from higher labour productivity growth. They pointed out that in 2007 and at the beginning of 2008 CPI inflation in Poland increased more strongly than nominal interest rates and so the real interest rate had decreased. They also argued that a considerable proportion of foreign currency denominated loans to enterprises was concentrated in a relatively small number of large enterprises and thus changes in domestic interest rates should have noticeable impact on growth in loans granted to other enterprises and on domestic demand. Moreover, they pointed out that monetary policy was being tightened in some countries.

While discussing the interest rates decision, the majority of the Council members believed that it was necessary to contain the risk of sustained increased CPI inflation and curb the expected growth in net core inflation and a possible boost in inflation expectations. In the opinion of some Council members, the outlook for inflation outlined in the February projection justified a significant interest rate increase at the current meeting. In the assessment of the majority of the Council, monetary policy tightening should be measured and proceed gradually due to, among other things, the uncertainty about the potential impact of interest rate increases on zloty exchange rate and about the outlook for global economic growth. In this context, the future path of interest rates in Poland was also discussed.

A motion to raise the key NBP interest rates by 50 basis points was put forward. The motion did not pass. A motion to raise the key NBP interest rates by 25 basis points was put forward and passed. The Council raised the interest rates to the following levels: the reference rate to 5.50%, the Lombard rate to 7.00%, the deposit rate to 4.00% and the rediscount rate to 5.75%.

Publication date: 20 March 2008

Minutes of the Monetary Policy Council decision-making meeting held on 26 March 2008

During the meeting the Monetary Policy Council discussed the outlook for inflation developments in the context of the past, current and, primarily, anticipated economic situation.

The discussion at the meeting focused on: current inflation developments, including changes in food prices and regulated prices, the outlook for economic growth, situation in the labour market and the level of interest rates in Poland and abroad.

While discussing current inflation developments, it was pointed out that as a result of the annual revision of the CPI basket, the inflation data for January had been significantly revised downwards (from 4.3% y/y to 4.0% y/y). It was also emphasised that in February inflation was significantly below expectations despite a rise up to 4.2% y/y. Lower than expected growth in prices in February was driven – apart from the revision of the CPI basket – by lower than expected growth in food and fuel prices. In the opinion of some Council members, a significant downward revision of the January inflation, together with markedly lower than expected inflation in February, allowed to assume that inflation might return within the limit for deviations from the NBP's inflation target sooner than accounted for in the February inflation projection.

When addressing the decline in the annual growth of food prices observed in February, some Council members pointed out that the decline had also been recorded in other countries of the region, which might suggest that the strong growth in food prices experienced since mid-2007 was beginning to slow down. A decline in the growth of food prices in the coming period is also suggested by prices of futures contracts in the world food markets, which reflect favourable forecasts of this year's crops. Other members of the Council pointed out that, due to the expectations that crops in 2008 would be higher than in 2007, prices of certain food products and agricultural commodities might even be expected to decline in 2008–2009.

It was pointed out that the rise in the annual inflation in February 2008 in relation to January 2008 was primarily driven by a strong growth in regulated prices. It was underlined that the CPI excluding regulated prices fell in February 2008 as compared to January 2008. Some members of the Monetary Policy Council indicated that regulated prices would be a major factor driving inflation in Poland both in 2008 and probably in the subsequent years. This is mainly related to the expected considerable rise in energy prices, which will result from the probable convergence of gas prices in Poland to those in other EU countries and from the need of the power generating sector to raise funds to finance the necessary investment (connected with a possible electricity shortage) and to cover the expenses incurred by the environmental protection regulations. Some Council members, however, pointed out that the ongoing liberalisation of the energy sector might curb the growth of energy prices.

While discussing the impact of tax policy on consumer price developments, some Council members pointed out that the adjustment of excise duty and VAT rates to the EU regulations, which is to take place after the expiration of the transition periods negotiated by Poland, might be an important factor driving inflation in Poland in the years to come. Nevertheless, it was emphasised that the timing of changes in indirect taxes is uncertain. The Council also paid attention to the fact that changes in indirect taxes might be of importance for Poland as regards its compliance with the Maastricht price stability criterion. In this context the members of the Council pointed to the need to appropriately coordinate the fiscal and monetary policies in the period preceding Poland's accession to the euro area.

When discussing net core inflation, some members of the Council argued that its strong rise in February was primarily the result of a surge in administered prices. Therefore, at least for a certain period of time, this measure may reflect the inflationary pressure stemming from changes in domestic demand only to a limited extent. Other members pointed out that a rise in the demand pressure is most clearly visible in some parts of the services sector. It was also argued that the growth in prices of market services had already been following an upward trend for a longer period, and its one-off drop in mid-2007 resulted from the way in which price promotions were accounted for in the price index.

Some Council members emphasised that a significant rise in administered prices, combined with previously recorded strong increases in food and fuel prices, might translate into a rise in perceived inflation and thus boost inflationary expectations of households. In this context, they pointed out that the monetary policy should account for the related increased risk of second-round effects.

While assessing the outlook for economic growth in Poland, it was pointed out that the growth of retail sales and industrial output in February were significantly higher than expected. In the opinion of some Council members, these data confirmed the continuation of strong activity in the Polish economy in 2008 Q1 suggesting, at the same time, that the global economic slowdown had thus far not deteriorated economic climate in Poland. Some members of the Council pointed out that GDP growth would remain at a relatively high level unless the negative impact of the slowdown in the world economy on the economic growth in Poland would rise. Certain members of the Council argued that in view of the estimates of potential GDP growth in Poland this meant that the output gap would remain positive in the coming period, which would, in turn, call for a further tightening of the monetary policy. It was also pointed out that despite previous interest rate increases high growth of credit aggregates continues, including growth of consumption loans granted to households.

Other members of the Council pointed out that the data on GDP in 2007 Q4 confirmed that, from the point of view of inflationary pressure, the structure of economic growth continued to be favourable and was better than expected (lower growth of domestic demand, including primarily lower growth of private consumption and lower negative contribution of net exports to GDP growth together with higher investment growth). They argued that if GDP growth in 2008 proved higher than assumed in the Budget Act, then the budget deficit, similarly to 2007, might be markedly lower than assumed, which would, in turn, curb inflationary pressure.

During the discussion it was pointed out that 2007 Q4 brought a decline in enterprises' profitability rate of gross turnover. Some Council members argued that this might result in enterprises assessing their financial condition less favourably, which amid growing production costs might urge them to increase prices of their products. Other members of the Council pointed out that deteriorating financial results of enterprises, combined with possible tightening of banks' lending policies, might result in lowering investment of enterprises and, in consequence, lead to a decline in GDP growth.

When analysing the situation in the labour market, it was pointed out that the data on wages in the enterprise sector in February were higher than expected, and the growth of employment remained at a high level. Some members of the Council indicated that the currently observed wage rise had been very high both in nominal and real terms as compared to that of the past few years, which confirmed persistently strong wage pressure in the economy. It was also emphasised that the dynamic growth in wages exceeded labour productivity growth, resulting in a further increase in unit labour costs.

While discussing external factors affecting the Polish economy, it was pointed out that uncertainty persisted as to the growth outlook for the global economy. Some members of the Council indicated that forecasts of the economic growth in the United States had recently been revised downwards despite a considerable easing in monetary and fiscal policies. The situation deteriorated also in the euro area, while in the opinion of some Council members, the pace of this process might indicate that economic slowdown in the euro area was not only driven by the recession in the United States but also by weak domestic demand in the euro area. Some members argued that a decline in the global economic growth, and particularly in the growth of Western European countries, might negatively affect the growth of Polish exports and, consequently, might lead to a decline in GDP growth in Poland. At the same time, faced with the uncertainty about the possibility of selling their products abroad, enterprises may limit their investment activity, which might also have a negative impact on GDP growth. Other members of the Council indicated that the negative impact of the slowdown in the world economy on the economic situation in Poland might be mitigated by the changing geographical structure of Polish foreign trade.

When discussing the monetary policy it was pointed out that too strong policy tightening, combined with interest rates cuts by the US Federal Reserve and the ECB interest rates kept unchanged, may be conducive to the inflow of speculative capital to Poland and to an excessive exchange rate appreciation. In turn, such an excessive strengthening of the zloty may lead to deteriorating the competitiveness of the Polish foreign trade, which amid a slowdown in the world economy may result in a decline in the growth of Polish exports and GDP. In this context, some Council members emphasised that possible consequences of a further increase in the interest rate disparity for the zloty exchange rate should be taken into consideration while taking decisions on interest rates.

While addressing the issue of the exchange rate, some Council members argued that despite the recently observed appreciation of the zloty, it should be treated neutrally in taking monetary policy decisions due to the possible considerable fluctuations of the exchange rate.

After discussion, it was assessed that primarily the following factors point to a significant probability of inflation remaining above the inflation target in the medium term: the continuation of the fast economic growth, probably exceeding the growth of potential GDP, significant surge in wages and employment and the risk of higher inflation expectations due to heightened current inflation and expected further growth in regulated prices. In the Council's assessment, these arguments justified monetary policy tightening at the current meeting. Members of the Council also discussed the scale and pace of the needed monetary policy tightening.

A motion to raise the key NBP interest rates by 50 basis points was put forward. The motion did not pass. A motion to raise the key NBP interest rates by 25 basis points was put forward and

passed. The Council raised the interest rates to the following levels: the reference rate to 5.75%, the Lombard rate to 7.25%, the deposit rate to 4.25% and the rediscount rate to 6.00%.

Publication date: 24 April 2008

Minutes of the Monetary Policy Council decision-making meeting held on 30 April 2008

During the meeting the Monetary Policy Council discussed the outlook for the future inflation developments in the context of the past, current and, primarily, anticipated economic situation.

The discussion at the meeting focused on: current inflation developments, including changes in administered prices and food prices, situation in the labour market, exchange rate developments, the outlook for economic growth and the level of interest rates in Poland and abroad. The Council discussed the influence of these factors on the future inflation in Poland.

While commenting on the current inflation, the Council analysed the reasons behind a slight decline in annual consumer price growth in March, which, however, remained above the upper limit for deviations from the NBP's inflation target set at 3.5%. It was argued that the fact that annual CPI inflation proved lower than in February followed from some decline in the annual food and fuel price growth. At the same time, it was pointed out that net core inflation increased in March, mainly due to a further acceleration in administered prices (prices of services connected with flat or house maintenance and some other services) and also because of an unexpected increase in prices of clothing and footwear. Some members of the Council emphasised that the heightened annual consumer price growth was mainly sustained by the continuing, despite some decrease, of the high growth of food and fuel prices and also by rises in administered prices in 2008 Q1. Those members also pointed out that the heightened inflation was also observed in many other countries and stressed that in Poland its level was lower than in other Central and Eastern European countries.

While discussing the outlook for inflation in 2008–2009, it was pointed out that rising administered prices, especially those of energy and natural gas, would be a factor increasing inflation. Some Council members underlined that rises in administered prices, combined with the previously observed strong increases in food and fuel prices, might translate into a rise in perceived inflation and thus also boost inflationary expectations. Those members pointed out that the surveys of inflation expectations of households in April revealed an increase in the percentage of respondents expecting inflation to stabilise at its current high level or to rise further. In this context, they pointed out that the monetary policy should account for the related increased risk of second-round effects. Moreover, some Council members assessed that the increased growth of the prices of clothing and footwear in March may be signalling a weakening in the disinflationary impact of globalisation processes and intensified competition in the market of internationally traded goods on the Polish economy. Other members of the Council, however, believed that it was difficult to assess at the moment whether the increased growth of clothing and footwear prices would indeed prove permanent.

While discussing the path of food prices, it was assessed that the high growth of these prices observed since the second half of 2007 would most probably ease in the months to come, which was indicated, among others, by the prices of futures contracts in the world food markets and the positive forecast of this year's harvest in Poland and other European countries.

Some Council members emphasised that high current inflation and the already introduced and expected rises of administered prices might be of importance for Poland as regards its compliance with the Maastricht price stability criterion. In this context, the Council members pointed to the need to appropriately coordinate the fiscal and monetary policies in the period preceding Poland's accession to the euro area.

While analysing developments in the environment of the Polish economy, it was pointed out that the symptoms of a slowdown in the United States had deepened and the activity in some Western European economies had lowered. It was stressed that there had been a downward revision of growth forecasts for the global economy in 2008–2009, particularly the forecasts for the United States and the euro area. Some Council members emphasised that the appreciation of the euro against the US dollar and pound sterling observed over the past months was a factor strengthening the negative impact that the economic slowdown in the United States and the United Kingdom had on GDP growth in the euro area. They assessed that the deceleration of economic growth in Western European countries, in combination with the zloty appreciation observed over the past months, may be lowering the growth rate of Polish exports and, consequently, have a negative impact on GDP growth in Poland. They also argued that the weakening of the foreign demand might persuade enterprises to limit their investment, which would additionally decrease GDP growth.

While assessing the outlook for economic growth in Poland, it was pointed out that the growth of industrial output and retail sales in March was lower than in the previous two months and significantly below expectations. In the opinion of some Council members those data may be a signal of reduced activity in the Polish economy in the coming period. Other members of the Council believed that it was difficult to assess at the moment whether the weaker than expected data for March indeed suggested a weakening economic growth. Those members argued that the low industrial output growth in March could have been connected with the Easter holiday break and the growing propensity of Poles to take more days off work in the holiday period. They pointed to the results of business confidence surveys, according to which the overall economic sentiment in Poland was still good. In the assessment of those Council members, the extent of a possible decline in economic growth in Poland would be significantly smaller than in the United States or the euro area.

While addressing the situation in the labour market, it was pointed out that the wage and employment growth in the enterprise sector in March was still high, which was conducive to increasing the demand pressure. It was emphasised that wage growth was still exceeding productivity growth, resulting in a further rise in unit labour costs. Some Council members, however, pointed to the fact that the continuously high growth of wages would be conducive to deteriorating the financial standing of enterprises, which would make further high pay rises impossible. Moreover, some Council members argued that the wage pressure in the coming period may in fact be easing due to a probable reduction in the scale of economic emigration of Poles, connected with weaker economic growth and worsening situation in the labour markets of Western European countries, particularly the United Kingdom and Ireland. They pointed out that the scale of emigration may be reduced by the zloty exchange rate appreciation observed over the last months which decreased the zloty value of income of Poles working abroad.

Some Council members argued that, apart from high wage growth, domestic demand may be additionally driven by growth in credit aggregates, including consumption loans granted to households, which continued at a high level. Other members of the Council underlined that since the beginning of 2008 the deposits of households had been increasing rapidly, which might suggest an increased propensity to save and be conducive to easing the demand pressure. Moreover, they also argued that the positive balance of the central government budget in 2008 Q1 was additionally lowering the demand pressure.

While discussing the exchange rate developments, it was pointed out that in April the zloty exchange rate appreciated significantly both against the US dollar and against the euro and was stronger than accounted for in the February inflation projection. It was underlined that the zloty exchange rate appreciation was conducive to easing the domestic inflationary pressure, as it resulted in a reduction of prices of imported goods expressed in the zloty, and particularly that it weakened the impact of high fuel price growth in the world markets on the Polish economy. At the same time, however, some Council members pointed out that the zloty appreciation also reduced the zloty denominated value of EU structural funds allocated for the financing of

investment projects, which may impede the implementation of those projects and lead to lowering investment growth.

While discussing monetary policy, some Council members stressed that against the background of other countries of the region the level of real interest rates in Poland was relatively high and that the monetary policy tightening in recent months had been effected at a relatively fast pace. Those members pointed out that some central banks had lowered their interest rates over the past months despite the persistently high inflation in those countries, and stressed that the appreciation of the real zloty exchange rate was additionally increasing the restrictiveness of monetary policy in Poland. They argued that a further monetary policy tightening in Poland would increase interest rate disparity between Poland on the one hand and the United States and the euro area on the other, which might encourage the inflow of short-term capital to Poland and be conducive to excessive zloty exchange rate appreciation. In the opinion of those members, this would weaken the competitiveness of the Polish economy and reduce the profitability of export production and thus would lead to further deepening of external imbalance. Other members of the Council, however, argued that, due to a large import intensity of export production, the zloty exchange rate appreciation did not significantly reduce the profits of exporters, which may be confirmed, among others, by the data on the financial results of enterprises in 2007. Moreover, some Council members thought that it was currently difficult to assess the sustainability of the factors which had led to the recent appreciation of the zloty. Some members of the Council also assessed that a rise in interest rate disparity would be increasing the share of loans denominated in foreign currencies in total loans, which might weaken the impact of domestic monetary policy on domestic demand. They pointed out that since the beginning of 2008 an increase had been observed in the share of housing loans denominated in foreign currencies in the total housing loan debt of individuals.

While discussing the interest rate decision, the Council assessed that the continuing high growth of wages and employment, along with the possibility of increased inflation expectations resulting from higher current inflation and the expected further increase of administered prices, both pointed to the risk of inflation remaining above the inflation target in the medium term. In the opinion of some Council members, these factors justified an interest rate increase already at the April meeting. In the opinion of the majority of the Council, however, the risk of a decrease in economic growth in Poland and of an excessive appreciation of the zloty exchange rate, both of which would be reducing inflation in the medium term, justified no interest rate change at the current meeting.

A motion to raise the key NBP interest rates by 25 basis points was put forward at the meeting. The motion did not pass. The Council kept the interest rates unchanged: the reference rate at 5.75%, the Lombard rate at 7.25%, the deposit rate at 4.25% and the rediscount rate at 6.00%.

Publication date: 23 May 2008

Minutes of the Monetary Policy Council decision-making meeting held on 28 May 2008

During the meeting the Monetary Policy Council discussed the outlook for the future inflation developments in the context of the past, current and, primarily, anticipated economic situation.

The discussion at the meeting focused on: current inflation developments, assessment of the risk of second-round effects, situation in the labour market, the outlook for economic growth in Poland and abroad and exchange rate developments. The Council discussed the influence of these factors on the future inflation in Poland.

While commenting on the current inflation, it was pointed out that in April CPI inflation had decelerated slightly (to 4.0% y/y), which had been driven by a decline in the annual growth of fuel and food prices. On the other hand, further acceleration in the growth of prices of certain services was a factor increasing inflation. It was emphasized that inflation remaining above the upper limit for deviations from the NBP's inflation target set at 3.5% was mainly the result of the previously observed rise in food prices and increases in administered prices. It was also indicated that increased inflation negatively affects financial condition of households, mainly those less affluent, in particular, when it is related to high growth in food prices. Yet, it was emphasised that due to favourable forecasts of harvest further decline in the growth of food prices may be expected.

Members of the Council paid a lot of attention to the reasons behind inflation remaining at the increased level. They argued that inflation developments in many countries, including Poland, were largely affected by increases in prices of food and oil in the global markets leading to changes in relative prices – i.e. factors beyond the impact of domestic monetary policy. It was pointed out that in comparison with other countries of the Central and Eastern Europe, Poland recorded the lowest CPI inflation and as regards HICP index only Slovakia had lower inflation than Poland. Some members of the Council stressed that additional factors, that are also largely beyond the impact of monetary policy, conducive to growth in prices in the new EU member states include: price and wage convergence and harmonisation of indirect taxes.

While discussing the outlook for inflation, some members of the Council pointed out that considering the recently observed rise in oil prices in the world markets and the results of the NBP's short-term forecasts, inflation in the quarters to come may be expected to remain above the upper limit for deviations from the target. In the medium term, higher inflation would be driven by high growth in wages and unit labour costs. At the same time, some members of the Council pointed out that further growth in gas and energy prices related to growing prices of energy resources and liberalisation of energy prices in Poland might be a factor driving inflation in 2009. In the longer term, weakening growth of energy prices should be driven by liberalisation of the energy market. On the other hand, inflation should be curbed by: lower GDP growth abroad, observed exchange rate appreciation and previous increases of interest rate.

Some members of the Council pointed out that a situation of inflation running markedly above the NBP's inflation target for a longer time increases the risk of second-round effects. This is so because increased inflation may lead to more permanent heightened inflation expectations, which is suggested by a large share of respondents in household surveys expecting inflation to remain at the present level. Yet, other members of the Council pointed that inflation expectations of households observed in May had lowered. Moreover, some members of the Council assessed that the risk of second round effects is limited due to factors discouraging enterprises from further wage increases. In this context, members of the Council pointed at the expected slowdown in the economic growth reflected in a decline of business sentiment indicators in the corporate sector published in May, zloty appreciation and a deceleration in profit ratios of enterprises in 2008 Q1.

While addressing the situation in the labour market, some members of the Council pointed out that strong growth in wages continued to be the major risk factor for price stability. According to those members of the Council, the April data on wages and employment in the corporate sector and current estimates of unit labour costs in the economy for 2008 Q1 corroborated persistently high wage pressure. At the same time, some members of the Council pointed at a growing wage pressure in the public finance sector and related uncertainty about the 2009 budget. Attention was paid to the fact that increased inflation constituted one of the factors behind currently growing wage pressure in this sector.

While assessing the outlook for economic growth in Poland, some members of the Council pointed out that data concerning economic activity are currently characterized with large volatility related, *inter alia*, to a different calendar of holidays than in 2007 and restrictions imposed on retail trading on holidays. They argue that in such a situation more attention should be paid to business

sentiment indicators which – although point at favourable economic situation – had declined in May. Those members also pointed out that in 2008 Q1 there was a decrease in the production capacity utilization. According to those members of the Council, economic growth in Poland in the quarters to come should decline to the level of potential growth. Other members of the Council emphasized that GDP growth in Poland continued to outpace the potential and signals of a slowdown are too weak to expect that inflation will return to the target without further adjustment of monetary policy.

Some members of the Council argued that the decline in profit ratios of enterprises might have a negative impact on investment growth. According to those members of the Council, also lower demand for Polish exports would be a factor curbing economic growth. Lower external demand related to economic slowdown abroad is corroborated by the results of the economic condition surveys for 2008 Q1 where indicator of export forecast declined again.

The meeting also focused on changes in the external conditions of the Polish economy. Some members of the Council pointed out that the data on GDP growth in 2008 Q1 for the United States and the euro area had proved better than expected. Other members of the Council argued that majority of economic indicators point at a serious slowdown in the American economy. However, referring to the situation in the euro area some members of the Council indicated considerable differences in economic growth between particular countries. They also emphasized that weak domestic demand together with a risk of a decline in external demand connected both with appreciation of the euro against the American dollar and the British pound and with the slowdown in the American and British economies, continued to be risk factors for economic growth in the euro area. Those members argued that concerns related to economic slowdown were translated into higher risk premia included in interest rates on corporate loans offered by banks in the euro area. It was also pointed out that Poland is among the EU countries whose business cycles are most closely correlated with the business cycle in the euro area which means that the slowdown in the euro area would probably have a negative impact on economic growth in Poland. Moreover, some members of the Council pointed out that uncertainty persisting in the world economy might result in lower inflow of direct investment to Poland which would also bring a decline in economic growth.

While addressing the dilemmas faced by central banks, some members of the Council pointed at a risk of stagflation, i.e. a situation where weakening economic growth would be accompanied by high inflation. In this context, the Council discussed appropriate response of monetary authorities to inflation remaining at an increased level, in particular, when it results, to a great extent, from factors beyond the impact of a domestic monetary policy.

While discussing exchange rate developments some members of the Council pointed out that zloty strengthening was an important factor tightening monetary conditions in the recent period. At the same time, it was pointed out that further rise in interest rate differential might result in increased inflow of short-term capital to Poland, driving further appreciation of the zloty and deterioration of financial results of enterprises which would have a negative impact on investment activity and economic growth. Other members of the Council argued that expectations concerning Fed and ECB interest rates had been changed, which is of significant importance for the outlook of interest rate differential in the period to come. With regard to the United States, interest rates are expected to be raised at the end of the year, whereas with regard to the euro area it had become common to expect interest rates to be kept at the current level. Moreover, these members of the Council pointed out that it was difficult at that time to assess the sustainability of the factors which had recently contributed to zloty appreciation.

While analysing the impact of exchange rate fluctuations on the economy, some members of the Council pointed at a risk of growing external imbalance in case of excessive zloty appreciation. Yet, other members of the Council argued that it was difficult to assess to what extent widened current account deficit was connected with exchange rate appreciation and to what extent it might result from economic growth exceeding the potential GDP growth.

At the meeting, members of the Council discussed the usefulness of the so-called Taylor rule in monetary policy. According to some members of the Council this rule should be used in conducting monetary policy. However, other members of the Council indicated that this rule should rather be used in *ex post* assessments. In this context they pointed at problems of correct specification of this rule and the uncertainty of the estimates of natural interest rate and potential output growth for Poland.

While referring to the interest rate decision, potential further tightening of monetary policy was discussed. In the opinion of some members of the Council, the risk of permanently heightened inflation expectations, high growth in wages and employment and GDP growth remaining above the potential output as well as the absence of clear signs of economic slowdown pointed at the risk of inflation remaining above the inflation target in the medium term. According to those members of the Council, those factors justified an interest rate increase at the May meeting. Moreover, those members pointed out that withholding the decision to raise interest rates increased the risk of inflation remaining above the inflation target for a longer period which would subsequently require more pronounced curbing of economic growth necessary to bring inflation down to the target. Yet, some members of the Council judged that the previous interest rate increases along with considerable appreciation of the zloty exchange rate and expected economic slowdown might prove sufficient to bring inflation down to the target in the medium term. The majority of the Council members argued, that a more comprehensive assessment of the risk of inflation remaining at an increased level will be possible after getting acquainted with the June inflation projection of the NBP. In their opinion, these arguments justified no interest rate change at the present meeting of the Council.

A motion to raise the key NBP interest rates by 25 basis points was put forward at the meeting. The motion did not pass. The Council kept the interest rates unchanged: the reference rate at 5.75%, the Lombard rate at 7.25%, the deposit rate at 4.25%, at the rediscount rate at 6.00%.

Publication date: 19 June 2008

Minutes of the Monetary Policy Council decision-making meeting held on 25 June 2008

During the meeting, the Monetary Policy Council discussed the outlook for inflation developments in the context of the past, current and, primarily, anticipated economic situation.

The discussion at the meeting focused on: labour market situation, the outlook for economic growth and the exchange rate developments. The Council discussed the influence of these factors on the future inflation in Poland in view of the June inflation projection.

The Council paid a lot of attention to the outlook for CPI inflation in Poland in the coming quarters. Some members of the Council pointed out that according to the June inflation projection based on the NECMOD model, the forecast inflation would be gradually decreasing starting from 2009 Q1 and, in line with the central projection path, it would be approaching the inflation target faster than expected in the February projection. Those members emphasised that the increased inflation resulting from food and fuel price growth in the world markets is observed in many other countries, including the euro area. They assessed that – similarly to many other countries – the period of heightened inflation may prove longer than expected so far. At the same time, they pointed out that in May, despite a rise in regulated prices, inflation in Poland was still at the lowest level among the Central and Eastern European countries, which was, among others, due to the monetary policy conducted in Poland in the earlier period.

The Council members indicated that CPI inflation in May rose to 4.4% and that in the months to come it may be even higher, among others, due to the statistical base effect. They

emphasised that at the beginning of 2009 a further increase in electricity prices triggered by their deregulation may be conducive to a rise in CPI inflation. Some Council members indicated that, in line with the June projection, core inflation net of food and energy prices would be gradually growing and in 2009–2010 it would run above 2.5%, which – in the opinion of those members – signals the build-up of demand pressure in the economy.

While discussing the outlook for economic growth in Poland, it was pointed out that in May the growth of industrial output was markedly lower than expected, which had been previously signalled by business sentiment indicators. In the opinion of some Council members, this may indicate a slowdown in the Polish economy in the nearest future. Those members argued that lower activity in the world economy, particularly in the euro area, together with the recently observed appreciation of zloty exchange rate would both contribute to the slowdown of the economic growth in Poland. They emphasised that in view of the June projection based on the NECMOD model, the forecast GDP growth in the second half of 2008 would be lower than the growth of potential GDP, which would be conducive to easing the inflationary pressure. Moreover, they argued that the composition of GDP in 2008 Q1 was favourable in terms of inflation outlook, as private consumption growth was lower and investment growth higher than GDP growth. Other members of the Council, in turn, pointed out that GDP growth in 2008 Q1 was higher than expected and most probably higher than potential GDP growth. While assessing the outlook for economic growth, those members highlighted that the data on industrial output in May were difficult to interpret due to the different calendar of public holidays than in 2007 and that the retail sales growth in May was relatively high. Those members believed that the slowdown in economic activity in Poland would probably not be significant. They argued that in the time to come the consumption growth would not mark a significant decrease, among others, due to the continuously high growth of wages and loans to households and the rising share of consumer loans in total loans granted to households.

While addressing labour market developments, the continuation of a strong wage growth and unfavourable relation between wage and labour productivity growth were pointed out. It was emphasised that in May unit labour costs in industry increased significantly due to the drop in the industrial output growth and a high wage growth. It was underlined that in line with June projection based on the NECMOD model, the forecast wage growth in the economy throughout the projection horizon would be faster than labour productivity growth and thus unit labour costs would continue to rise. Some Council members pointed out that 2008 Q1 brought an increase in the share of wage costs in total costs of enterprises, which was conducive to raising the inflationary pressure. Those members assessed that the heightened pressure on wage growth in some public sector enterprises may be leading to wage increases in the coming period and, consequently, also to rising prices of products manufactured by those enterprises. They also argued that the heightened current inflation was one of the factors contributing to increasing the wage pressure in the public finance sector. In the opinion of some Council members, this raised the risk of second-round effects in the time to come.

Moreover, some Council members argued that high wage growth and the increased CPI inflation, due to the mechanism of old-age and disability pension indexation, would increase the expenditure of the state budget in 2009 and in subsequent years, which would be conducive to deepening the deficit of the public finance sector. In this context it was pointed out that the expected slowdown of economic growth and the ensuing decline in the growth of the central budget tax revenue would also be contributing to increasing the budget deficit.

Other Council members, however, assessed that the high growth of wages was to a large extent connected with the ongoing convergence of the Polish economy with richer EU member states. They pointed out that wage costs still made a relatively low contribution to the total costs of enterprises, and emphasised that in view of business tendency surveys the percentage of enterprises which reported rising costs of wages as an important factor behind the rising prices of their products remained low. In the assessment of those Council members, the risk of second-round effects was currently far lower than in the 1970s. They also argued that increasing

employment under tight labour market conditions, at least in the short term, results in lowering the average labour productivity due to: declining capital-to-labour ratio, employing people whose qualifications are lower than those of the already employed and a high share of the services sector (where productivity growth is relatively low) in the employment growth, all of which had a joint effect of raising unit labour costs. They assessed that the expected activity slowdown in the Polish economy should, with some time lag, lead to curbing the wage growth. Moreover, some Council members believed that the demands of substantial pay rises in the public finance sector would not be satisfied in the nearest future.

While analysing the exchange rate developments and their impact on the economy, a significant appreciation of the zloty in the recent period was underlined. It was emphasised that the exchange rate appreciation tightened Poland's monetary conditions and was conducive to easing the inflationary pressure, as the prices of imported goods denominated in zloty were falling. In this context it was pointed out that the current zloty exchange rate was stronger than in the June projection based on the NECMOD model and thus future inflation might prove lower than it followed from the projection. It was argued at the same time that the currently observed zloty exchange rate appreciation would result, with some time lag, in a growing current account deficit. Some Council members believed that the rising deficit should be curbing inflationary pressure by stepping up the growth of the demand for imported goods at the expense of the demand for domestic goods. On the other hand, some Council members assessed that the expected slowdown in economic growth in Poland should be conducive to a reduction of the current account deficit.

Some Council members pointed out that the zloty exchange rate appreciation and rising unit labour costs were conducive to worsening financial results of exporters. They argued that this may lead to a decrease in the scale of investments undertaken by exporting enterprises and, consequently, a decrease in potential GDP growth. In the opinion of those members, in view of weakening activity in the economies of Poland's most important trade partners and the ensuing decline in the foreign demand for Polish products, enterprises will react to the worsening of their financial results by raising the prices of products destined for the domestic market, which in turn will be adding to the domestic inflationary pressure.

While addressing the developments in the environment of the Polish economy, the uncertainty concerning the economic situation in the United States, the euro area and the United Kingdom was pointed out. It was stressed that the decrease in indicators of economic climate in Germany was signalling a deteriorating situation in this economy. It was assessed that the slowdown of euro-area economic growth may be delayed in time but would certainly come. It was argued that the cycle of monetary policy easing in the United States most probably came to an end, while in the euro area signals emerged of a monetary policy tightening in the near future. It was emphasised that in case monetary policy was tightened in the euro area or the United States, an increase of the NBP interest rates would not result in a further widening of the interest rate differential between Poland and those economies. Some Council members assessed that the global level of interest rates was currently too low, which meant that in order to bring inflation down it was necessary to tighten monetary policy both in the developed and developing economies. In this context attention was drawn to the dilemmas of central banks facing the risk of stagflation, i.e. a situation when a decline in economic activity is accompanied by heightened inflation. The appropriate monetary policy response to a rise in inflation caused by factors independent of the domestic monetary policy was also discussed.

The members of the Council emphasised the lack of structural reforms, including the public finance reform, which are of great importance for shaping the long-term outlook for economic growth and inflation. In the opinion of the Council members, abandoning the public finance reform may lead to a non-optimal policy mix. It was also emphasised that without a clearly defined path of harmonising the rates of indirect taxes with the EU requirements and without a detailed liberalisation programme of the energy market, the assessment of future price growth path, particularly as regards administered prices, is problematic.

The Council also discussed an optimal communication policy of the central bank's decision-making body with the environment with a view to influencing the financial markets expectations as to the future monetary policy. On this occasion the great importance of the central bank's communication was stressed for the formation of inflation expectations in the situation when, due to strong and persistent price shocks in the commodity markets, inflation may remain at a heightened level for a longer period. In this context the Council emphasised that the lack of any precise declaration on the part of the government about the planned date of Poland's accession to the euro area may in the current situation become a factor impeding the pursuit of the optimal monetary policy.

While considering the interest rate decision, the Council assessed that the probability of inflation remaining above the inflation target in the monetary policy transmission horizon is higher than the probability of inflation running below the target. This assessment was supported by the inflation outlook presented in the June projection and also by the latest data on inflation and high wage growth outpacing the labour productivity growth. Such an assessment justified raising interest rates at the current meeting. The Council also discussed the future path of NBP interest rates. In the opinion of some Council members bringing inflation down to the target in the medium term may require a further monetary policy tightening in the coming months. Other Council members, however, argued that a further monetary policy tightening might result in an excessive appreciation of zloty exchange rate. They pointed out that the increased current inflation was to a large extent the effect of factors beyond the influence of the domestic monetary policy and argued that the expected lowering of the economic growth should be conducive to easing the inflationary pressure.

A motion to raise the key NBP interest rates by 25 basis points was put forward at the meeting and passed. The Council raised the interest rates to the following levels: the reference rate to 6.00%, the Lombard rate to 7.50%, the deposit rate to 4.50% and the rediscount rate to 6.25%.

Publication date: 24 July 2008

Minutes of the Monetary Policy Council decision-making meeting held on 30 July 2008

During the meeting the Monetary Policy Council discussed the outlook for the future inflation developments in the context of the past, current and, primarily, anticipated economic situation.

The discussion at the meeting focused on exchange rate developments and their impact on economic growth, external balance and inflation, the outlook for economic growth in Poland, the labour market situation and the assessment of the risk of second-round effects. The Council discussed the influence of these factors on future inflation in Poland.

The Council paid close attention to the fact that as a result of the strengthening of the zloty so far, the present level of the exchange rate considerably outstripped that accounted for in the June inflation projection, which is likely to bring inflation down in the future. At the same time, some members of the Council pointed out that the recently observed appreciation of the zloty might have outpaced the appreciation of the equilibrium exchange rate. Some members of the Council argued that apart from the continuing interest rates differential between Poland and the euro area and the United States, expectations of further interest rate hikes in Poland, stimulating the inflow of short-term capital, might also have contributed to zloty strengthening. Given a low risk premium and favourable fundamentals of the Polish economy, subsequent interest rate hikes may, in the opinion of those members of the Council, bring further strong appreciation of the zloty. Other members of the Council argued that the anticipated economic slowdown in Poland might contribute to zloty depreciation. They also reasoned that at present it is difficult to assess

whether factors which had led to zloty appreciation were of permanent nature. Those members pointed out that exchange rate developments are, to a great extent, affected by non-fundamental and external factors whose impact on the exchange rate is hardly predicable. Therefore, in their opinion, a depreciation of the zloty exchange rate cannot be ruled out.

In the discussion about the consequences of zloty appreciation it was pointed out that it contributed to curbing inflation by decreasing imported inflation, including by easing the impact of oil price growth in the world markets on domestic prices. Some members of the Council pointed out that the appreciation of the zloty exchange rate surpassing the appreciation of the equilibrium exchange rate might, with a time lag, negatively affect economic activity in Poland by decreasing the competitiveness of Polish exports, which would be conducive to increasing the negative contribution of net exports to GDP growth and might curb corporate investment activity. In the opinion of those members of the Council, a worsening outlook for Polish exports is signalled by the findings of the NBP's economic condition survey indicating a marked drop in 2008 Q2 in margins of enterprises manufacturing export products, a fall in the number of export contracts and an appreciation of the actual exchange rate outstripping the appreciation of the average exchange rate ensuring exports profitability declared by enterprises. Attention was also paid to GUS data on foreign trade deficit in 2007 which after revision proved higher than previously estimated, which was mainly connected with stronger import growth. In the opinion of some members of the Council this means that zloty appreciation may have a stronger impact on Polish foreign trade than previously estimated. Those members pointed out that the zloty appreciation will in subsequent quarters further deepen the foreign trade deficit which would also be influenced by the economic slowdown abroad.

On the other hand, it was pointed out that according to preliminary national accounts data for 2008 Q1 export growth was maintained at a level close to the import growth despite the appreciation of the zloty exchange rate. It was also indicated that import growth might be connected not only with exchange rate appreciation but also with a strong growth of domestic demand. It was argued that wage growth outpacing labour productivity growth was also conducive to deteriorating competitiveness of Polish manufacturers.

The Council paid considerable attention to the role of the exchange rate in the conduct of monetary policy. Some members of the Council argued that in a small open economy, such as the Polish economy, changes in the exchange rate, in particular in relation to the equilibrium exchange rate, contribute significantly to a tightening of monetary conditions and should be taken into account in the decisions about interest rates. They pointed out that although the exchange rate appreciation is an effective channel of curbing inflation, excessive currency strengthening poses a risk of too severe an economic slowdown and of a worsening external balance. Other members argued that the recent strong appreciation of the zloty exchange rate could be temporary and therefore changes in the exchange rate should be treated as a neutral factor while taking decisions on interest rate. Some members of the Council pointed out that due to the specific character of exchange rate markets, the exchange rate can persistently deviate from the equilibrium exchange rate.

While discussing the outlook for economic growth, some members of the Council indicated that June data on lower than expected growth in industrial output, falling growth in retail sales and deteriorating economic conditions indicators in June and July together with information on lower capacity utilization in 2008 Q3 pointed to a gradual slowdown of the economic growth in Poland. Those members pointed out that limited investment and consequently lower GDP growth might also result from the likely deterioration of profit ratios of enterprises. Moreover, in the judgment of those members of the Council the second half of 2008 might be expected to see GDP growth below potential output growth which should be conducive to lowering the inflationary pressure. Yet, other members of the Council pointed out that the scale of the anticipated slowdown was limited and might not be sufficient to bring inflation down to the target over the monetary policy horizon. Moreover, despite a certain decline, credit aggregates continued to display a high growth rate which, in the opinion of those members, supported the inflationary pressure.

In the discussion about the labour market situation, it was reasoned that high wage growth and growing unit labour costs continued to be major risk factors to inflation in the medium term. It was indicated that the economic slowdown had not curbed wage pressures yet. Some members of the Council pointed out that, as suggested by the findings of the NBP's business tendency survey, the outlook for employment and wage growth deteriorated in 2008 Q3 for the second consecutive time, and employment growth in enterprises was on a downward path. In the opinion of those members, 2008 H2 might see a gradual softening of the labour market which would be driven by the expected growth in economic activity and a lower scale of Poles' economic migration abroad. Some members of the Council also pointed out that an economic slowdown and related decreasing labour demand as well as worsening financial condition of enterprises should contribute to lowering the wage growth.

It was argued during the discussion that heightened current inflation together with adaptive inflation expectations posed a risk of inflation remaining at a relatively high level. It was also emphasized that the recent heated public debate about the price growth contributed to boosting inflation expectations. Yet, in the opinion of some members of the Council the impact of inflation expectations on wage growth should decrease together with weakening economic conditions. In the opinion of those members the recently observed strong appreciation of the zloty exchange rate bringing down inflation expectations constitutes an additional factor reducing the risk of second-round effects.

At the meeting the current inflation developments were also discussed. It was pointed out that despite the increase in the consumer price index recorded in June (being primarily the result of a higher growth in the prices of food, fuels and certain services), inflation in Poland, similarly as in Slovakia, was the lowest in the region. It was also emphasized that the 12-month moving average HICP inflation taken into account while assessing the compliance with the Maastricht price stability criterion, despite its increase, still had not exceeded the reference value, which was due to fact that the currently observed rise in inflation is global in character.

At the same time, it was pointed out that June had seen an increase in all core inflation measures which, in the opinion of some Council members, corroborated growing inflationary pressure. While analyzing core inflation measures net of food and energy prices, it was emphasized that since mid-2006 this indicator had been on a steady rising path, and the June inflation projection pointed to its further growth and persistently high level in 2009. It was also noted that the past few years had seen core inflation net of food and energy prices running considerably below CPI inflation which, in case this relation continued, might mean the CPI inflation will remain above the inflation target also in 2009 or even beyond. On the other hand, some members of the Council pointed out that the expected decline in economic growth, the recent strengthening of the exchange rate and the previous interest rate hikes could bring inflation down close to the inflation target in the monetary policy horizon, albeit the expected rise in administered prices would be a factor supporting increased inflation.

While discussing the changes in the external environment of the Polish economy, some members of the Council emphasized persisting uncertainty about the duration of the slowdown in the world economy and its impact on economic growth in Poland. The data on the United States suggest, in the judgment of those members, that the fiscal impulse implemented in the United States has been largely offset by rising fuel prices and will drive only a short-lived acceleration of economic growth. According to the latest forecasts, the second half of 2008 should bring further slowdown in the US economy which might continue also in 2009. Moreover, those members pointed to a deteriorating growth outlook in the European economy, particularly in Germany which so far had reported relatively high economic growth.

Some members of the Council pointed out that considering the sources of the currently elevated inflation, central banks pursuing inflation targeting strategy did not aim at bringing inflation down to the target fast as this might result in an excessive decline in economic growth. In this context, it was pointed out that in Poland the measures which could lower the inflationary

pressure and consequently reduce the costs of bringing inflation down to the target were structural reforms, including the reform of public finances. The reform of public finances should limit the pro-cyclicality of fiscal policy.

Potential further increases in interest rates were discussed at the meeting. Some members of the Council emphasized that the risk of inflation expectations being maintained at a heightened level and a strong rise in wages and unit labour costs combined with the anticipated only slight slowdown in economic activity weighted in favour of increasing interest rates at the July meeting. It was argued that the outlook for inflationary processes was largely affected by the developments in real interest rates which, despite the previous interest rate increases, continued to fall. Yet, the majority of the Council members judged that the strong appreciation of the zloty exchange rate, the expected softening of the labour market and the anticipated slowdown in economic growth coupled with the already implemented interest rate hikes would constitute factors bringing inflation down to the target in the medium term, yet, a more comprehensive assessment of the risk of inflation continuing at a heightened level would be possible after analysing the data to be released in the coming months. Moreover, those members indicated that too large a scale of interest rate hikes might favour excessive appreciation which, coupled with a deteriorating outlook for economic growth abroad would constitute a risk of a significant weakening of exports and pose a risk of a considerable economic slowdown in Poland and further rising of external imbalance. These arguments, in the opinion of the majority of the Council members, justified keeping interest rates unchanged at the present meeting.

A motion to raise the key NBP interest rates by 25 basis points was put forward at the meeting. The motion did not pass. The Council kept the interest rates unchanged: the reference rate at 6.00%, the Lombard rate at 7.50%, the deposit rate at 4.50% and the rediscount rate at 6.25%.

Publication date: 21 August 2008

Minutes of the Monetary Policy Council decision-making meeting held on 27 August 2008

During the meeting the Monetary Policy Council discussed the outlook for future inflation developments in the context of the past, current and, primarily, anticipated economic situation.

The discussion at the meeting focused on exchange rate developments and their impact on economic growth, external balance and inflation, the outlook for economic growth in Poland and abroad and the situation in the labour market. The Council discussed the influence of these factors on future inflation in Poland.

While analysing the impact of exchange rate developments on the outlook for inflation and economic growth in Poland, attention was paid to the depreciation of the exchange rate of the zloty and other currencies of the region, both against the US dollar and the euro, which was observed in August 2008. It was indicated that at present it was difficult to assess whether the observed zloty depreciation would be of permanent nature. Yet, some members of the Council pointed to the risk of zloty depreciation in the context of the anticipated economic slowdown in Poland. Moreover, they indicated that changes in the exchange rate of the euro against the US dollar might be important for future zloty exchange rate developments. Those members emphasised that in the case of further depreciation of the zloty, the exchange rate would cease to be the factor curbing inflation in Poland. At the same time it was pointed out that the slowdown in the global economy, including in the EU economies, might result in lower demand for Polish exports which would contribute to the depreciation of the equilibrium exchange rate. Other members of the Council also pointed out that despite the recently observed depreciation, the exchange rate of the zloty continued to be considerably stronger than in the previous quarters. They argued that although exchange rate appreciation constituted a factor curbing imported

inflation, further interest rate hikes might lead to a renewed appreciation of the zloty exchange rate, which could negatively affect the competitiveness of Polish manufacturers and, as a result, economic activity in Poland.

While analysing the developments of the zloty exchange rate, the Council discussed the impact of the appreciation on the external balance of the Polish economy. It was pointed out that according to preliminary data in the first half of 2008 the foreign trade deficit had deepened. Attention was also paid to the fact that preliminary data suggested changes in the structure of financing of the current account deficit of the balance of payments, reflected in a decline of foreign direct investment and a growth in portfolio investment in 2008 Q2. Some members of the Council argued that the rise in the foreign trade deficit had probably been driven by a strong appreciation of the zloty exchange rate leading to deteriorating competitiveness of Polish producers both on the domestic market as well as on foreign markets. Other members of the Council pointed out, however, that import growth outstripping export growth could have been connected with high growth in domestic demand, hence, considering the expected economic slowdown in Poland, import growth should be expected to decline. Besides, those members reasoned that in the longer term wage growth outpacing labour productivity growth might be a more important factor leading to deteriorating competitiveness of Polish exports.

While addressing changes in the external environment of the Polish economy, attention was paid to the persisting, despite relatively high GDP growth in 2008 Q2, unfavourable outlook for economic growth in the United States, as well as deeper than expected deterioration in economic conditions in certain EU economies. Particular attention was paid to strong economic slowdown, deteriorating economic conditions indicators and further worsening of consumer sentiment in economies which constitute the main markets for Polish exports – Germany, France, Italy and Great Britain. The worsening outlook for exports in the euro area was also pointed to, particularly for German exports, which, due to the strong trade links between Polish and German exporters, might translate into a decline in Polish exports.

During the discussion, attention was paid to a considerable drop in fuel prices in the global market observed since early July 2008, noting, at the same time, that at present it was difficult to assess whether this phenomenon was of permanent nature. Some members of the Council argued that due to the anticipated further deterioration in business conditions in the developed countries, the risk of further strong growth of fuel prices in the global market had declined. Moreover, those members indicated that slower growth in global demand might also translate into curbing the rising prices of other commodities which would be conducive to reducing global inflation.

While discussing the outlook for economic growth in Poland, it was pointed to the signs of economic slowdown, i.e. lower than expected growth in industrial output and further decline in manufacturing orders in July 2008, deteriorating financial results of enterprises and growing share of semi-finished goods and work-in-progress, goods and finished products in the structure of inventories in the first half of 2008 as well as a deterioration of the majority of economic conditions indicators. Some members of the Council pointed out that a further decline in GDP growth might be triggered by limited investment, which could be driven by deteriorating profit ratios of enterprises. Moreover, they argued that further weakening in business conditions in the EU might – through falling demand for Polish exports – lead to a deeper-than-currently-anticipated decline in economic growth in Poland. Other members of the Council pointed out, however, that GDP growth in 2008 Q2 had probably been higher than anticipated in the June projection, which suggested that the scale of subsequent decline in economic growth might be smaller than projected. They also indicated that drawing conclusions about changes in economic activity in Poland based on the monthly data on industrial output was subject to uncertainty, especially taking into account the growing share of services in the structure of the Polish economy.

While analysing the situation in the labour market it was pointed to persistently high growth in wages and unit labour costs running well above the level anticipated in the June projection. Some members of the Council argued that the relation between wage growth and labour

productivity growth might deteriorate in the near future due to the expected economic slowdown and the resulting decline in labour productivity growth. On the other hand, other members of the Council reasoned that the economic slowdown would contribute to lower labour demand, and consequently, with a certain time lag, would curb wage pressure, whereas the persistently relatively high investment growth would be conducive to growth in labour productivity. They also paid attention to the diminishing importance of wage pressure as a growth barrier indicated by enterprises in the NBP's business condition surveys and gradually declining employment growth amidst continued growth in economic activity. Moreover, those members argued that tensions in the labour market would be eased as a result of declining migration outflows, due to, among other things, weakening in business conditions in Great Britain and other EU countries. It was also pointed out that high wage growth was partly related to the process of convergence of the Polish economy with richer countries of the EU.

When assessing the impact of the persistently high wage growth on inflationary processes, some members of the Council argued that amidst continuing fast growth in demand, entrepreneurs might tend to pass on the increase in labour costs to prices. Moreover, attention was paid to the fact that growing consumer demand driven by rising income of households was conducive to growing inflationary pressure as indicated by the rise in core inflation, including growth in the prices of services, which had been observed for several quarters. Those members also pointed out that the anticipated rise in CPI in August 2008 created a risk of a rise in inflation expectations. On the other hand, some members of the Council indicated that the previous month saw inflationary expectations stabilising and that an economic slowdown in Poland would limit the risk of second-round effects. They also pointed out that the impact of a rapid wage growth on inflation might be mitigated by the decline in the share of labour costs in the total costs of enterprises, observed in the previous years.

Some members of the Council pointed out that factors contributing to persisting demand pressure might include, apart from rapid wage growth, still high although declining credit growth, including high growth in consumer loans. Other members of the Council argued, however, that as a result of the declining value of financial assets of households and the growth in new loans, asset encumbrance had been growing which should limit households' future borrowing capacity. They also emphasised that an economic slowdown might have the same effect. At the same time it was pointed out that the possible growth in interest-rate differentials might have a limited impact on the growth in credit aggregates due to the possibility of zloty-denominated loans being substituted by foreign-currency-denominated loans. On the other hand, it was argued that an interest rate rise should be conducive to a decline in credit growth, among other things, through influencing the expectations of future income of households.

The meeting also addressed current inflation developments. It was pointed out that in July core inflation net of food and energy prices continued to run at the level recorded in June 2008, and the acceleration of CPI inflation as compared with the previous month had been driven by the increasing growth of food, energy and fuel prices. The attention was also paid to the fact that inflation in Poland, similarly as in Slovakia, continued to be the lowest in the region. It was also emphasised that the 12-month moving average HICP inflation taken into account while assessing the compliance with the Maastricht price stability criterion, despite its increase, still had not exceeded the reference value.

While discussing the decision on interest rates, some members of the Council pointed out that the scale of economic slowdown might not be sufficient to bring inflation down to the target over the monetary policy horizon. Moreover, curbed appreciation of the zloty coupled with the risk of exchange rate depreciation connected with the expected slowdown in the Polish economy, falling real interest rates – despite the already implemented interest rate increases – and the risk of inflation expectations continuing at a heightened level justified, in their opinion, raising interest rates at the present meeting. In the judgment of those members, delaying subsequent interest rate increases might boost the costs of bringing inflation down to the target. In the opinion of other members of the Council, considerable economic slowdown abroad, signs of economic slowdown

in Poland, the already implemented interest rate increases and the expected decline in wage pressure would constitute factors bringing inflation down to the target in the medium term. Those members also pointed out that interest rate rise could be conducive to the appreciation of the zloty exchange rate which would pose a risk of a deeper economic slowdown in Poland and further rising of external imbalance. Moreover, they argued that a more comprehensive assessment of the risk of inflation continuing at a heightened level in the medium term would be possible after analysing the data to be released in the coming months.

A motion to raise the key NBP interest rates by 25 basis points was put forward at the meeting. The motion did not pass. The Council kept the interest rates unchanged: the reference rate at 6.00%, the Lombard rate at 7.50%, the deposit rate at 4.50% and the rediscount rate at 6.25%.

Publication date: 18 September 2008

Minutes of the Monetary Policy Council decision-making meeting held on 24 September 2008

During the meeting the Monetary Policy Council discussed the outlook for the future inflation developments in the context of the past, current and, above all, anticipated economic situation.

The discussion at the meeting focused on: the outlook for inflation and economic growth in Poland and in the world economy, situation in the labour market in Poland and the prospects of Poland's entry to the euro area.

When analysing the economic growth developments in Poland, it was pointed out that GDP growth in 2008 Q2 had been much higher and in 2008 Q3 would probably be also higher than expected in the June projection. Some Council members, however, pointed to the rise in contribution of gross fixed capital formation and a drop in contribution of total consumption to GDP growth in 2008 Q2, which might indicate easing the upward pressure on consumer prices. These members argued as well that the drop in industrial output, bigger than expected reduction of growth in construction and assembly output and marked deterioration of economic climate indices in the corporate sector in August 2008 signalled significant weakening of economic activity in Poland in the coming quarters. They also pointed out that a lowering of the demand for Polish exports, due to the significant deterioration of economic growth in countries which are Poland's main trading partners, would be conducive to the decline in GDP growth. The similar impact would be exerted by the appreciation of the zloty observed in the first half of the year, which reduces the competitiveness of Polish producers in foreign markets and in the domestic market, and the weakening of consumption demand related to the probable deterioration of situation in the labour market.

While discussing the situation in the external environment of the Polish economy, further marked deterioration of outlook for economic growth in the United States and the euro area was noted. The fall in industrial output in these economies as well as further deterioration of economic climate indices were underscored. Some members of the Council pointed out that the crisis in the housing market and financial markets would contribute to a significant drop in consumer demand in the US economy. These members also emphasized that the support granted to financial institutions by the government of the United States would reduce the possibility of further demand stimulation by means of fiscal policy. Demand might be further reduced by regulations tightening criteria for granting loans, which were likely to be introduced in the United States. It was pointed out that the intensification of turmoil in financial markets in the United States would probably translate to the situation in the banking sector of some of the EU economies and would be an additional factor dampening economic activity in these countries.

With respect to the situation in the labour market in Poland, attention was drawn to the continuous decline in employment growth since the beginning of the year and the decline in wage growth in the corporate sector in August 2008. Some members of the Council argued that it might indicate that declining economic activity in Poland would be accompanied by relatively fast easing of wage pressure. These members also pointed out that the growth in labour supply in Poland related to possible increased returns of Poles from EU countries in which the current and anticipated economic situation had significantly deteriorated might also be conducive to the decline in wage growth. Other members of the Council, however, emphasized that wage growth remained strong and might remain at a heightened level due to the lag between the weakening of economic activity and deterioration of the situation in the labour market. In their assessment, that effect, coupled with decreasing GDP growth, might lead in the nearest future to further drop in labour productivity and consequently to the increase in unit labour costs. Other members of the Council also pointed out that the decline in wage growth might be reduced by the process of convergence of the Polish economy to more developed EU economies where the share of compensations in GDP is much higher than in Poland. Furthermore, some members emphasized that a fast rise in unit labour costs might in the longer horizon significantly reduce the competitiveness of Polish enterprises, including exporters.

The development of monetary aggregates in Poland was also discussed during the meeting. Some members of the Council drew attention to a still very strong growth in consumer credits, emphasizing that it would probably support continuously high demand pressure. At the same time, these members pointed out that the high growth of broad money supply observed for the last several years might indicate the persistence of inflationary pressure in the economy. Other members of the Council, however, noted that credit growth might be reduced by possible tightening of criteria for granting loans, as well as by the decrease in creditworthiness of households related to their deteriorating financial situation as a result of a significant drop in value of their assets.

When analysing inflation developments in Poland, it was noted that the harmonized index of consumer prices (HICP) in Poland in August 2008 was still the lowest among the countries of the region and also lower than in the majority of the countries of the euro area. Attention was also drawn to the lower than expected CPI inflation in August 2008 and to the decline in food and oil prices in global markets, which should be conducive to lowering inflation over the following few months. Some members of the Council pointed, however, to a significant rise in core inflation net of food and energy prices in August 2008. At the same time, it was emphasised that this measure of core inflation had been lower till July 2008 due to the promotional Internet price reduction last year, and its level observed since August 2008 better reflects price processes in the economy. Some members of the Council drew attention to the risk of core inflation remaining in the coming quarters above the NBP inflation target and the CPI inflation above the upper limit for deviations from the target due to possible increases of administered prices. Other members of the Council, however, pointed out that in the light of the probable resignation from the earlier announced deregulation of energy prices for households since the beginning of 2009, the energy price growth might be lower than earlier expected, and therefore the risk of inflation remaining at a heightened level might decline.

An important factor taken into account during the discussion was the result of the meeting between the Prime Minister and representatives of the government with the Monetary Policy Council held on 16 September 2008 concerning the perspectives of Poland's accession to the euro area. At the Council's meeting some members of the Council pointed out that complying with the Maastricht inflation criterion in 2011 may require a more restrictive monetary policy than in a situation when Poland were to meet the convergence criteria in a later period. Some of the members observed that the need to meet this criterion in 2011 and by implication to stabilise inflation at an adequate level in 2010–2011 justified the tightening of monetary policy at the current meeting. According to other members of the Council the slowdown in the Polish economy would contribute to bringing inflation down to a level enabling meeting the Maastricht inflation criterion. Moreover, some members of the Council noted that due to the uncertainty with respect to obtaining

the support of the required parliamentary majority for changes in the constitution necessary from the point of view of introducing euro in Poland, there was no need to consider the possible adjustment of the monetary policy to the necessity of meeting the inflation criterion at the current meeting.

The impact of the prospects of Poland's entry to the euro area on the zloty exchange rate was also discussed during the meeting. Some members of the Council pointed out that Poland's preparations towards joining the euro area might be accompanied by the appreciation of the nominal zloty exchange rate, which would be conducive to reducing inflation. Other members of the Council observed, however, that there was a risk of the zloty depreciation if the political consultations mentioned in the joint press release of the Prime Minister and the Monetary Policy Council, did not succeed, particularly in the context of increased global risk aversion due to the turmoil in financial markets.

While discussing the decision on interest rates, some members of the Council pointed out that the scale of economic slowdown might be insufficient to reduce inflation to the target over the monetary policy horizon. Moreover, according to these members of the Council, the risk of inflation remaining above the upper limit for deviations from the target in the longer run, the risk of the exchange rate depreciation related to the turmoil in global financial markets and the possibility of revising the assessments concerning the perspective of Poland's entry to the euro area, the risk of inflation expectations remaining at an elevated level and the decreasing – despite the already implemented interest rate increases – real interest rates justified rising interest rates at the current meeting. In the assessment of these members of the Council, such decision was warranted also by perspectives of Poland's entry to the euro area outlined after the meeting with the Prime Minister and by the ensuing necessity of meeting the Maastricht inflation criterion. Furthermore, these members also pointed out that delaying interest rate increases might raise the costs of bringing inflation down to the target. According to other members of the Council, significant weakening of the economic activity in the external environment of the Polish economy, signs of economic slowdown in Poland, the already implemented interest rate increases, as well as the fall in the prices of agricultural and energy commodities in global markets would support the return of inflation to the target in medium term. These members also indicated that interest rate increases might be conducive to excessive curbing of domestic demand and – by supporting the renewed appreciation of the zloty exchange rate – to decreasing the price competitiveness of exports, and as a consequence might create the risk of a significant weakening of economic activity in Poland. According to these members of the Council, the uncertainty related to turmoil in global financial markets and the lack of political consensus regarding the date of adopting the euro warranted abstaining from the possible adjustment of the monetary policy to the necessity of meeting the inflation criterion. Moreover, they argued that a more comprehensive assessment of the risk of inflation remaining in the medium term at an elevated level would be possible after analysing the October projection of inflation and GDP and the data released in the coming months.

A motion to raise the NBP interest rates by 25 basis points was put forward at the meeting. The motion did not pass. The Council kept the interest rates unchanged: the reference rate at 6.00%, the Lombard rate at 7.50%, the deposit rate at 4.50% and the rediscount rate at 6.25%.

Publication date: 23 October 2008

Minutes of the Monetary Policy Council decision-making meeting held on 29 October 2008

During the meeting the Monetary Policy Council discussed the outlook for the future inflation developments in the context of the past, current and, primarily, anticipated economic situation.

The discussion at the meeting focused on: situation in the external environment of the Polish economy, outlook for economic growth in Poland, situation in the labour market and the prospects

of Poland's entry to the euro area. The Council discussed the impact of those factors on future inflation developments in Poland in view of the October projection of inflation and GDP.

While discussing the situation in the external environment of the Polish economy, further considerable deterioration in the outlook for economic growth in the global economy was noted. It was emphasised that the crisis of the financial sector in the United States contributed to intensifying unfavourable developments in the real economy of that country. Attention was also paid to considerable deterioration of economic climate in Great Britain and strong slowdown in economic activity in the euro area as well as considerable lowering of growth forecasts for the euro area's economy. Moreover, it was emphasised that in the time to come the weakening of the economic activity would be experienced not only in the developed but also in developing economies, including Asian and Latin American countries. In the case of economies exporting commodities, an important factor conducive to lower economic growth would be the decline in the value of their exports caused by falling commodity prices, whereas the decline in economic activity in the emerging economies which import commodities might additionally contribute to the lowering of prices of those commodities. It was pointed out that the slowdown in global economic activity curbed inflationary pressure, prompting central banks of many countries to ease their monetary policy.

The Council paid a lot of attention to the impact of the weakened global economy and the turmoil in the global financial markets on the outlook for economic growth in Poland. It was pointed out that the recession in the euro area, which is Poland's main trading partner, would lead to the lowering of demand for Polish exports. It was emphasised that deteriorating growth outlook in the global economy and the increased uncertainty in the external environment might – despite still relatively good condition of the Polish economy – contribute to the worsening of households' expectations of the future economic situation in Poland and, as a result, to the weakening of consumption demand. It was also argued that the drop in the value of households' assets being the result of the downturn in the financial markets might additionally dampen the consumption growth. It was also pointed out that changes in the external environment of the Polish economy might adversely affect the investment activity of enterprises in Poland. Investment growth may slow down primarily due to worsening entrepreneurs' expectations concerning the future demand in the foreign and domestic markets. Moreover, it was emphasised that the rise in risk premium driven by the turmoil in the international financial markets had led to a rise in market interest rates in Poland, and, consequently, to an increase in the cost of credit, which would also contribute to the weakening of investment growth in the time to come. Difficulties in acquiring capital for new investment, related to falling share prices in the capital markets, may also have the same effect. Attention was also drawn to further tightening of loan granting criteria by banks. A possible decrease in the inflow of foreign direct investment to Poland and deteriorating outlook for the financing of enterprises with foreign loans were also listed among adverse effects of the weakening world economy and the crisis in the global financial markets.

While assessing the outlook for economic growth in Poland, it was pointed out that in the coming quarters the above discussed factors would be conducive to lowering GDP growth. It was emphasised that the decline in economic growth was signalled, *inter alia*, by the deterioration in economic climate indices observed in the past few months. It was also emphasised that the growth of retail sales and industrial output in 2008 Q3 was markedly lower than in the first half of 2008. On the other hand, some members of the Council pointed out that the decline in the GDP growth in Poland would be curbed by the inflow of EU structural funds for financing investment projects, the expected relatively low level of prices of oil and other commodities as well as the zloty exchange rate depreciation observed between July and October 2008 which, if proved lasting, might mitigate the adverse impact of the weakening economic activity in the external environment of the Polish economy on the growth of Polish exports.

While addressing the situation in the labour market, it was assessed that in the near term wage pressure may be expected to continue despite the decline in economic growth. At the same time, however, it was pointed out that in the longer term the wage pressure would ease due to

the falling labour demand signalled, *inter alia*, by further decline in the annual employment growth in the corporate sector in September 2008. It was also argued that due to the economic slowdown in Western Europe, one could expect increased returns of Poles from economic migration and, consequently, a rise in the number of the economically active persons, which would contribute to further easing of the wage pressure. Moreover, it was assessed that the strong rise in corporate investment observed in the past few quarters would result in labour productivity continuing at a relatively high level, contributing to the improving of the unfavourable relation between the wage and labour productivity growth in the time to come.

When analysing inflation developments in Poland, it was noted that core inflation net of food and energy prices had increased in September 2008. Some members of the Council pointed out that the rise in core inflation was one of the major factors driving the considerable increase in CPI inflation over the past year. They emphasised that the increase in the growth of the prices of services was an important factor contributing to the rise in both CPI and core inflation. They argued that high growth of those prices in the analysed period resulted, on the one hand, from growing demand pressure (which, in turn, in the opinion of those members of the Council, was the result of the high wage growth and fast credit growth observed in the past few quarters), and, on the other hand, from intensifying cost pressure driven by rising unit labour costs. Moreover, those members pointed at the signs of growing share of services in households' consumption expenditure which suggests that the impact of the prices of services on CPI would be increasing. In the opinion of those members, accounting for those tendencies in the GUS revised CPI basket next year, provided the current prices trends continue, could be conducive to increasing inflation in 2009. Other members of the Council indicated that faced with deteriorating outlook for economic growth, the household demand for services might weaken, thus easing the pressure on further rise of those prices. They also indicated that the rise in the prices of services might be connected with the increasing demand for services resulting from the adjustment of the consumption structure in Poland to the structure prevailing in wealthier EU countries. Those members also argued that high annual growth of prices of certain services (e.g. in the group of *restaurant and hotel services*) resulted, to some extent, from previous strong increases of food prices, whereas in the case of some other services the price increases were largely related to insufficient competition in the markets of those services.

Some members of the Council pointed out that the rise in CPI inflation in the past year was largely driven by a rise in administered prices dependent on the decisions of central and local government entities (in particular, prices of services related to flat maintenance and energy prices), at the same time emphasising that further rise in those prices would be conducive to increasing inflation also in the future. Other members pointed out that due to the expected continued high contribution of growth in administered prices to CPI inflation, bringing CPI inflation down to the inflation target would require curbing the core inflation through considerable easing of demand pressure.

While discussing the outlook for inflation, some members of the Council emphasised that increased growth of consumer prices in the past months had been largely driven by the high annual growth of food and fuel prices, and that the expected decline in the growth of those prices in the coming months, driven by falling commodity prices in the world markets, would bring inflation down. Yet, it was emphasised that at present it was difficult to assess whether the currently low level of oil prices was a lasting phenomenon or not. Some members of the Council indicated that already in September 2008 CPI inflation had decreased as a result of a strong decline in the annual growth of food and fuel prices. They also stressed that GDP growth falling below the growth of potential output in the coming quarters would contribute to curbing the inflationary pressure. Some members also argued that the rise in administered prices and increasing households' loan service burden resulting from rising market interest rates would limit the volume of current consumption, thus contributing to lowering demand pressure and, consequently, inflationary pressure. Inflation should also be curbed by the expected easing of wage pressure and the continuing disinflationary impact of goods imported from low-cost countries. Moreover, those members assessed that due to the possible considerable weakening of economic activity in Poland, inflation in the coming quarters

might be significantly lower than assumed in the October inflation projection based on the NECMOD model. In the opinion of those members of the Council, considering the current exceptionally high uncertainty about the growth outlook for the world economy, reflected in significant and frequent revisions of macroeconomic forecasts, the usefulness of forecasts based on econometric models is lower than usual. It was pointed out that due to considerable deterioration in the situation in the external environment of the Polish economy, the works on the October inflation projection based on the NECMOD model involved quantification of the related risks, in the light of which the forecast GDP growth and inflation in Poland would be lower than suggested by the data released until 26 September 2008. Some members of the Council also pointed at other inflation forecasts which had been recently revised downwards.

In the opinion of other members of the Council, even considerable slowdown of GDP growth would not contribute to a rapid decline in inflation, which was reflected in the NBP's October projection. Those members pointed at the results of other forecasts conducted at the NBP according to which the forecast inflation, despite downward revision, would be running at an increased level in the coming quarters. They also emphasised that in line with the central projection path, the forecast CPI inflation in 2009 would be running at a level above the upper limit of deviations from the NBP's inflation target even after accounting for the quantification of risks resulting from deteriorating outlook for the global economic growth. Those members emphasised that in the light of the October projection, core inflation would remain at an elevated level in the coming quarters. It was also underlined that some measures of inflation expectations of individuals increased in September. Some members of the Council pointed out that expectations of future inflation might increase as a result of the turmoil in the financial markets and the related zloty exchange rate depreciation observed in October. At the same time it was pointed out that in September inflation expectations of bank analysts and some measures of inflation expectations of individuals decreased; in the opinion of some members of the Council, the decline in the economic activity in Poland, as anticipated by households, might contribute to the lowering of households' expectations of future inflation.

The discussion at the meeting also focused on the prospects of Poland's accession to the euro area in the context of the calendar of preparation for the euro adoption presented in October by the Council of Ministers. It was pointed out that the likelihood of implementing this calendar was dependent upon the required majority in the Parliament supporting the amendments in the Constitution of the Republic of Poland and other legal acts necessary for euro adoption. At the same time, it was pointed out that developments in the financial markets would be an important factor that may affect the prospects of Poland's adoption of the euro. While addressing the prospects of Poland's complying with the Maastricht inflation criterion, some members of the Council argued that the decline in the economic activity in many EU countries would be considerably stronger than in Poland, causing the reference value for this criterion to decrease stronger than inflation in Poland. In the opinion of those members of the Council, this means that that complying with the Maastricht inflation criterion in 2011 may require a more restrictive monetary policy than in a situation when Poland were to meet the convergence criteria at a later date.

The Council emphasised that the implementation of structural reforms, including the increasing of competition in certain sectors of the economy, would support the sustainable compliance with the convergence criteria.

While discussing the exchange rate developments, attention was paid to the strong weakening of the zloty exchange rate against the US dollar and the euro observed in October. It was pointed out that the exchange rate depreciation in October was driven by the turmoil in the global financial markets and the outflow of foreign capital and that it was present in all countries of the region pursuing a floating exchange rate regime as well as many other countries. In this context, a lot of attention was paid to the current macroeconomic situation and monetary policy in some small open economies. While discussing the exchange rates, it was pointed out that amidst increased uncertainty, exchange rate developments in small open economies are subject to

stronger than usual fluctuations. Some members of the Council argued that credible prospects of Poland's accession to the euro area might limit the fluctuations of the Polish zloty against the euro, at the same time emphasising that delays in this process may lead to the depreciation of the exchange rate. The Council also discussed the impact of interest rate differential between Poland and the euro area and the United States on the zloty exchange rate developments.

While discussing the decision on interest rates, the Council assessed that the considerable deterioration of the outlook for global economic growth, as well as the increased uncertainty as to the future economic activity in Poland coupled with elevated current and expected inflation, justified keeping the NBP's interest rates unchanged at the current meeting.

The Council also discussed the level of the NBP's interest rates in the near term. Some members of the Council pointed out that in the coming quarters inflation should be expected to continue above the inflation target despite the decline in economic growth. They stressed that this, coupled with stronger weakening of the economic activity and, consequently, of the inflationary pressure in many EU countries, was likely to make it difficult for Poland to comply with the Maastricht inflation criterion. In the opinion of those members, those arguments spoke for keeping the interest rates unchanged in the coming months. Other members argued that the decline of GDP growth in the coming quarters below the potential output growth would bring inflation down to the target in the medium term, while pointing out that the weakening of the economic activity in Poland might prove stronger than currently assessed which, coupled with the limited credit availability and market interest rates remaining at an increased level due to the turmoil in the international financial markets, might contribute to bringing down inflation below the target. In the opinion of those members of the Council, those arguments might justify the need to lower the NBP's interest rates in the coming months.

The members of the Council emphasised that the assessment of the NBP's interest rates level consistent with ensuring price stability in the medium term would depend on the data to be released in the coming months.

The Council kept the interest rates unchanged: the reference rate at 6.00%, the Lombard rate at 7.50%, the deposit rate at 4.50% and the rediscount rate at 6.25%.

Publication date: 20 November 2008

Minutes of the Monetary Policy Council decision-making meeting held on 26 November 2008

During the meeting the Monetary Policy Council discussed the outlook for the future inflation developments in the context of the past, current and, primarily, anticipated economic situation.

The discussion at the meeting focused on: situation in the external environment of the Polish economy, outlook for economic growth and inflation in Poland, credit market conditions, zloty exchange rate developments and prospects of the public finance sector.

While addressing the situation in the external environment of the Polish economy, a further deterioration in the outlook for global economic growth, and in particular, recession already observed in the United States, the euro area and Great Britain, was noted. It was also pointed out that global economic slowdown had been accompanied by a strong decline in the prices of oil and other commodities which was conducive to curbing global inflation. It was noted that those factors urged many central banks to further considerable interest rate cuts. In some countries fears of deflation have emerged. It was emphasised that due to strong links between the financial sector and the real economy it was difficult, at the moment, to assess how strongly the global financial crisis would affect the activity in the world economy; although, this impact might prove considerable.

While discussing the impact of the weakened global economy and the turmoil in the global financial markets on the outlook for economic growth in Poland, attention was paid to the downward revisions of forecasts of the domestic economic growth. It was argued that lower than expected data on industrial output and retail sales in October 2008 and weaker financial results of enterprises after the three quarters of 2008 as compared with 2007 as well as declining economic climate indices corroborated expectations of economic slowdown in Poland. Attention was also paid to the findings of enterprise surveys pointing to a decline in the expected demand and employment indices. It was emphasised that the anticipated deterioration of the situation in the labour market in Poland combined with the recession observed in Polish migration's major destination countries might contribute to deteriorating households' sentiment, and, as a result, to lowering consumption demand. In the opinion of some Council members, considerable deterioration in the external environment of the Polish economy and a risk of significant decline in investment and consumption demand due to deteriorating expectations about future economic situation in Poland suggested that in 2009 GDP growth in Poland might prove lower than anticipated in the NBP's October projection.

In this context, it was also pointed out that an important factor conducive to the weakening of the domestic demand would be banks' tightening of their lending policy. Some members of the Council argued that 2009 might see a stabilisation or even a decrease in corporate and household lending. A more difficult access to loans will result mainly from the currently introduced by banks tighter loan granting criteria and conditions (more rigorous assessment of creditworthiness, higher margins, increased required collateral, higher non-interest costs of credit etc.), while the increase in costs of loans may result, to some extent, from the increase in interest rates offered by banks on deposits. Market interest rates remaining at an elevated level and limited access of banks to external financing are also conducive to curbing lending. Yet, some Council members noted that the monetary data had not, thus far, suggested any considerable slowdown in lending.

While addressing the situation in the labour market it was pointed out that – despite some deceleration – the growth of wages and unit labour costs had remained at a high level. In the opinion of some members of the Council, subsequent quarters might be expected to bring a decline in employment and a rise in unemployment which might be driven by probable increase in labour supply resulting from demographic factors and lower incentives for economic migration of Poles to other EU countries. The majority of the Council members assessed that the expected decline in economic growth and the related deterioration in the labour market situation would translate into lowering wage pressure which, given the falling current inflation considerably limits the risk of the second-round effects.

While analyzing current inflation in Poland it was noted that for a year it had been remaining above the upper limit for deviations from the NBP inflation target. Some Council members pointed out that the currently heightened inflation resulted largely from high growth in administered prices (mainly prices of non-market services related to flat maintenance and energy prices) not directly influenced by monetary policy. At the same time it was noted that the rise in prices of some market services driven by demand pressure was also contributing to inflation remaining at an elevated level. Other members of the Council argued that the consumption growth had been continuously below the GDP growth which, in their opinion, meant that demand pressure in the Polish economy was limited. Those members pointed out that October 2008 saw a decline in four out of six core inflation indices, and core inflation net of food and energy prices remained at the level recorded in September 2008.

While discussing future inflation developments, some members of the Council pointed out that due to time lags in the monetary transmission mechanism, the outlook for inflation after 2009 was currently of key importance for monetary policy. Those Council members emphasised that the expected decline in inflation would be faster than anticipated in the October projection. In their opinion, the following arguments supported such an assessment: probably stronger than previously expected economic slowdown in Poland, considerable easing of the global inflationary pressure (including further decline in commodity prices), weaker – amidst declining demand –

translation of the currently observed growth in unit labour costs into prices and faster lowering of wage growth than anticipated in the projection. Those members of the Council pointed out that the growth of both food and fuel prices in 2009 might prove lower than forecast. It was also emphasized that the rise in administered prices, including prices of energy, together with an increase of excise duty on tobacco products due to the required adjustment of tax rates to the EU regulations would be delaying the process of lowering inflation. It was pointed out that the uncertainty about administered prices developments was an important factor that hinders identifying the time of inflation returning to the inflation target.

While addressing the exchange rate issues, some members of the Council emphasized that the current exchange rate of the zloty was weaker than anticipated in the October inflation projection which may contribute to price increases. Moreover, those Council members pointed out that zloty depreciation limited translation of lower commodity prices in the world markets into domestic prices. Other members of the Council assessed that the impact of the zloty depreciation observed in the past few months on inflation in Poland would be limited due to the lower pass through of exchange rate changes to consumer prices amidst the expected economic slowdown.

While discussing the exchange rate developments, it was pointed out that zloty depreciation in the past few months had largely been driven by the outflow of foreign capital from developing economies connected with the turmoil in the global financial markets. It was argued that the role of interest rate differential between Poland and the euro area and the United States had been temporarily limited, and the outlook for exchange rate developments depended to a major extent on the situation in the financial markets of the developed countries. Some members of the Council emphasized that exchange rate depreciation increases the volume and service cost of foreign corporate debt. Yet, it was also pointed out that weaker exchange rate of the zloty might mitigate the adverse effects of the economic slowdown in the euro area on the demand for Polish exports.

The Council paid a lot of attention to the prospects of fiscal policy in 2009 in the light of the announced amendments to the draft Budget Act. It was pointed out that keeping the budget deficit at the level adopted in the original draft Budget Act would mean – under the assumption of a lower economic growth – tightening of the fiscal policy. Some members of the Council noted, however, that the final shape of the Budget Act was not yet known and the planned lowering of the expenditure did not have to mean their actual reduction, among other things, due to the possibility of reallocating some of the funds not spent in 2008 to the subsequent year. The Council emphasized that maintaining fiscal discipline in the public finance sector may be conducive to easing monetary policy.

While addressing the issue of Poland's accession to the euro area, attention was paid to increased uncertainty about the implementation of the schedule of Poland's euro adoption, which was due to the lack of political consensus on this matter so far. At the same time it was pointed out that the monetary policy should take into account the risk of a strong economic slowdown in Poland making the compliance with the Maastricht fiscal criterion more difficult.

The Council also analyzed the liquidity conditions in the banking sector and their impact on the monetary policy transmission mechanism. In this context, the Council discussed the need for possible further adjustment of monetary policy instruments to liquidity conditions in the interbank market.

While discussing the decision on interest rates, some Council members assessed that further deterioration in the outlook for global economic growth, including the recession observed in Poland's major trading partners, the signs of considerable decline in economic activity in Poland in subsequent quarters and the resulting anticipated significant lowering of the inflationary pressure in the medium term justified easing the monetary policy at the Council's November meeting. The factor favouring the decision to ease the monetary policy was maintaining the public finance discipline amidst the expected economic slowdown declared by the government's representatives. Those members of the Council also argued that the lowering of the NBP interest rates would

prevent banks from limiting lending. Other Council members, however, pointed at the difficulty to identify the horizon of inflation returning to the inflation target and the considerable volatility of the zloty exchange rate as factors speaking for keeping the interest rates unchanged. Those members assessed that changes in the monetary policy parameters, if any, should be implemented at a later date – i.e. after the Council has got acquainted with the Budget Act for 2009 and with the subsequently released data on inflation and economic growth in Poland.

The Council also discussed the scale of the NBP interest rate reduction at the current meeting. In the opinion of some Council members the considerable deterioration of the outlook for economic growth in Poland spoke for lowering interest rates by 50 basis points at the November meeting. The majority of the Council members, however, assessed that developments in the Polish economy justified a gradual easing of monetary policy. They pointed out that amidst persisting high risk aversion in the international financial markets a too strong interest rate reduction at the current meeting could lead to further exchange rate depreciation.

A motion to lower the NBP interest rates by 50 basis points was put forward. The motion did not pass. A motion to lower the NBP interest rates by 25 basis points was put forward and passed. The Council decided to lower the NBP interest rates to the level: the reference rate to 5.75%, the Lombard rate to 7.25%, the deposit rate to 4.25% and the rediscount rate to 6.00%.

Publication date: 18 December 2008

Minutes of the Monetary Policy Council decision-making meeting held on 23 December 2008

During the meeting the Monetary Policy Council discussed the outlook for inflation in the context of the past, current and, primarily, anticipated economic situation.

The discussion at the meeting focused on: the outlook for economic growth and inflation in Poland, credit market conditions and zloty exchange rate developments.

While addressing the situation in the external environment of the Polish economy, a further deterioration in the outlook for global economic growth, and in particular, the deepening recession in the United States and the euro area, was noted. It was emphasised that the developments in the global economy were conducive to faster than previously expected decline in inflation in many economies, *inter alia*, as a result of the fall in commodity prices, including oil prices. It was pointed out that those factors urged many central banks, in particular banks of countries that are in recession, to further considerable easing of the monetary policy.

The Council paid a lot of attention to the outlook for economic growth in Poland. It was emphasised that unfavourable developments in the external environment of the Polish economy brought about stronger than previously expected decline in activity in the Polish economy which was corroborated by weaker than anticipated November data on industrial and construction output. Among major channels through which the world crisis affected the Polish economy were listed: the decline in external demand, deteriorating agents' expectations as to the future economic situation of the country and tightening of banks' lending policy. It was pointed out that the coming quarters might be expected to bring about a strong drop in corporate investment being largely the result of economic slowdown and deterioration in the outlook for sales in the domestic and foreign markets as well as a more difficult access of enterprises to loans both in Polish zloty and foreign currencies. Considerable weakening of investment demand will also be driven by such factors as deteriorating financial results of enterprises, limited possibilities of business financing through the capital market and a probable decline in the inflow of foreign direct investment to Poland. It was also stressed that as a result of the tightening of banks' lending policy, small and medium-sized enterprises might face problems with the absorption of EU funds for investment projects due to the need to contribute own funds. It was emphasised that GDP data for 2008 Q3 pointed to

a considerably stronger than anticipated fall in investment growth. At the same time, it was pointed out that the annual investment growth in the enterprise sector in 2008 Q3 was negative, and investment growth in the economy resulted from the continued relatively high growth in investment expenditure of the public finance sector and in housing investment. It was assessed that in 2008 Q4 the investment contribution to GDP growth could be close to zero and in the first half of 2009 it might turn negative.

While discussing the future economic situation it was assessed that the slowdown in economic growth would also be driven by a decline in consumption and export growth, and GDP growth in 2008 Q4 and in subsequent quarters would most probably be lower than anticipated in the NBP's October projection. It was pointed out that the decline in the growth of Polish exports might be stronger than the one recorded in the previous periods of economic slowdown in the external environment of the Polish economy due to the fact that in the past few years, the corporate links between Polish and foreign companies intensified and the share of highly processed goods sensitive to business cycle fluctuations in the Polish export production increased. Moreover, it was argued that contrary to previous expectations the consumption demand might also weaken considerably which was suggested by worse than expected November data on retail sales. The decline in private consumption growth will be driven by the anticipated deterioration of the labour market situation indicated by the November data on the declining wage growth and falling employment in the enterprise sector and increasing unemployment as well as tightening of household lending criteria. It was argued that limited access to credit would have a stronger impact on consumption demand than in the previous periods of the economic slowdown as the past few years had been marked by growing importance of credit in financing household consumption. Moreover, deterioration in the housing market situation related, among other things, to the tightening of conditions and criteria of granting mortgage loans, will contribute to the decline in demand for home furnishing goods and services. Among factors having a negative impact on consumption demand were also listed: deteriorating consumer sentiment and decreasing purchasing power of households' incomes driven by increases in administered prices.

While discussing the outlook for inflation it was assessed that in the time to come the growth in consumer prices would continue to decline and would be within the tolerance range for deviations from the inflation target, thus running below the level forecast in the NBP's October inflation projection. Lower than forecast inflation in the near term will be mainly driven by lower than assumed commodity prices in the global markets, including oil and gas prices. In the medium term, the lowering of inflationary pressure will be driven by: stronger than previously expected decline in the global and domestic economic growth, low inflation in the external environment of the Polish economy translating into declining growth in the prices of import goods and faster than anticipated in the projection weakening of wage pressure connected with falling labour demand and increased labour supply, *inter alia*, as a result of intensified return of Poles from the economic migration. Moreover, some members of the Council indicated that amidst the economic slowdown the previously observed increase in unit labour costs would translate into prices only to a limited extent. Attention was also paid to the stronger than expected decline in CPI inflation in November. Among factors curbing the decline in inflation, in turn, were listed: further rise in administered prices, increases in excise tax on certain products and depreciation of the zloty exchange rate observed in the past few months. Yet, some members of the Council pointed out that the impact of the exchange rate weakening on prices amidst economic slowdown would probably be limited.

While addressing the exchange rate developments, it was stressed that the considerable zloty depreciation against the euro and the US dollar and increased exchange rate volatility observed in the past few months resulted mainly from the increase in risk aversion in the global financial markets leading to capital outflow from the emerging markets. Some members of the Council argued that the appreciation of the zloty exchange rate in the first half of 2008 and its subsequent depreciation could be reinforced by Polish enterprises concluding structured foreign exchange contracts. In this context, it was pointed out that the exchange rate depreciation in the second half of 2008 contributed to the deterioration of the financial situation of certain enterprises

which might additionally limit the investment of these enterprises. Some members of the Council pointed out that the exchange rate depreciation resulted in increasing the value of public debt denominated in foreign currencies and, consequently, the relation of debt to GDP which, due to statutory restrictions, might make it necessary to limit the expenditure of the public finance sector in the coming years. Yet, other members of the Council pointed out that the share of debt denominated in foreign currencies in the total public debt was considerably lower than the share of debt in Polish zloty. On the other hand, as the favourable consequence of the zloty exchange rate depreciation it was noted that it was increasing the competitiveness of Polish products on foreign markets which would limit the impact of recession in countries being Poland's major trading partners on the growth of Polish exports.

While analysing the situation in the credit market it was pointed out that the tightening of banks' lending policy and continued increased level of market interest rates as compared with the NBP rates were related to liquidity disturbances in the banking system being the result of the crisis in the global financial markets. It was argued that commercial banks' operations aimed at increasing the liquidity – reduction of lending and offering of high interest rates on deposits – would contribute to limiting the domestic demand in the time to come. It was also pointed out that too high interest rates on deposits might result in deteriorating financial results of banks and, consequently, constitute a factor limiting future lending. It was pointed out that this effect was not yet observed in the monetary data showing that loans continued to grow relatively fast in November. Some members of the Council argued that the continued growth in corporate loans in November might be driven by the fact that enterprises, fearing the further tightening of banks' lending policy, tried to use the available credit lines.

The Council also discussed the actions of the NBP and the government that could counteract the reduction of banks' lending. It was argued that this objective would be supported by the government loan guarantee system, concerning in particular corporate loans, including loans taken for projects financed with UE funds. It was pointed out that due to liquidity problems faced by banks possible lowering of the NBP interest rates might not fully translate into reductions of market interest rates. In the opinion of some discussants this was an argument speaking in favour of considerable decreases in the NBP interest rates. Other members of the Council argued that even strong decreases in the interest rates would not increase loan availability or reduce credit costs since those depend on banks' liquidity situation and households' and entrepreneurs' expectations as to the future situation of the Polish economy.

While discussing the decision on interest rates, the Council assessed that the signs of stronger and faster than expected decline in the global and Polish economic activity combined with considerable lowering of the inflationary pressure in the medium term speak for decreasing the NBP interest rates. Some members of the Council expressed the opinion that easing of the monetary policy should be implemented gradually, *inter alia*, due to the high uncertainty about the outlook for the global and Polish economy and about the impact of cuts in the NBP interest rates on market interest rates and domestic demand. They argued that too strong a lowering of the NBP interest rates might negatively affect the expectations of the financial market participants as regards the outlook for the Polish economy, thus driving further exchange rate depreciation. Some members of the Council assessed, however, that in the current situation the impact of the interest rate disparity on the exchange rate was limited. The majority of the Council members assessed that the scale of economic slowdown in Poland and the increased credit cost resulting from market interest rates continuing well above the level of the NBP reference rate combined with the marked weakening of the inflationary pressure justified a considerable easing of the monetary policy at the December meeting. Those members argued that insufficient response of the monetary policy to the unfavourable developments in the Polish economy might contribute to intensifying those developments and, as a result – through deteriorating expectations of the financial market participants – be conducive to the weakening and increased volatility of the zloty exchange rate. They assessed that a more significant lowering of the NBP interest rates would counteract the reduction of bank lending and, consequently, the excessive weakening of domestic demand, and that it would also reduce the cost of credit, including the cost of servicing the previously contracted

loans, which could additionally reduce the share of the so-called bad debts, thus contributing to increased stability of the financial system. They also pointed out that maintaining the public finance discipline despite the economic slowdown declared by representatives of the government constituted an additional factor favouring the easing of the monetary policy. The Council also discussed the scale of possible further lowering of the NBP interest rates.

A motion to lower the NBP interest rates by 50 basis points and a motion to lower the NBP interest rates by 75 basis points were put forward. The motion to lower the NBP interest rates by 75 basis points was passed, therefore the motion to lower the NBP interest rates by 50 basis points was not put to voting. The Council decided to lower the NBP interest rates to the level: the reference rate to 5.00%, the Lombard rate to 6.50%, the deposit rate to 3.50% and the rediscount rate to 5.25%.

Publication date: 22 January 2009

Appendix 7

Selected information about the banking sector

In 2008, similarly as in the previous years, banks were the most important institutions in the Polish financial sector. As at the end of 2008, banking sector assets totalled PLN 1,041.9 billion and were 31.5% higher as compared to the preceding year. The ratio of assets to GDP rose to around 85%⁷² (from 68.1% at the end of 2007). The most important source of asset growth was the increase in loans to households, especially housing loans. There was also a dynamic rise in loans to enterprises. The loan growth faster than deposit growth led to a significant structural change in the banking sector balance. In the second half of 2007 for the first time the value of loans granted to non-financial entities exceeded the value of their deposits and in 2008 the difference between those values continued to rise.

Concentration level of the banking sector measured with the share of 5 biggest banks in assets decreased by 2 percentage points (from 46.6% to 44.6% in 2008). This was because the assets of smaller banks and the branches of credit institutions were growing at a faster rate. At the end of 2008 the assets of the branches of credit institutions (PLN 56.1 billion) almost equalled the assets of cooperative banks (PLN 56.5 billion) and their share in the sector's assets rose from 4.3% to 5.4%.

Table 51

Asset structure of the banking sector

Specification	Value (PLN billion)		Growth rate (%)	Structure (%)	
	2007	2008	2007 = 100	2007	2008
Cash and due from central bank	28.2	39.5	140.0	3.6	3.8
Due from financial sector	125.2	108.4	86.6	15.8	10.4
Due from non-financial sector, including:	421.7	587.7	139.4	53.2	56.4
– net loans to non-financial sector, of which:	410.2	573.9	139.9	51.6	55.1
– to enterprises	164.4	215.7	131.2	20.7	20.7
– to households	244.1	355.9	145.8	30.7	34.2
Due from general government	21.4	24.6	114.9	2.7	2.4
Due from reverse repo transactions	6.0	9.0	150.7	0.8	0.9
Securities, of which:	135.6	181.0	133.4	17.1	17.4
– NBP money bills and bonds	15.8	18.3	115.9	2.0	1.8
– Treasury bills and bonds*	101.0	145.8	144.4	12.7	14.0
Fixed assets	22.0	25.6	116.6	2.8	2.5
Other assets	32.6	66.0	203.4	4.1	6.4
Total assets of the banking sector	792.8	1 041.9	131.5	100.0	100.0

* Bonds issued by non-residents have not been taken into account.

Source: NBP data.

⁷² Based on preliminary GDP estimates for Poland for three quarters of 2008 published by GUS on 28 November 2008 and the GDP estimated for Poland for 2008 Q4 calculated as the arithmetic mean of GDP levels in three quarters of 2008.

Table 52

Liabilities structure of the banking sector

Specification	Value (PLN billion)		Growth rate (%)	Structure (%)	
	2007	2008	2007 = 100	2007	2008
Due to central bank	3.0	18.1	587.0	0.4	1.7
Due to financial sector	158.4	242.9	153.3	20.0	23.3
Due to non-financial sector, including:	428.2	506.0	118.2	54.0	48.6
– deposits of non-financial sector, of which:	419.3	494.1	117.8	52.7	47.4
– from enterprises	144.8	149.2	103.0	18.2	14.3
– from households	262.4	330.8	126.1	33.0	31.8
Due to general government	44.7	53.5	119.7	5.6	5.1
Due to reverse repro transactions	13.3	14.7	110.9	1.7	1.4
Due to issue of own securities	12.4	12.5	100.7	1.6	1.2
Other liabilities	51.1	96.5	188.6	6.5	9.3
Specific provisions for off-balance sheet liabilities	0.4	0.4	96.1	0.1	0.0
General risk provision	0.5	0.3	56.8	0.1	0.0
Capital (funds)*	63.1	74.8	118.5	7.9	7.2
Subordinated debt	5.6	7.6	135.7	0.7	0.7
Profit/loss during approval procedures	0.0	0.0	0.0	0.0	0.0
Current year profit/loss	12.3	14.6	120.1	1.5	1.4
Total liabilities of the banking sector	792.8	1 041.9	131.4	100.0	100.0

* Basic capital, supplementary fund, reserve funds, general risk fund, revaluation reserve, other supplementary funds.

Source: NBP data.

Table 53

Relationships with non-residents

Specification	Contribution (%)	
	2007	2008
Contribution of operations with non-residents		
– in total assets of the banking sector	10.1	7.4
– in total liabilities of the banking sector	13.3	20.6

Source: NBP data.

Table 54

Financial result of the banking sector

Specification	Value (PLN billion)		Growth rate (%)
	2007	2008	2007 = 100
Gross financial result	15.0*	18.1	1.21
Net financial result	12.3	14.6	1.20

* The previous report stipulated that the gross financial result in 2007 amounted to PLN 16.8 billion, but then the result of BPH division was reported as loss on discontinued operation (in the profit and loss account it is "below" the gross result).

Source: NBP data.

Table 55
Profitability of the banking sector

Specification	Rate of return (%)	
	2007	2008
ROA – net	1.7	1.6
ROE – net*	22.4	21.8**

* Domestic banking sector (excluding the branches of foreign credit institutions).

** Data for November 2008.

Source: NBP data.

Table 56
Own funds and solvency ratio of the domestic banking sector

Specification	2007	2008*	Annual change (pp)	Growth rate (% , 2007 = 100)
Solvency ratio (%)	12.1	10.9	-1.3	n/a
Regulatory own funds (PLN billion)	61.8	75.5	n/a	122.3

* Data for November 2008.

Source: NBP data.

Appendix 8

List of open-to-public academic seminars and selected publications of the NBP

2008 saw the organisation of 11 open-to-public academic seminars. The seminars presented the works of NBP employees, representatives of financial institutions and academia. The seminars covered the following topics:

- The impact of emigration on the labour market in Poland
- Polish economy in 1997–2006 in the light of DSGE modelling
- Managing the public debt of EU countries
- Signalling mechanism of dollarisation
- The Maastricht Convergence Criteria and Optimal Monetary Policy for the EMU Accession Countries
- New forecasting model of the NBP
- Macro- and micro-economic effects of globalisation for the Polish economy
- The impact of euro adoption on price transparency and inflation
- The theory of financial system risk management
- Estimating benefits of the publication of interest rate path
- Rationality of emigration movements from Poland following its EU accession

In 2008, the following publications by NBP staff were included in ISI Master Journal List:

- Marcin Kolasa, *How does FDI inflow affect productivity of domestic firms? The role of horizontal and vertical spillovers, absorptive capacity and competition*, "Journal of International Trade and Economic Development", 17(1), 2008.
- Marcin Kolasa, *Productivity, innovation and convergence in Poland*, "Economics of Transition", 16(3), 2008.
- Jan Hagemeyer, Jan Michalek, *The Political Economy of Poland's Trade Policy. Empirical Verification of the Grossman-Helpman Model*, "Eastern European Economics", Vol. 46, No. 05.
- Michał Rubaszek, Paweł Skrzypczyński, *On the forecasting performance of a small-scale DSGE model*, "International Journal of Forecasting", 24(3), 2008.
- Andrzej Kocięcki, *A Prior for Impulse Responses in Bayesian SVAR Models*, "Journal of Business & Economic Statistics".

In the series *Materiały i Studia* (NBP Working Papers) the following articles were published in 2008: (in Polish)

- Mariusz-Jan Radło, Oskar Kowalewski, *Wpływ globalizacji na polską gospodarkę*. [The impact of globalisation on the economy]
- Michał Dzieliński, *Wpływ nowych regulacji kapitałowych na konkurencyjność polskich banków*. [The impact of new capital regulations on the competitiveness of Polish banks]
- Małgorzata Pawłowska, Sylwester Kozak, *Przystąpienie Polski do strefy euro a efektywność, poziom konkurencji oraz wyniki polskiego sektora finansowego*. [Poland's accession to the euro area and the efficiency, level of competition and results of the Polish financial sector]
- Paweł Skrzypczyński, *Wahania aktywności gospodarczej w Polsce i strefie euro*. [Economic activity fluctuations in Poland and the euro area]
- Radosław Cholewiński, *Wpływ zmian kursu walutowego na dynamikę procesów inflacyjnych*. [The impact of exchange rate movements on the dynamics of inflationary processes]
- Wiesław Gumuła, *Wynagrodzenia oraz produktywność pracy (badania krajowego rynku pracy – maj 2007 r.)*. [Wages and labour productivity (studies of domestic labour market – May 2007)]
- Tomasz Cizak, Anna Górka, Sebastian Jakubiec, Małgorzata Siemaszko, *Pierwsze doświadczenia Słowenii związane z zamianą tołara na euro*. [First experiences of Slovenia connected with tolar-to-euro changeover]
- Przemysław Wejner, *Parytet siły nabywczej jako wyznacznik realnego kursu walutowego. Ewolucja w kierunku nieliniowych modeli autoregresyjnych*. [Purchasing power parity as an indicator of the real exchange rate. Evolution towards non-linear autoregressive models]

(in English)

- Adam Głogowski, *Macroeconomic determinants of Polish banks' loan losses – results of a panel data study*.
- Michał Brzoza-Brzezina, Adam Kot, *The Relativity Theory Revisited: Is Publishing Interest Rate Forecasts Really so Valuable?*
- Aneta Hryckiewicz, Oskar Kowalewski, *The Economic Determinants and Engagement Modes of Foreign Banks in Central Europe*.
- Marcin Kolasa, *Structural heterogeneity or asymmetric shocks? Poland and the euro area through the lens of a two-country DSGE model*.
- Katarzyna B. Budnik, *Non-accelerating wage inflation rate of unemployment in Poland*.
- Marek Rozkrut, *It's not only WHAT is said, it's also WHO the speaker is. Evaluating the effectiveness of central bank communication*.
- Konrad Szelaąg, *A Single Fiscal Policy in the Euro Area: Vision or Utopia?*
- Katarzyna B. Budnik, *Search Equilibrium with Migration: the Case of Poland*.

Appendix 9

Voting records of Monetary Policy Council members on motions and resolutions in 2008

Date	Subject matter of motion or resolution	MPC decision	Voting of MPC members:	
			For:	Against:
29 January 2008	Resolution on restoring the organisational state that would be consistent with the Act on the National Bank of Poland		J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna	S. Skrzypek
30 January 2008	Motion to raise NBP interest rates by 0.50 percentage points	Motion did not receive a majority vote.	D. Filar M. Noga H. Wasilewska-Trenkner	S. Skrzypek J. Czekaj S. Nieckarz S. Owsiak M. Pietrewicz A. Sławiński A. Wojtyna
30 January 2008	Resolution on the level of the reference rate, Lombard rate, deposit rate and rediscount rate of the National Bank of Poland	Motion did not receive a majority vote. The level of all interest rates was raised by 0.25 percentage points.	S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak A. Sławiński H. Wasilewska-Trenkner A. Wojtyna	M. Pietrewicz
20 February 2008	Resolution amending the resolution on accounting policies, the structure of assets and liabilities in the balance sheet and the profit and loss account of the National Bank of Poland		S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner	A. Wojtyna
27 February 2008	Motion to raise NBP interest rates by 0.50 percentage points	Motion did not receive a majority vote.	D. Filar M. Noga H. Wasilewska-Trenkner	S. Skrzypek J. Czekaj S. Nieckarz S. Owsiak M. Pietrewicz A. Sławiński A. Wojtyna
27 February 2008	Resolution on the level of the reference rate, Lombard rate, deposit rate and rediscount rate of the National Bank of Poland	The level of all interest rates was raised by 0.25 percentage points.	S. Skrzypek J. Czekaj D. Filar M. Noga A. Sławiński H. Wasilewska-Trenkner A. Wojtyna	S. Nieckarz S. Owsiak M. Pietrewicz

Date	Subject matter of motion or resolution	MPC decision	Voting of MPC members:	
			For:	Against:
26 March 2008	Motion to raise NBP interest rates by 0.50 percentage points	Motion did not receive a majority vote.	D. Filar M. Noga H. Wasilewska-Trenkner	S. Skrzypek J. Czekaj S. Nieckarz S. Owsiak M. Pietrewicz A. Sławiński A. Wojtyna
26 March 2008	Resolution on the level of the reference rate, Lombard rate, deposit rate and rediscount rate of the National Bank of Poland	The level of all interest rates was raised by 0.25 percentage points.	S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna	
22 April 2008	Resolution on approving the Annual Financial Report of the National Bank of Poland prepared as of 31 December 2007		S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna	
30 April 2008	Motion to raise NBP interest rates by 0.25 percentage points	Motion did not receive a majority vote.	D. Filar M. Noga H. Wasilewska-Trenkner A. Wojtyna	S. Skrzypek J. Czekaj S. Nieckarz S. Owsiak M. Pietrewicz A. Sławiński
21 May 2008	Resolution on approving the Report on Monetary Policy Implementation in 2007		S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna	
21 May 2008	Resolution on the evaluation of the activities of the NBP Management Board as regards the implementation of the Monetary Policy Guidelines for the Year 2007		S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna	

Date	Subject matter of motion or resolution	MPC decision	Voting of MPC members:	
			For:	Against:
27 May 2008	Resolution on approving the Report on the Operations of the National Bank of Poland in 2007		S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner	A. Wojtyna
28 May 2008	Motion to raise NBP interest rates by 0.25 percentage points	Motion did not receive a majority vote.	D. Filar M. Noga H. Wasilewska-Trenkner A. Wojtyna	S. Skrzypek J. Czekaj S. Nieckarz S. Owsiak M. Pietrewicz A. Sławiński
25 June 2008	Resolution on the level of the reference rate, Lombard rate, deposit rate and rediscount rate of the National Bank of Poland	The level of all interest rates raised by 0.25 percentage points.	S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna	
30 July 2008	Motion to raise NBP interest rates by 0.25 percentage points	Motion did not receive a majority vote.	D. Filar H. Wasilewska-Trenkner A. Wojtyna	S. Skrzypek J. Czekaj S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński
27 August 2008	Motion to raise NBP interest rates by 0.25 percentage points	Motion was not passed (due to tie vote, the Chairman's casting vote was decisive).	D. Filar M. Noga A. Sławiński H. Wasilewska-Trenkner A. Wojtyna	S. Skrzypek J. Czekaj S. Nieckarz S. Owsiak M. Pietrewicz
24 September 2008	Resolution on adopting Monetary Policy Guidelines for 2009		S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak A. Sławiński H. Wasilewska-Trenkner A. Wojtyna M. Pietrewicz was absent at the vote.	
24 September 2008	Motion to raise NBP interest rates by 0.25 percentage points	Motion was not passed (due to tie vote, the Chairman's casting vote was decisive).	D. Filar M. Noga A. Sławiński H. Wasilewska-Trenkner A. Wojtyna	S. Skrzypek J. Czekaj S. Nieckarz S. Owsiak M. Pietrewicz

Date	Subject matter of motion or resolution	MPC decision	Voting of MPC members:	
			For:	Against:
13 October 2008	Resolution amending the resolution on Monetary Policy Guidelines for 2008		S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna	
13 October 2008	Resolution on the principles for using currency swap transactions by the National Bank of Poland		S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna	
26 November 2008	Motion to lower the NBP interest rates by 0.50 percentage points	Motion did not receive a majority vote.	S. Skrzypek M. Pietrewicz	J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak A. Sławiński H. Wasilewska-Trenkner A. Wojtyna
26 November 2008	Resolution on the level of the reference rate, Lombard rate, deposit rate and rediscount rate of the National Bank of Poland	The level of all interest rates was lowered by 0.25 percentage points.	S. Skrzypek J. Czekaj S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński A. Wojtyna	D. Filar H. Wasilewska-Trenkner
16 December 2008	Resolution on approving the Financial Plan of the National Bank of Poland for 2009		S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner	A. Wojtyna
16 December 2008	Resolution on setting the ceiling for liabilities arising from loans and credits drawn by the NBP at foreign banking and financial institutions		S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna	

Date	Subject matter of motion or resolution	MPC decision	Voting of MPC members:	
			For:	Against:
16 December 2008	Resolution amending the resolution on accounting principles, the layout of balance-sheet assets and liabilities and profit and loss of the National Bank of Poland		S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna	
16 December 2008	Resolution amending the resolution on Monetary Policy Guidelines for 2009		S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna	
23 December 2008	Resolution on the level of the reference rate, Lombard rate, deposit rate and rediscount rate of the National Bank of Poland	The level of all interest rates was lowered by 0.75 percentage points (due to tie vote, the Chairman's casting vote was decisive).	S. Skrzypek J. Czekaj S. Nieckarz S. Owsiak M. Pietrewicz	D. Filar M. Noga A. Sławiński H. Wasilewska-Trenkner A. Wojtyna
23 December 2008	Motion to lower the NBP interest rates by 0.50 percentage points	The motion to lower the NBP interest rates by 0.75 percentage points was passed, therefore the motion to lower the NBP interest rates by 0.50 percentage points was not put to voting.		
23 December 2008	Resolution on principles of conducting open market operations		S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna	

Source: NBP data.



STATISTICAL ANNEX

TABLE I

Basic Economic Data

Period	1. Industrial output			2. Construction output			3. Consumer Price Index			4. Producer Price Index	
	current prices	constant prices		current prices	constant prices		the same month previous year = 100	previous month = 100	December previous year = 100	the same month previous year = 100	previous month = 100
		the same month previous year = 100	previous month = 100		the same month previous year = 100	previous month = 100					
	million zloty	%	%	million zloty	%	%	%	%	%	%	%
1	2	3	4	5	6	7	8	9	10	11	
XII 2007	67 213.8	105.8	91.7	9 112.9	114.0	147.7	104.0	100.3	104.0	101.9	99.2
I 2008	71 003.4	110.5	104.4	3 316.1	108.6	36.0	104.0	100.7	100.7	102.5	101.3
II	72 393.8	114.7	101.5	4 106.5	121.3	123.6	104.2	100.4	101.1	102.8	100.5
III	72 976.1	100.7	100.7	4 768.1	116.8	115.8	104.1	100.4	101.5	102.5	100.2
IV	75 716.2	114.4	104.1	5 396.9	120.9	112.8	104.0	100.4	101.8	101.9	99.8
V	69 521.7	101.4	90.9	5 836.6	115.9	107.9	104.4	100.8	102.6	102.4	100.8
VI	73 360.1	106.5	105.2	6 782.8	119.4	115.9	104.6	100.2	102.9	102.2	100.3
VII	71 441.1	104.8	97.3	6 510.1	113.4	95.8	104.8	100.0	102.8	101.7	99.8
VIII	65 542.2	95.6	91.2	6 459.7	102.9	98.9	104.8	99.6	102.4	101.4	100.1
IX	75 674.2	105.5	116.6	7 203.1	109.6	111.4	104.5	100.3	102.8	102.0	100.4
X	77 012.1	98.0	101.9	7 980.2	105.6	110.8	104.2	100.4	103.2	102.4	100.0
XI	66 889.5	89.4	86.9	6 378.9	100.4	79.9	103.7	100.2	103.4	102.2	99.8
XII	65 023.9	94.4	96.9	9 543.6	102.0	150.1	103.3	99.9	103.3	102.7	99.6

Period	12. Corporate financial performance												
	revenues		operating costs		pre-tax profit/loss	statutory deductions	net profit/loss	cost to sales ratio	net margin	quick liquidity ratio	total current assets	accounts receivable and associated claims	accounts payable
	total	of which: sales of goods & services	total	of which: cost of sales									
	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	%	%	%	million zloty	million zloty	million zloty
22	23	24	25	26	27	28	29	30	31	32	33	34	
XII 2007	1 713 204.6	1 042 788.6	1 608 451.4	1 033 785.5	104 828.2	18 639.2	86 189.0	93.9	5.0	98.9	528 370.3	201 960.7	194 900.8
I 2008	.	.	.	.	.	.	.	.	.	.	.	.	.
II	.	.	.	.	.	.	.	.	.	.	.	.	.
III	438 477.9	266 037.9	412 782.0	263 542.3	25 693.6	5 313.5	20 380.1	94.1	4.6	100.7	536 088.4	208 126.7	190 363.8
IV	.	.	.	.	.	.	.	.	.	.	.	.	.
V	.	.	.	.	.	.	.	.	.	.	.	.	.
VI	918 374.4	552 626.8	863 611.6	550 531.1	54 772.6	10 487.1	44 285.5	94.0	4.8	98.9	571 546.0	224 381.0	201 282.3
VII	.	.	.	.	.	.	.	.	.	.	.	.	.
VIII	.	.	.	.	.	.	.	.	.	.	.	.	.
IX	1 400 691.5	843 418.8	1 321 332.7	842 855.2	79 398.2	15 740.0	63 658.2	94.3	4.5	100.1	586 701.7	225 547.4	204 606.1
X	.	.	.	.	.	.	.	.	.	.	.	.	.
XI	.	.	.	.	.	.	.	.	.	.	.	.	.
XII	1 903 409.4	1 130 677.9	1 823 495.8	1 145 389.3	79 986.8	16 952.9	63 033.9	95.8	3.3	95.1	591 419.1	218 983.8	215 966.9

Period	5. Construction Price Index		6. Number of employed corporate sector total	7. Average employment, corporate sector total	8. Number of unemployed	9. Unemployment rate	10. Average monthly employee earnings, gross, corporate sector	11. National Budget revenue & expenditure							
	the same month previous year = 100	previous month = 100						revenue	expenditure	financial surplus/deficit and net foreign lending/borrowing					
	%	%						thousands	thousands	thousands	%	zloty	million zloty	million zloty	million zloty
	12	13						14	15	16	17	18	19	20	21
XII 2007	107.6	100.2	5 407.0	5 237.0	1 746.6	11.2	3 245.14	236 367.5	252 323.9	-11 069.2					
I 2008	107.4	100.3	5 537.0	5 339.0	1 813.4	11.5	2 975.54	22 655.4	18 248.1	4 533.7					
II	107.0	100.4	5 563.0	5 363.0	1 778.5	11.3	3 040.46	43 303.9	43 440.5	33.8					
III	106.5	100.4	5 570.0	5 376.0	1 702.2	10.9	3 152.96	64 659.5	62 856.6	422.5					
IV	106.0	100.5	5 579.0	5 382.0	1 605.7	10.3	3 144.87	90 618.6	90 064.3	-542.8					
V	105.2	100.3	5 577.0	5 383.0	1 525.6	9.8	3 076.14	108 826.5	110 703.4	-2 642.8					
VI	104.7	100.3	5 581.0	5 383.0	1 455.3	9.4	3 222.47	127 705.9	131 086.6	-3 574.9					
VII	104.3	100.3	5 587.0	5 392.0	1 422.9	9.2	3 234.96	150 887.8	153 632.5	-1 379.2					
VIII	104.0	100.2	5 578.0	5 391.0	1 404.4	9.1	3 172.54	172 997.2	173 314.6	2 099.8					
IX	103.7	100.1	5 588.0	5 395.0	1 376.6	8.9	3 176.84	192 377.8	196 602.4	-901.0					
X	103.4	100.1	5 590.0	5 397.0	1 352.3	8.8	3 247.77	213 802.8	225 288.1	-7 939.9					
XI	103.2	100.0	5 572.0	5 386.0	1 398.5	9.1	3 326.94	235 010.1	249 982.9	-11 403.4					
XII	102.9	99.9	5 517.0	5 353.0	1 473.8	9.5	3 428.01	254 083.8	278 674.3	-21 063.8					

TABLE II

Financial Market – Basic Information

Period	1. NBP Interest rates					2. Reserve requirement							Total required reserve held		
	Lombard rate	Rediscount rate	Refinancing rate	Deposit rate	Minimum yield on open market operations (reverse repo rate) ^a	Reserve requirement ratio on zloty deposits		Reserve requirement ratio on foreign currency deposits (zloty)		Reserve requirement ratio on repo operations	Interest on reserve requirement	Total	of which:		
						demand	time	demand	time				current account	declared valuat cash	
	%	%	%	%	%	%	%	%	%	%	million zloty	million zloty	million zloty		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
XII 2007	6.50	5.25	6.50/7.50	3.50	5.00	3.5	3.5	3.5	3.5	0.0	0.9 of the rediscount rate	16 966.2	16 966.2	.	
I 2008	6.75	5.50	6.75/7.75	3.75	5.25	3.5	3.5	3.5	3.5	0.0	0.9 of the rediscount rate	17 466.1	17 466.1	.	
II	7.00	5.75	7.00/8.00	4.00	5.50	3.5	3.5	3.5	3.5	0.0	0.9 of the rediscount rate	17 606.6	17 606.6	.	
III	7.25	6.00	7.25/8.25	4.25	5.75	3.5	3.5	3.5	3.5	0.0	0.9 of the rediscount rate	17 862.7	17 862.7	.	
IV	7.25	6.00	7.25/8.25	4.25	5.75	3.5	3.5	3.5	3.5	0.0	0.9 of the rediscount rate	18 200.8	18 200.8	.	
V	7.25	6.00	7.25/8.25	4.25	5.75	3.5	3.5	3.5	3.5	0.0	0.9 of the rediscount rate	18 200.8	18 200.8	.	
VI	7.50	6.25	7.50/8.50	4.50	6.00	3.5	3.5	3.5	3.5	0.0	0.9 of the rediscount rate	18 654.6	18 654.6	.	
VII	7.50	6.25	7.50/8.50	4.50	6.00	3.5	3.5	3.5	3.5	0.0	0.9 of the rediscount rate	19 120.3	19 120.3	.	
VIII	7.50	6.25	7.50/8.50	4.50	6.00	3.5	3.5	3.5	3.5	0.0	0.9 of the rediscount rate	19 120.3	19 120.3	.	
IX	7.50	6.25	7.50/8.50	4.50	6.00	3.5	3.5	3.5	3.5	0.0	0.9 of the rediscount rate	19 643.5	19 643.5	.	
X	7.50	6.25	7.50/8.50	4.50	6.00	3.5	3.5	3.5	3.5	0.0	0.9 of the rediscount rate	20 151.0	20 151.0	.	
XI	7.25	6.00	7.25/8.25	4.25	5.75	3.5	3.5	3.5	3.5	0.0	0.9 of the rediscount rate	20 151.0	20 151.0	.	
XII	6.50	5.25	6.50/7.50	3.50	5.00	3.5	3.5	3.5	3.5	0.0	0.9 of the rediscount rate	21 089.0	21 089.0	.	

^a 7-day operation

^b 2-day bills

Period	3. Treasury bill tenders											
	Demand declared by bidders (at face value)											
	Total	of which for:										
		1-week	2-week	3-week	5-week	6-week	8-week	10-week	13-week	26-week	39-week	52-week
	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty
28	29	30	31	32	33	34	35	36	37	38	39	
XII 2007	12 938.11	0.00	0.00	0.00	0.00	6 713.55	0.00	0.00	1 668.75	0.00	1 240.17	3 315.64
I 2008	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
II	1 967.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1 967.46
III	6 734.32	0.00	0.00	0.00	3 773.00	0.00	0.00	0.00	0.00	0.00	0.00	2 961.32
IV	20 581.96	11 782.00 ^b	0.00	0.00	0.00	0.00	0.00	0.00	1 022.65	1 724.19	0.00	6 053.12
V	15 036.51	0.00	0.00	4 024.70	0.00	0.00	0.00	0.00	1 251.90	1 318.84	0.00	8 441.07
VI	17 143.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6 699.93	0.00	0.00	10 443.86
VII	16 067.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8 296.20	3 146.60	0.00	4 624.79
VIII	13 098.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6 426.88	0.00	6 671.65
IX	10 003.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3 916.72	0.00	6 086.86
X	9 694.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4 575.71	0.00	0.00	5 118.75
XI	17 831.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7 042.73	0.00	2 101.86	8 687.07
XII	25 536.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3 061.54	3 066.45	3 137.10	16 271.19

Period	3. Treasury bill tenders												
	Number of tenders during month	Total	Face value of bills offered for sale										
			of which:										
	1-week	2-week	3-week	5-week	6-week	8-week	10-week	13-week	26-week	39-week	52-week		
	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	
15	16	17	18	19	20	21	22	23	24	25	26	27	
XII 2007	2	11 500.00	0.00	0.00	0.00	0.00	4 500.00	0.00	0.00	3 000.00	0.00	2 000.00	2 000.00
I 2008	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
II	1	500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	500.00
III	1	1 500.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	1 000.00
IV	2	7 300.00	2 800.00 ^b	0.00	0.00	0.00	0.00	0.00	0.00	500.00	1 000.00	0.00	3 000.00
V	2	10 700.00	0.00	0.00	2 200.00	0.00	0.00	0.00	0.00	1 500.00	1 500.00	0.00	5 500.00
VI	3	7 600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3 300.00	0.00	0.00	4 300.00
VII	4	6 400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2 000.00	2 000.00	0.00	2 400.00
VIII	3	4 800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2 400.00	0.00	2 400.00
IX	3	3 600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1 800.00	0.00	1 800.00
X	4	6 100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2 800.00	0.00	0.00	3 300.00
XI	4	9 100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3 900.00	0.00	700.00	4 500.00
XII	4	9 900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1 500.00	1 500.00	1 800.00	5 100.00

Period	3. Treasury bill tenders												
	Total	Face value of bills sold											
		of which:											
	1-week	2-week	3-week	5-week	6-week	8-week	10-week	13-week	26-week	39-week	52-week		
	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty		
40	41	42	43	44	45	46	47	48	49	50	51		
XII 2007	9 086.22	0.00	0.00	0.00	0.00	5 158.55	0.00	0.00	1 340.75	0.00	586.92	2 000.00	
I 2008	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
II	500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	500.00	
III	2 153.82	0.00	0.00	0.00	737.00	0.00	0.00	0.00	0.00	0.00	0.00	1 416.82	
IV	7 548.41	2 837.00 ^b	0.00	0.00	0.00	0.00	0.00	0.00	572.50	1 004.69	0.00	3 134.22	
V	10 201.21	0.00	0.00	2 007.70	0.00	0.00	0.00	0.00	1 166.90	963.84	0.00	6 062.77	
VI	8 094.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3 835.11	0.00	0.00	4 259.06	
VII	6 650.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2 364.10	2 023.37	0.00	2 263.04	
VIII	4 800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2 400.00	0.00	2 400.00	
IX	3 601.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1 801.89	0.00	1 800.00	
X	4 601.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1 794.56	0.00	0.00	2 806.58	
XI	7 530.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2 806.22	0.00	895.80	3 828.91	
XII	10 210.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1 577.44	1 479.25	1 585.50	5 568.01	

TABLE II

Financial Market – Basic Information

Period	3. Treasury bill tenders												Bills outstanding from tender sales at month end (purchase prices) million zloty
	Yield on bills purchased, weighted average												
	Total	of which on:											
		1-week	2-week	3-week	5-week	6-week	8-week	10-week	13-week	26-week	39-week	52-week	
	%	%	%	%	%	%	%	%	%	%	%	%	
52	53	54	55	56	57	58	59	60	61	62	63	64	
XII 2007	5.56	0.00	0.00	0.00	0.00	5.43	0.00	0.00	5.64	0.00	5.88	5.74	21 809.18
I 2008	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14 955.43
II	5.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.65	13 700.22
III	6.02	0.00	0.00	0.00	5.61	0.00	0.00	0.00	0.00	0.00	0.00	6.23	12 526.23
IV	6.14	5.87 ^b	0.00	0.00	0.00	0.00	0.00	0.00	6.06	6.22	0.00	6.38	14 552.05
V	6.30	0.00	0.00	5.91	0.00	0.00	0.00	0.00	6.28	6.36	0.00	6.43	21 466.30
VI	6.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.39	0.00	0.00	6.72	28 749.99
VII	6.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.38	6.54	0.00	6.80	34 111.94
VIII	6.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.55	0.00	6.62	36 772.96
IX	6.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.41	0.00	6.42	34 540.40
X	6.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.34	0.00	0.00	6.37	34 691.49
XI	6.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.58	0.00	6.65	6.74	40 006.53
XII	6.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.14	6.20	5.79	6.18	47 863.44

^b 2-day bills

Period	4. Tenders for NBP money-market bills										
	demand declared by bidders (at face value)										
	total	of which:									
		1-day	2-day	3-day	5-day	6-day	7-day	8-day	9-day	14-day	28-day
	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty
77	78	79	80	81	82	83	84	85	86	87	
XII 2007	44 983.57	0.00	.	.	.	.	44 983.57	.	.	0.00	0.00
I 2008	52 311.40	0.00	.	.	.	.	52 311.40	.	.	0.00	0.00
II	84 369.70	0.00	.	.	.	.	84 369.70	.	.	0.00	0.00
III	54 182.95	0.00	.	.	.	.	54 182.95	.	.	0.00	0.00
IV	54 211.72	0.00	.	.	.	.	54 211.72	.	.	0.00	0.00
V	51 067.41	0.00	.	.	.	.	51 067.41	.	.	0.00	0.00
VI	32 361.67	0.00	.	.	.	.	32 361.67	.	.	0.00	0.00
VII	63 773.63	0.00	.	.	.	.	63 773.63	.	.	0.00	0.00
VIII	58 713.60	0.00	.	.	.	12 596.30	34 515.70	11 601.60	.	0.00	0.00
IX	52 665.43	0.00	.	.	.	0.00	52 665.43	0.00	.	0.00	0.00
X	42 062.30	0.00	.	.	.	0.00	42 062.30	0.00	.	0.00	0.00
XI	49 692.52	0.00	.	190.00	.	0.00	49 502.52	0.00	.	0.00	0.00
XII	57 587.11	0.00	3 649.00	0.00	18 197.80	0.00	25 527.01	0.00	10 213.30	0.00	0.00

Period	4. Tenders for NBP money-market bills											
	Number of tenders during month	Face value of bills offered for sale										
		Total	of which:									
			1-day	2-day	3-day	5-day	6-day	7-day	8-day	9-day	14-day	28-day
	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty
65	66	67	68	69	70	71	72	73	74	75	76	
XII 2007	4	67 400.00	0.00	.	.	.	.	67 400.00	.	.	0.00	0.00
I 2008	4	55 000.00	0.00	.	.	.	.	55 000.00	.	.	0.00	0.00
II	5	71 600.00	0.00	.	.	.	.	71 600.00	.	.	0.00	0.00
III	4	58 300.00	0.00	.	.	.	.	58 300.00	.	.	0.00	0.00
IV	4	51 000.00	0.00	.	.	.	.	51 000.00	.	.	0.00	0.00
V	5	49 100.00	0.00	.	.	.	.	49 100.00	.	.	0.00	0.00
VI	4	42 200.00	0.00	.	.	.	.	42 200.00	.	.	0.00	0.00
VII	4	60 900.00	0.00	.	.	.	.	60 900.00	.	.	0.00	0.00
VIII	5	59 800.00	0.00	.	.	.	12 000.00	36 300.00	11 500.00	.	0.00	0.00
IX	4	55 400.00	0.00	.	.	.	0.00	55 400.00	0.00	.	0.00	0.00
X	5	17 300.00	0.00	.	.	.	0.00	17 300.00	0.00	.	0.00	0.00
XI	5	0.00	0.00	.	0.00	.	0.00	0.00	0.00	.	0.00	0.00
XII	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Period	4. Tenders for NBP money-market bills											
	face value of bills sold											
	Total	of which:										
		1-day	2-day	3-day	5-day	6-day	7-day	8-day	9-day	14-day	28-day	
		million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty	million zloty
88	89	90	91	92	93	94	95	96	97	98		
XII 2007	44 761.35	0.00	.	.	.	.	44 761.35	.	.	0.00	0.00
I 2008	51 284.40	0.00	.	.	.	.	51 284.40	.	.	0.00	0.00
II	71 600.00	0.00	.	.	.	.	71 600.00	.	.	0.00	0.00
III	53 123.20	0.00	.	.	.	.	53 123.20	.	.	0.00	0.00
IV	50 652.70	0.00	.	.	.	.	50 652.70	.	.	0.00	0.00
V	43 848.87	0.00	.	.	.	.	43 848.87	.	.	0.00	0.00
VI	32 320.40	0.00	.	.	.	.	32 320.40	.	.	0.00	0.00
VII	55 732.73	0.00	.	.	.	.	55 732.73	.	.	0.00	0.00
VIII	52 560.10	0.00	.	.	.	12 000.00	29 060.10	11 500.00	.	0.00	0.00	
IX	48 640.60	0.00	.	.	.	0.00	48 640.60	0.00	.	0.00	0.00	
X	39 379.10	0.00	.	.	.	0.00	39 379.10	0.00	.	0.00	0.00	
XI	49 692.52	0.00	.	190.00	.	0.00	49 502.52	0.00	.	0.00	0.00	
XII	57 587.11	0.00	3 649.00	0.00	18 197.80	0.00	25 527.01	0.00	10 213.30	0.00	0.00	

TABLE II

Financial Market – Basic Information

Period	4. Tenders for NBP money-market bills											
	Total	Yield on bills purchased, weighted average										Bills outstanding from tender sales at month end (purchase prices) million zloty
		of which:										
		1-day	2-day	3-day	5-day	6-day	7-day	8-day	9-day	14-day	28-day	
%	%	%	%	%	%	%	%	%	%	%		
	99	100	101	102	103	104	105	106	107	108	109	110
XII 2007	5.00	0.00	.	.	.	.	5.00	.	.	0.00	0.00	7 761.25
I 2008	5.00	0.00	.	.	.	.	5.00	.	.	0.00	0.00	14 081.60
II	5.31	0.00	.	.	.	.	5.31	.	.	0.00	0.00	15 683.22
III	5.56	0.00	.	.	.	.	5.56	.	.	0.00	0.00	12 456.67
IV	5.75	0.00	.	.	.	.	5.75	.	.	0.00	0.00	12 985.48
V	5.75	0.00	.	.	.	.	5.75	.	.	0.00	0.00	9 988.83
VI	5.80	0.00	.	.	.	.	5.80	.	.	0.00	0.00	6 122.65
VII	6.00	0.00	.	.	.	.	6.00	.	.	0.00	0.00	12 884.96
VIII	6.00	0.00	.	.	.	6.00	6.00	6.00	.	0.00	0.00	7 551.28
IX	6.00	0.00	.	.	.	0.00	6.00	0.00	.	0.00	0.00	14 982.51
X	6.00	0.00	.	.	.	0.00	6.00	0.00	.	0.00	0.00	6 286.86
XI	5.95	0.00	.	6.00	.	0.00	5.95	0.00	.	0.00	0.00	10 923.68
XII	5.62	0.00	5.74	0.00	5.75	0.00	5.75	0.00	5.00	0.00	0.00	10 200.54

Period	5. Outright sales of securities by NBP					6. Data on trading sessions of Warsaw Stock Exchange								
	Number of tenders	face value of securities allotted for sale	face value of bids submitted by banks	face value of bids accepted	value of bids accepted	Number of companies at month end	Capitalisation at month end	P/E ratio at month end	Warsaw Stock Exchange Index (WIG) at month end	WIG monthly average	Second-Tier Market Index (sWIG80) at month end	sWIG80 monthly average	monthly turnover	turnover ratio
		million zloty	million zloty	million zloty	million zloty		million zloty						million zloty	%
	111	112	113	114	115	116	117	118	119	120	121	122	123	124
XII 2007	0	0.00	0.00	0.00	0.00	351	509 887.4	18.8	55 648.5	56 892.2	15 917.9	16 072.0	33 635.6	2.1
I 2008	0	0.00	0.00	0.00	0.00	350	439 672.2	14.9	47 747.8	49 337.2	14 201.4	14 123.2	44 480.3	3.1
II	0	0.00	0.00	0.00	0.00	353	434 233.9	14.2	47 522.0	48 962.2	14 438.1	14 587.8	30 918.0	1.7
III	0	0.00	0.00	0.00	0.00	354	443 822.6	13.7	48 011.3	46 724.5	14 067.2	13 865.0	25 793.2	1.5
IV	0	0.00	0.00	0.00	0.00	361	428 868.5	13.2	46 691.8	47 299.0	13 269.4	13 547.5	24 292.4	1.4
V	0	0.00	0.00	0.00	0.00	364	429 784.7	12.7	46 624.4	47 375.6	12 852.5	13 086.8	23 362.2	1.4
VI	0	0.00	0.00	0.00	0.00	366	378 978.1	11.2	41 146.3	43 660.6	11 346.3	12 007.9	21 577.0	1.5
VII	0	0.00	0.00	0.00	0.00	366	396 351.8	11.7	42 405.8	39 887.9	10 313.9	10 209.5	28 084.9	2.1
VIII	0	0.00	0.00	0.00	0.00	366	377 707.0	10.6	40 481.8	40 701.8	10 076.9	10 030.2	19 845.7	1.5
IX	0	0.00	0.00	0.00	0.00	368	351 265.0	10.0	37 367.3	38 758.2	9 460.3	9 813.9	27 407.2	2.2
X	0	0.00	0.00	0.00	0.00	367	272 500.6	7.7	28 397.1	30 647.8	7 311.2	7 993.5	35 075.4	3.7
XI	0	0.00	0.00	0.00	0.00	369	261 239.6	8.2	27 130.1	27 293.9	7 138.1	7 271.9	21 646.7	2.6
XII	0	0.00	0.00	0.00	0.00	374	267 359.3	8.4	27 228.6	27 406.5	6 852.8	7 028.9	18 231.7	2.2

TABLE III

PLN/USD and PLN/EUR Daily Exchange Rates

Days	December 2007			January 2008			February 2008			March 2008		
	NBP average exchange rates		USD/EUR	NBP average exchange rates		USD/EUR	NBP average exchange rates		USD/EUR	NBP average exchange rates		USD/EUR
	PLN/USD	PLN/EUR		PLN/USD	PLN/EUR		PLN/USD	PLN/EUR		PLN/USD	PLN/EUR	
	1	2	3	4	5	6	7	8	9	10	11	12
1	2.4589	3.6267	1.4749	2.4350	3.5820	1.4710	2.4215	3.6025	1.4877	2.3155	3.5204	1.5204
2	2.4589	3.6267	1.4749	2.4550	3.5975	1.4654	2.4215	3.6025	1.4877	2.3155	3.5204	1.5204
3	2.4730	3.6195	1.4636	2.4550	3.6125	1.4715	2.4215	3.6025	1.4877	2.3305	3.5356	1.5171
4	2.4675	3.6169	1.4658	2.4529	3.6075	1.4707	2.4082	3.5670	1.4812	2.3171	3.5221	1.5200
5	2.4499	3.6075	1.4725	2.4529	3.6075	1.4707	2.4281	3.5748	1.4723	2.3255	3.5290	1.5175
6	2.4585	3.5818	1.4569	2.4529	3.6075	1.4707	2.4580	3.5905	1.4607	2.3075	3.5379	1.5332
7	2.4525	3.5865	1.4624	2.4511	3.6010	1.4691	2.4568	3.5979	1.4645	2.3189	3.5702	1.5396
8	2.4525	3.5865	1.4624	2.4463	3.6008	1.4719	2.4971	3.6185	1.4491	2.3189	3.5702	1.5396
9	2.4525	3.5865	1.4624	2.4429	3.5940	1.4712	2.4971	3.6185	1.4491	2.3189	3.5702	1.5396
10	2.4378	3.5739	1.4660	2.4450	3.5930	1.4695	2.4971	3.6185	1.4491	2.3213	3.5700	1.5379
11	2.4260	3.5699	1.4715	2.4220	3.5810	1.4785	2.4906	3.6229	1.4546	2.3028	3.5458	1.5398
12	2.4359	3.5773	1.4686	2.4220	3.5810	1.4785	2.4895	3.6120	1.4509	2.2915	3.5280	1.5396
13	2.4373	3.5820	1.4697	2.4220	3.5810	1.4785	2.4700	3.5987	1.4570	2.2741	3.5445	1.5586
14	2.4747	3.6017	1.4554	2.4055	3.5825	1.4893	2.4543	3.5870	1.4615	2.2664	3.5307	1.5578
15	2.4747	3.6017	1.4554	2.4052	3.5735	1.4857	2.4453	3.5902	1.4682	2.2664	3.5307	1.5578
16	2.4747	3.6017	1.4554	2.4272	3.5950	1.4811	2.4453	3.5902	1.4682	2.2664	3.5307	1.5578
17	2.5237	3.6235	1.4358	2.4606	3.5977	1.4621	2.4453	3.5902	1.4682	2.2560	3.5613	1.5786
18	2.5133	3.6162	1.4388	2.4782	3.6250	1.4628	2.4461	3.5793	1.4633	2.2440	3.5420	1.5784
19	2.5115	3.6159	1.4397	2.4782	3.6250	1.4628	2.4290	3.5759	1.4722	2.2442	3.5370	1.5761
20	2.5242	3.6230	1.4353	2.4782	3.6250	1.4628	2.4342	3.5838	1.4723	2.2841	3.5333	1.5469
21	2.5168	3.6180	1.4375	2.5112	3.6395	1.4493	2.4255	3.5761	1.4744	2.2882	3.5336	1.5443
22	2.5168	3.6180	1.4375	2.5263	3.6577	1.4478	2.4074	3.5725	1.4840	2.2882	3.5336	1.5443
23	2.5168	3.6180	1.4375	2.4861	3.6280	1.4593	2.4074	3.5725	1.4840	2.2882	3.5336	1.5443
24	2.5100	3.6115	1.4388	2.4784	3.6225	1.4616	2.4074	3.5725	1.4840	2.2882	3.5336	1.5443
25	2.5100	3.6115	1.4388	2.4542	3.6135	1.4724	2.4049	3.5630	1.4816	2.2688	3.5280	1.5550
26	2.5100	3.6115	1.4388	2.4542	3.6135	1.4724	2.3785	3.5318	1.4849	2.2489	3.5346	1.5717
27	2.4949	3.6168	1.4497	2.4542	3.6135	1.4724	2.3507	3.5395	1.5057	2.2356	3.5260	1.5772
28	2.4566	3.6062	1.4680	2.4665	3.6245	1.4695	2.3320	3.5219	1.5102	2.2363	3.5270	1.5772
29	2.4566	3.6062	1.4680	2.4501	3.6185	1.4769	2.3155	3.5204	1.5204	2.2363	3.5270	1.5772
30	2.4566	3.6062	1.4680	2.4503	3.6218	1.4781				2.2363	3.5270	1.5772
31	2.4350	3.5820	1.4710	2.4438	3.6260	1.4838				2.2305	3.5258	1.5807
Average monthly rate	2.4754	3.6042	X	2.4537	3.6080	X	2.4305	3.5825	X	2.2816	3.5374	X

Days	April 2008			May 2008			June 2008			July 2008		
	NBP average exchange rates		USD/EUR	NBP average exchange rates		USD/EUR	NBP average exchange rates		USD/EUR	NBP average exchange rates		USD/EUR
	PLN/USD	PLN/EUR		PLN/USD	PLN/EUR		PLN/USD	PLN/EUR		PLN/USD	PLN/EUR	
	13	14	15	16	17	18	19	20	21	22	23	24
1	2.2390	3.5110	1.5681	2.2267	3.4604	1.5540	2.1824	3.3788	1.5482	2.1293	3.3543	1.5753
2	2.2350	3.4949	1.5637	2.2291	3.4518	1.5485	2.1750	3.3836	1.5557	2.1222	3.3558	1.5813
3	2.2315	3.4815	1.5602	2.2291	3.4518	1.5485	2.1611	3.3745	1.5615	2.1140	3.3559	1.5875
4	2.2175	3.4828	1.5706	2.2291	3.4518	1.5485	2.1843	3.3763	1.5457	2.1199	3.3273	1.5696
5	2.2175	3.4828	1.5706	2.2199	3.4400	1.5496	2.1845	3.3708	1.5431	2.1199	3.3273	1.5696
6	2.2175	3.4828	1.5706	2.2203	3.4385	1.5487	2.1727	3.3890	1.5598	2.1199	3.3273	1.5696
7	2.2084	3.4639	1.5685	2.2142	3.4285	1.5484	2.1727	3.3890	1.5598	2.1193	3.3155	1.5644
8	2.2018	3.4689	1.5755	2.2303	3.4217	1.5342	2.1727	3.3890	1.5598	2.1015	3.3052	1.5728
9	2.1997	3.4580	1.5720	2.2006	3.4054	1.5475	2.1447	3.3923	1.5817	2.0956	3.2841	1.5671
10	2.1755	3.4520	1.5868	2.2006	3.4054	1.5475	2.1755	3.3785	1.5530	2.0843	3.2736	1.5706
11	2.1600	3.4200	1.5833	2.2006	3.4054	1.5475	2.1787	3.3734	1.5484	2.0710	3.2690	1.5785
12	2.1600	3.4200	1.5833	2.1995	3.3945	1.5433	2.1941	3.3863	1.5434	2.0710	3.2690	1.5785
13	2.1600	3.4200	1.5833	2.1861	3.3846	1.5482	2.2035	3.3915	1.5391	2.0710	3.2690	1.5785
14	2.1730	3.4295	1.5782	2.2010	3.3934	1.5418	2.2035	3.3915	1.5391	2.0529	3.2564	1.5862
15	2.1500	3.4118	1.5869	2.1913	3.4010	1.5520	2.2035	3.3915	1.5391	2.0405	3.2602	1.5977
16	2.1510	3.4095	1.5851	2.1861	3.3884	1.5500	2.1941	3.3870	1.5437	2.0276	3.2301	1.5931
17	2.1502	3.4305	1.5954	2.1861	3.3884	1.5500	2.1835	3.3852	1.5504	2.0331	3.2245	1.5860
18	2.1499	3.4295	1.5952	2.1861	3.3884	1.5500	2.1805	3.3765	1.5485	2.0309	3.2205	1.5858
19	2.1499	3.4295	1.5952	2.1650	3.3827	1.5624	2.1731	3.3685	1.5501	2.0309	3.2205	1.5858
20	2.1499	3.4295	1.5952	2.1758	3.3930	1.5594	2.1625	3.3662	1.5566	2.0309	3.2205	1.5858
21	2.1596	3.4258	1.5863	2.1522	3.3836	1.5722	2.1625	3.3662	1.5566	2.0220	3.2146	1.5898
22	2.1444	3.4178	1.5938	2.1522	3.3836	1.5722	2.1625	3.3662	1.5566	2.0235	3.2230	1.5928
23	2.1340	3.4074	1.5967	2.1675	3.4095	1.5730	2.1681	3.3657	1.5524	2.0720	3.2603	1.5735
24	2.1700	3.4182	1.5752	2.1675	3.4095	1.5730	2.1605	3.3635	1.5568	2.0655	3.2370	1.5672
25	2.2044	3.4352	1.5583	2.1675	3.4095	1.5730	2.1538	3.3585	1.5593	2.0420	3.2060	1.5700
26	2.2044	3.4352	1.5583	2.1623	3.4044	1.5744	2.1420	3.3585	1.5679	2.0420	3.2060	1.5700
27	2.2044	3.4352	1.5583	2.1578	3.4015	1.5764	2.1366	3.3694	1.5770	2.0420	3.2060	1.5700
28	2.2002	3.4416	1.5642	2.1610	3.3973	1.5721	2.1366	3.3694	1.5770	2.0400	3.2080	1.5725
29	2.2115	3.4460	1.5582	2.1728	3.3823	1.5567	2.1366	3.3694	1.5770	2.0494	3.2252	1.5737
30	2.2267	3.4604	1.5540	2.1824	3.3788	1.5482	2.1194	3.3542	1.5826	2.0539	3.2063	1.5611
31				2.1824	3.3788	1.5482				2.0509	3.2026	1.5616
Average monthly rate	2.1852	3.4444	X	2.1904	3.4069	X	2.1694	3.3760	X	2.0674	3.2600	X

TABLE III

PLN/USD and PLN/EUR Daily Exchange Rates

Days	August 2008			September 2008			October 2008		
	NBP average exchange rates		USD/EUR	NBP average exchange rates		USD/EUR	NBP average exchange rates		USD/EUR
	PLN/USD	PLN/EUR		PLN/USD	PLN/EUR		PLN/USD	PLN/EUR	
1	2.0665	3.2170	1.5567	2.2790	3.3360	1.4638	2.3895	3.3775	1.4135
2	2.0665	3.2170	1.5567	2.3133	3.3553	1.4504	2.4470	3.4025	1.3905
3	2.0665	3.2170	1.5567	2.3360	3.3670	1.4414	2.4676	3.4188	1.3855
4	2.0600	3.2100	1.5583	2.3263	3.3800	1.4530	2.4676	3.4188	1.3855
5	2.0777	3.2192	1.5494	2.4094	3.4325	1.4246	2.4676	3.4188	1.3855
6	2.0875	3.2305	1.5475	2.4094	3.4325	1.4246	2.5291	3.4370	1.3590
7	2.0975	3.2460	1.5476	2.4094	3.4325	1.4246	2.5451	3.4515	1.3561
8	2.1495	3.2600	1.5166	2.4324	3.4674	1.4255	2.5648	3.4923	1.3616
9	2.1495	3.2600	1.5166	2.4513	3.4677	1.4146	2.4835	3.4161	1.3755
10	2.1495	3.2600	1.5166	2.4500	3.4670	1.4151	2.6115	3.5548	1.3612
11	2.1620	3.2590	1.5074	2.4505	3.4106	1.3918	2.6115	3.5548	1.3612
12	2.2078	3.2835	1.4872	2.3793	3.3595	1.4120	2.6115	3.5548	1.3612
13	2.1915	3.2690	1.4917	2.3793	3.3595	1.4120	2.6029	3.5484	1.3632
14	2.2233	3.3137	1.4904	2.3793	3.3595	1.4120	2.5652	3.4959	1.3628
15	2.2233	3.3137	1.4904	2.3591	3.3618	1.4250	2.5998	3.5304	1.3580
16	2.2233	3.3137	1.4904	2.3763	3.3861	1.4249	2.6385	3.5506	1.3457
17	2.2233	3.3137	1.4904	2.3472	3.3363	1.4214	2.6509	3.5653	1.3449
18	2.2625	3.3335	1.4734	2.3428	3.3710	1.4389	2.6509	3.5653	1.3449
19	2.2744	3.3355	1.4665	2.3381	3.3163	1.4184	2.6509	3.5653	1.3449
20	2.2427	3.3083	1.4751	2.3381	3.3163	1.4184	2.6354	3.5515	1.3476
21	2.2430	3.3160	1.4784	2.3381	3.3163	1.4184	2.7199	3.5962	1.3222
22	2.2240	3.3022	1.4848	2.2480	3.2750	1.4569	2.8812	3.7139	1.2890
23	2.2240	3.3022	1.4848	2.2492	3.3099	1.4716	2.9788	3.8212	1.2828
24	2.2240	3.3022	1.4848	2.2531	3.3094	1.4688	3.1303	3.9262	1.2543
25	2.2470	3.3127	1.4743	2.2663	3.3340	1.4711	3.1303	3.9262	1.2543
26	2.2674	3.3120	1.4607	2.2985	3.3575	1.4607	3.1303	3.9262	1.2543
27	2.2605	3.3275	1.4720	2.2985	3.3575	1.4607	3.0823	3.8275	1.2418
28	2.2688	3.3485	1.4759	2.2985	3.3575	1.4607	2.9714	3.7128	1.2495
29	2.2691	3.3460	1.4746	2.3641	3.3949	1.4360	2.8454	3.6320	1.2764
30	2.2691	3.3460	1.4746	2.3708	3.4083	1.4376	2.7300	3.5634	1.3053
31	2.2691	3.3460	1.4746				2.8472	3.6330	1.2760
Average monthly rate	2.1926	3.2884	X	2.3497	3.3712	X	2.6980	3.5855	X

Days	November 2008			December 2008		
	NBP average exchange rates		USD/EUR	NBP average exchange rates		USD/EUR
	PLN/USD	PLN/EUR		PLN/USD	PLN/EUR	
1	2.8472	3.6330	1.2760	3.0338	3.8432	1.2668
2	2.8472	3.6330	1.2760	3.0394	3.8340	1.2614
3	2.7703	3.5565	1.2838	3.0468	3.8457	1.2622
4	2.7946	3.5498	1.2702	3.0805	3.8824	1.2603
5	2.7306	3.5046	1.2835	3.0476	3.8881	1.2758
6	2.7571	3.5603	1.2913	3.0476	3.8881	1.2758
7	2.8428	3.6474	1.2830	3.0476	3.8881	1.2758
8	2.8428	3.6474	1.2830	3.0035	3.8686	1.2880
9	2.8428	3.6474	1.2830	3.0548	3.9323	1.2873
10	2.8332	3.6427	1.2857	3.0610	3.9589	1.2933
11	2.8332	3.6427	1.2857	3.0257	3.9703	1.3122
12	3.0065	3.7693	1.2537	2.9709	3.9689	1.3359
13	3.0042	3.7502	1.2483	2.9709	3.9689	1.3359
14	2.9457	3.7348	1.2679	2.9709	3.9689	1.3359
15	2.9457	3.7348	1.2679	2.9561	3.9804	1.3465
16	2.9457	3.7348	1.2679	2.9683	4.0489	1.3640
17	2.9426	3.7277	1.2668	2.8948	4.0834	1.4106
18	3.0665	3.8623	1.2595	2.8463	4.1740	1.4665
19	3.0502	3.8444	1.2604	2.9130	4.1132	1.4120
20	3.0845	3.8620	1.2521	2.9130	4.1132	1.4120
21	3.0151	3.7984	1.2598	2.9130	4.1132	1.4120
22	3.0151	3.7984	1.2598	2.9081	4.1037	1.4111
23	3.0151	3.7984	1.2598	2.9476	4.1176	1.3969
24	3.0762	3.8824	1.2621	2.9313	4.1025	1.3995
25	2.9891	3.8411	1.2850	2.9313	4.1025	1.3995
26	2.9197	3.7888	1.2977	2.9313	4.1025	1.3995
27	2.9047	3.7578	1.2937	2.9313	4.1025	1.3995
28	2.9196	3.7572	1.2869	2.9313	4.1025	1.3995
29	2.9196	3.7572	1.2869	2.9293	4.1848	1.4286
30	2.9196	3.7572	1.2869	2.9072	4.1244	1.4187
31				2.9618	4.1724	1.4087
Average monthly rate	2.9209	3.7207	X	2.9715	4.0177	X

TABLE IV

Average MFI Interest Rates on Outstanding Amounts,
PLN Denominated (in per cent)

	Sector	Category	Original maturity, period of notice	No	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08		
Deposits in PLN	households and non-profit institutions serving households	with agreed maturity	overnight	1	1.5	1.6	1.6	1.7	1.7	1.8		
			up to 2 years	2	3.5	3.6	3.5	3.7	3.8	3.9		
			over 2 years	3	3.3	3.4	3.4	3.4	3.3	3.3		
		redeemable at notice	total	4	3.5	3.6	3.5	3.7	3.8	3.9		
			up to 3 months' notice	5	2.2	2.2	2.0	2.1	2.2	2.0		
			over 3 months' notice	6	4.5	4.6	4.6	4.6	4.6	4.6		
	non-financial corporations	with agreed maturity	overnight	7	1.9	2.3	2.4	2.5	2.7	2.6		
			up to 2 years	8	4.4	4.8	4.7	4.9	5.1	5.2		
		total, overdraft excluded	over 2 years	9	2.7	2.8	3.0	3.1	3.1	3.5		
			total	10	4.3	4.7	4.7	4.9	5.1	5.2		
	total, overdraft excluded				11	3.8	4.0	3.9	4.1	4.2	4.3	
	repos				12	4.9	5.0	5.3	5.6	5.8	5.8	
	Loans in PLN	households and non-profit institutions serving households	bank overdraft		13	12.2	12.3	12.3	12.3	12.6	12.8	
for consumption				credits cards	14	16.8	17.2	16.5	17.5	17.2	17.3	
for consumption			up to 1 years maturity	15	10.1	9.8	10.0	9.8	10.1	9.7		
			over 1 and up to 5 years maturity	16	13.5	13.5	13.7	13.4	13.6	13.5		
			over 5 years maturity	17	12.4	12.6	12.7	12.7	12.9	12.9		
			total	18	13.5	13.6	13.6	13.6	13.6	13.6		
for house purchases			up to 1 year maturity	19	6.5	6.6	6.7	6.7	6.9	6.8		
			over 1 and up to 5 years maturity	20	6.0	6.2	6.2	6.3	6.6	6.7		
			over 5 and up to 10 years maturity	21	6.2	6.3	6.5	6.4	6.9	6.9		
			over 10 years maturity	22	6.2	6.4	6.5	6.4	6.9	6.9		
			total	23	6.2	6.3	6.5	6.4	6.9	6.9		
for other purposes			up to 1 year maturity	24	7.5	7.5	7.6	7.6	8.4	8.4		
			over 1 and up to 5 years maturity	25	8.3	8.2	8.2	8.3	8.6	8.7		
			over 5 years maturity	26	7.5	7.7	7.7	7.7	7.8	8.1		
			total	27	7.7	7.8	7.8	7.8	8.0	8.3		
total, overdraft excluded				28	9.5	9.7	9.8	9.7	10.0	10.1		
non-financial corporations			bank overdraft		29	6.4	6.5	6.5	6.7	7.0	7.1	
				up to 1 year maturity	30	6.8	6.9	6.8	7.0	7.3	7.4	
		over 1 and up to 5 years maturity	over 1 and up to 5 years maturity	31	6.7	6.9	6.9	7.0	7.3	7.4		
			over 5 years maturity	32	6.3	6.4	6.5	6.5	6.7	6.8		
		total, overdraft excluded				33	6.5	6.6	6.7	6.8	7.0	7.1
		total, overdraft excluded				34	8.3	8.4	8.5	8.5	8.8	8.9

Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08
1.8	1.9	1.8	1.7	1.7	1.7	1.7
4.0	4.2	4.3	4.6	4.9	5.9	6.1
3.2	3.0	3.0	3.0	2.8	2.9	2.8
3.9	4.2	4.3	4.6	4.8	5.8	6.1
2.0	2.1	2.1	2.1	2.1	2.1	2.0
4.5	4.3	4.6	4.6	4.7	4.6	4.6
2.6	2.7	2.8	2.7	2.7	2.5	2.4
5.3	5.4	5.4	5.5	5.6	5.8	6.0
3.5	3.5	3.5	3.8	4.0	4.2	4.3
5.3	5.4	5.4	5.5	5.6	5.8	5.9
4.4	4.6	4.6	4.9	5.0	5.8	6.0
5.9	6.0	6.1	6.0	5.9	6.2	5.9
12.8	13.0	13.0	13.1	13.1	13.1	13.1
17.5	17.9	18.1	17.6	18.0	17.7	17.8
10.4	10.4	10.6	11.0	10.9	11.2	11.3
13.6	13.6	13.6	13.7	13.6	13.9	13.9
13.2	13.5	13.7	13.8	13.8	14.0	14.1
13.8	13.9	14.2	14.2	14.2	14.4	14.5
7.0	7.6	7.8	8.1	8.5	8.7	9.5
6.8	7.2	7.4	7.6	7.7	8.0	8.1
7.1	7.3	7.4	7.5	7.7	7.9	8.1
7.1	7.2	7.3	7.5	7.5	7.7	7.9
7.1	7.2	7.3	7.5	7.5	7.8	7.9
8.4	8.7	8.7	8.8	8.9	9.0	8.8
8.8	9.0	9.1	9.1	9.2	9.4	9.4
8.2	8.4	8.5	8.4	8.6	8.8	8.7
8.3	8.6	8.6	8.6	8.7	9.0	8.9
10.3	10.4	10.6	10.7	10.8	11.0	11.0
7.1	7.3	7.4	7.4	7.5	7.7	7.5
7.6	7.7	7.7	7.9	8.0	7.9	7.8
7.5	7.7	7.8	7.9	8.0	8.0	8.0
6.9	7.1	7.2	7.3	7.3	7.4	7.4
7.2	7.4	7.5	7.6	7.6	7.7	7.7
9.1	9.2	9.4	9.5	9.5	9.6	9.6

TABLE V
**Average MFI Interest Rates on New Business,
PLN Denominated (in per cent)**

	Sector	Category	Original maturity, period of notice, initial rate fixation	No	Dec- 07	Jan-08	Feb-08	Mar-08	Apr-08	
Deposits in PLN	households and non-profit institutions serving households	with agreed maturity	up to 1 month	1	4.1	4.3	4.6	4.9	5.1	
			over 1 and up to 3 months	2	4.5	4.5	4.6	5.0	5.2	
			over 3 and up to 6 months	3	4.3	4.4	4.6	4.9	5.1	
			over 6 months and up to 1 year	4	3.7	3.8	5.3	4.5	4.6	
			over 1 and up to 2 years	5	4.1	4.5	3.8	3.0	2.4	
			over 2 years	6	4.0	3.5	3.7	2.7	2.6	
			total	7	4.2	4.3	4.7	4.9	5.1	
	non-financial corporations	with agreed maturity	up to 1 month	8	4.2	4.7	5.0	5.3	5.5	
			over 1 and up to 3 months	9	5.0	5.0	5.1	5.4	5.7	
			over 3 and up to 6 months	10	5.1	5.0	5.1	5.5	5.6	
			over 6 months and up to 1 year	11	4.9	5.0	4.9	5.5	5.2	
			over 1 and up to 2 years	12	2.5	4.9	4.8	2.4	4.3	
			over 2 years	13	0.8	4.2	4.1	2.5	1.1	
			total	14	4.2	4.7	5.0	5.3	5.5	
	total				15	4.2	4.6	4.9	5.2	5.4
	repos				16	4.7	5.1	5.4	5.6	5.9
Loans in PLN	households and non-profit institutions serving households	for consumption	credit cards	17	14.8	15.8	15.7	15.5	15.8	
			variable rate and up to 3 months initial rate fixation	18	14.8	15.1	15.5	16.0	16.5	
			over 3 months and up to 1 year initial rate fixation	19	8.8	10.2	10.3	10.3	10.9	
			over 1 and up to 5 years initial rate fixation	20	13.3	13.7	13.8	13.9	14.0	
			over 5 years initial rate fixation	21	17.8	16.8	16.4	17.0	17.5	
			total excluding credit cards ^a	22	13.0	13.8	14.0	14.2	14.7	
			total	23	13.7	14.6	14.7	14.7	15.1	
		for house purchases	the annual percentage rate of charge (APRC)	24	20.2	21.0	21.4	21.7	22.0	
			variable rate and up to 3 months initial rate fixation	25	6.9	7.0	7.2	7.4	7.8	
			over 3 months and up to 1 year initial rate fixation	26	7.2	7.3	7.2	7.5	7.4	
			over 1 and up to 5 years initial rate fixation	27	8.0	5.4	5.7	8.2	8.4	
			over 5 and up to 10 years initial rate fixation	28	8.1	8.1	8.3	7.9	7.7	
			over 5 years initial rate fixation	29	7.9	7.6	7.9	8.1	8.0	
			total	30	6.9	7.0	7.2	7.4	7.7	
		for farming	the annual percentage rate of charge (APRC)	31	7.5	7.4	7.6	7.8	8.1	
			variable rate and up to 3 months initial rate fixation	32	6.7	7.7	7.8	7.9	7.7	
			over 3 months and up to 1 year initial rate fixation	33	14.8	14.8	14.9	8.3	8.4	
			over 1 and up to 5 years initial rate fixation	34	-	-	-	-	-	
			over 5 years initial rate fixation	35	-	-	-	-	-	
			total	36	6.7	7.7	7.8	7.9	7.7	
			for sole proprietors	variable rate and up to 3 months initial rate fixation	37	7.8	8.1	8.4	8.6	9.2
		over 3 months and up to 1 year initial rate fixation		38	9.0	9.2	8.6	9.3	9.2	
		over 1 and up to 5 years initial rate fixation		39	13.0	13.0	12.9	12.2	12.4	
	over 5 years initial rate fixation	40		13.1	13.4	13.2	13.1	12.9		
	total	41		7.9	8.2	8.5	8.7	9.3		
	for other purposes	variable rate and up to 3 months initial rate fixation	42	8.0	7.7	8.3	8.6	8.7		
		over 3 months and up to 1 year initial rate fixation	43	8.2	7.5	7.9	9.7	9.6		
		over 1 and up to 5 years initial rate fixation	44	7.1	6.9	6.8	7.4	7.3		
		over 5 years initial rate fixation	45	-	7.6	6.8	6.9	-		
		total	46	8.0	7.7	8.2	8.7	9.1		
	total				47	11.6	12.3	12.5	12.5	13.1
	non-financial corporations	contracts up to PLN 4 million, overdraft excluded	variable rate and up 3 months initial rate fixation	48	7.2	7.3	7.6	7.6	8.0	
			over 3 months and up to 1 year initial rate fixation	49	7.5	7.0	7.8	7.3	7.8	
			over 1 and up to 5 years initial rate fixation	50	7.4	7.6	8.1	8.2	7.5	
			over 5 years initial tare fixation	51	6.3	7.6	12.4	10.8	7.0	
			total	52	7.2	7.2	7.6	7.6	7.9	
		contracts over PLN 4 million, overdraft excluded	variable rate and up 3 months initial rate fixation	53	7.2	6.8	7.1	7.3	7.8	
			over 3 months and up to 1 year initial rate fixation	54	7.2	6.9	6.9	6.6	7.1	
			over 1 and up to 5 years initial rate fixation	55	5.9	7.2	7.7	-	9.8	
			over 5 years initial tare fixation	56	-	-	-	-	-	
			total	57	7.2	6.9	7.1	7.3	7.8	
		total				58	7.2	6.9	7.3	7.3	7.8
	total				59	9.5	9.9	10.0	10.0	10.8

^a Category "total excluding credit cards" for consumer loans (itm 22) has been added for comparability with real interest rate, which does not include credit cards.

May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08
5.1	5.2	5.2	5.3	5.3	5.4	5.4	5.4
5.4	5.5	5.6	5.9	6.8	6.7	6.9	7.3
5.2	5.5	5.6	5.6	5.6	6.6	7.3	7.1
5.2	5.2	4.9	5.0	4.9	5.9	6.3	7.0
1.9	2.9	3.5	3.6	6.6	6.8	6.8	6.8
0.5	0.2	0.3	0.2	4.5	4.1	2.6	5.4
5.1	5.2	5.2	5.4	5.8	6.1	6.2	6.5
5.3	5.5	5.6	5.6	5.5	5.6	5.4	5.5
5.8	5.9	5.9	5.3	6.0	6.3	6.5	6.7
5.7	6.0	6.2	6.0	6.2	6.2	7.1	6.8
5.1	5.4	5.4	5.4	5.3	6.0	6.8	6.7
5.6	3.5	6.4	4.2	5.1	5.8	6.2	6.7
1.0	2.2	0.8	1.2	5.8	4.5	5.0	5.7
5.4	5.6	5.6	5.6	5.6	5.7	5.5	5.6
5.3	5.5	5.5	5.5	5.7	5.9	5.8	5.9
5.8	5.9	6.0	6.2	5.9	5.9	6.2	5.3
15.6	15.8	15.9	16.0	15.9	15.9	16.4	15.9
16.8	17.0	17.3	17.4	17.5	17.6	16.8	16.4
11.2	11.4	11.3	11.5	12.0	12.2	12.3	11.9
14.5	14.4	14.7	14.6	14.4	14.7	15.5	14.7
17.4	17.5	17.5	18.0	17.9	17.7	17.3	17.7
15.2	15.0	15.3	15.3	15.2	15.5	15.4	14.8
15.3	15.3	15.5	15.5	15.5	15.6	15.8	15.3
22.3	22.1	22.6	22.9	23.1	23.4	23.2	22.6
7.8	8.0	8.3	8.5	8.6	8.7	8.9	8.8
7.6	7.9	7.9	8.1	8.0	8.3	8.3	8.0
7.4	8.7	6.1	9.1	4.3	7.7	8.7	8.7
8.1	9.1	8.3	8.2	8.4	8.9	8.3	7.6
8.0	8.5	8.0	7.8	7.8	7.7	7.6	7.1
7.8	8.0	8.3	8.4	8.6	8.7	8.8	8.7
8.1	8.6	8.8	9.0	9.0	9.0	9.2	9.3
7.9	8.3	8.3	8.4	8.5	7.2	8.7	8.2
10.0	-	-	18.7	16.1	19.5	-	-
23.5	18.4	-	-	-	-	-	-
-	-	-	-	-	3.6	-	-
8.0	8.3	8.3	8.4	8.5	7.1	8.7	8.2
9.1	9.4	9.1	9.5	9.2	9.5	10.2	9.9
10.8	11.6	13.0	12.9	13.0	12.8	12.8	12.8
13.0	12.5	12.5	13.0	12.7	11.8	12.9	12.5
13.4	12.3	12.9	13.1	13.2	13.0	12.3	12.2
9.3	9.6	9.3	9.7	9.5	9.7	10.4	10.1
9.1	8.2	8.9	9.2	9.3	9.4	9.8	10.6
10.4	9.3	9.1	11.2	9.8	11.5	10.2	9.7
7.8	7.8	7.7	7.4	7.4	7.2	7.9	7.0
-	-	-	-	-	-	-	-
9.2	8.4	8.9	9.2	9.4	9.5	9.7	10.4
13.6	13.6	13.8	13.7	13.7	13.6	14.1	13.6
8.0	8.2	8.3	8.3	8.4	8.8	8.4	8.5
7.6	8.4	8.2	8.3	8.3	8.7	8.6	8.3
7.6	8.1	8.3	7.8	8.3	7.9	8.5	7.6
12.2	9.3	12.1	13.0	13.9	13.0	10.3	12.8
8.0	8.2	8.3	8.3	8.4	8.8	8.4	8.5
7.8	8.3	8.1	8.1	8.3	8.3	8.5	8.3
6.9	7.7	8.2	8.5	8.4	7.7	8.2	7.7
-	-	7.9	-	7.4	8.0	8.4	-
-	6.9	-	-	-	-	-	-
7.7	8.3	8.1	8.1	8.3	8.2	8.4	8.3
7.7	8.3	8.1	8.2	8.3	8.4	8.4	8.3
10.9	11.2	10.9	11.1	11.3	10.9	11.9	11.4

TABLE VI
**Average MFI Interest Rates on New Business,
EUR Denominated (in per cent)**

	Sector	Category	Original maturity, period of notice, initial rate fixation	No	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08
Deposits in EUR	households and non-profit institutions serving households	overnight ^a		1	0.7	0.8	0.8	0.8	0.8
		redeemable at notice	up to 3 months' notice ^a	2	-	-	-	-	-
			over 3 months' notice ^a	3	-	-	-	-	-
		with agreed maturity	up to 1 month	4	3.4	3.4	3.4	3.6	3.6
			over 1 and up to 3 months	5	3.7	3.6	3.5	3.7	3.8
			over 3 and up to 6 months	6	3.2	3.4	3.5	3.5	3.7
			over 6 months and up to 1 year	7	3.0	3.0	3.4	3.3	3.6
			over 1 and up to 2 year	8	3.2	2.6	2.8	2.8	3.5
			over 2 years	9	3.1	2.7	2.5	2.4	2.4
			total	10	3.5	3.4	3.4	3.6	3.7
	non-financial corporations	overnight ^a		11	1.6	1.7	1.8	1.8	1.7
		with agreed maturity	up to 1 month	12	3.6	3.6	3.6	3.6	3.7
			over 1 and up to 3 months	13	4.2	3.8	3.8	4.1	4.1
			over 3 and up to 6 months	14	4.3	4.4	3.7	4.3	4.0
			over 6 months and up to 1 year	15	3.2	4.2	3.4	3.5	4.0
			over 1 and up to 2 years	16	3.3	3.8	2.9	4.0	3.9
			over 2 years	17	3.2	3.7	3.0	2.5	3.8
			total	18	3.6	3.6	3.6	3.7	3.7
	total	19	3.6	3.6	3.6	3.6	3.7		
	repos		20	-	-	-	-	-	
Loans in EUR	households and non-profit institutions serving households	bank overdraft ^a		21	6.7	8.0	6.0	6.3	6.3
		for consumption	variable rate and up to 3 months initial rate fixation	22	8.0	6.1	10.1	8.7	8.9
			over 3 months and up to 1 year initial rate fixation	23	8.6	-	-	-	-
			over 1 and up to 5 years' initial rate fixation	24	-	-	-	-	-
			over 5 years initial rate fixation	25	-	-	-	-	-
			total	26	8.0	6.1	10.1	8.7	8.9
		for house purchases	the annual percentage rate of charge (APRC)	27	8.3	7.4	10.9	9.4	11.2
			variable rate and up to 3 months initial rate fixation	28	6.8	7.0	6.4	7.0	6.5
			over 3 months and up to 1 year initial rate fixation	29	6.4	6.6	6.0	5.8	6.3
			over 1 and up to 5 years initial rate fixation	30	-	-	-	-	-
	over 5 and up to 10 years initial rate fixation		31	6.5	-	-	-	-	
	for other purposes	over 5 years initial rate fixation	32	-	-	-	-	-	
		total	33	6.6	6.9	6.3	6.3	6.4	
		the annual percentage rate of charge (APRC)	34	6.8	7.1	6.8	6.6	6.8	
		variable rate and up to 3 months initial rate fixation	35	6.2	6.1	5.5	6.0	6.2	
		over 3 months and up to 1 year initial rate fixation	36	6.3	5.5	-	6.7	-	
		over 1 and up to 5 years initial rate fixation	37	5.5	5.1	4.8	5.2	5.3	
		over 5 years initial rate fixation	38	-	-	-	-	-	
		total	39	6.2	6.0	5.4	5.9	6.0	
	total	40	6.3	6.1	5.6	6.2	6.2		
non-financial corporations	bank overdraft ^a		41	5.1	4.9	4.9	4.9	4.9	
	contracts up to EUR 1 million, overdraft excluded	variable rate and up to 3 months initial rate fixation	42	5.8	5.5	6.9	5.7	5.9	
		over 3 months and up to 1 year initial rate fixation	43	5.9	5.4	6.1	5.8	5.3	
		over 1 and up to 5 years initial rate fixation	44	5.9	5.5	5.3	5.5	5.7	
		over 5 years initial rate fixation	45	-	-	-	-	-	
	total	46	5.8	5.5	6.8	5.7	5.9		
	contracts over EUR 1 million, overdraft excluded	variable rate and up to 3 months initial rate fixation	47	5.9	5.9	5.6	6.0	6.0	
		over 3 months and up to 1 year initial rate fixation	48	5.7	-	5.2	5.9	5.9	
		over 1 and up to 5 years initial rate fixation	49	5.8	-	4.9	-	-	
		over 5 years initial rate fixation	50	-	-	-	6.0	-	
total		51	5.9	5.9	5.6	6.0	6.0		
total	52	5.9	5.8	5.8	6.0	6.0			
total	53	5.9	5.8	5.8	6.0	6.0			

^a Category calculated on a basis of an outstanding amounts. Excluded from "total" average.

May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08
0.8	0.9	1.1	1.0	0.9	0.8	0.8	0.8
-	0.9	0.9	0.9	0.9	0.9	0.9	0.9
-	1.4	1.3	1.3	1.4	1.3	1.4	1.3
3.5	3.6	3.7	3.7	4.1	3.7	3.2	2.8
3.8	3.9	3.9	3.9	4.0	4.2	3.5	3.3
3.7	3.9	3.9	3.9	4.1	4.1	3.8	3.7
3.6	4.1	3.8	4.1	4.2	4.1	4.0	3.8
3.4	3.5	3.6	3.6	4.1	3.7	3.7	3.4
2.3	2.4	2.6	2.6	2.9	2.9	2.2	2.9
3.6	3.7	3.8	3.8	4.1	3.9	3.4	3.1
1.7	1.8	1.7	1.8	1.7	1.5	1.2	0.9
3.7	3.7	4.0	4.0	4.0	3.6	3.1	2.4
3.8	4.4	4.3	4.3	4.2	4.6	3.8	3.6
3.8	3.7	3.8	4.1	4.8	4.6	4.1	3.4
4.3	3.4	4.5	4.3	4.5	4.5	3.3	3.9
3.5	3.6	4.0	3.4	4.3	4.4	3.0	2.2
3.7	3.8	3.3	2.6	2.9	3.9	2.9	2.9
3.7	3.8	4.0	4.0	4.1	3.7	3.1	2.5
3.7	3.8	3.9	4.0	4.1	3.7	3.2	2.6
-	-	-	-	-	-	-	-
6.1	6.9	8.3	8.8	6.6	8.0	6.7	5.9
6.8	9.0	8.0	8.6	8.7	9.3	8.6	6.6
6.0	7.5	-	7.7	7.7	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
6.8	8.4	8.0	8.2	8.7	9.3	8.6	6.6
7.2	9.7	8.8	8.9	9.6	10.0	9.1	6.4
7.2	7.2	7.0	7.3	7.7	7.3	7.5	7.1
6.5	7.1	7.0	6.8	7.4	6.4	6.0	6.3
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	7.6	-	7.3	-	-
6.9	7.2	7.0	7.2	7.7	7.2	7.5	7.1
7.2	7.5	7.2	7.5	8.0	7.4	8.0	7.3
6.4	6.2	6.9	6.6	7.0	7.0	6.0	5.0
7.1	7.0	-	5.7	6.4	6.2	5.7	4.0
5.4	5.5	5.5	5.5	5.5	-	4.7	3.8
-	-	-	-	-	-	-	-
6.2	6.2	6.8	6.5	6.8	7.0	6.0	5.0
6.4	6.4	7.0	7.0	7.3	7.0	6.8	6.1
5.0	5.0	5.1	5.2	5.2	5.5	5.0	4.3
6.1	6.1	6.2	6.1	6.2	6.5	6.1	6.2
8.1	6.6	6.8	6.5	6.8	6.4	5.8	5.4
8.3	5.9	5.9	6.2	5.9	5.9	8.3	3.0
5.9	5.6	6.0	5.6	5.7	-	5.2	4.1
6.2	6.1	6.2	6.1	6.2	6.5	6.1	6.1
6.3	6.1	6.4	6.1	6.0	6.4	6.0	4.6
5.7	5.9	6.2	-	6.0	6.0	5.5	5.1
-	-	-	-	-	-	-	3.6
-	-	-	-	6.8	-	5.2	-
6.2	6.0	6.4	6.1	6.1	6.4	5.9	4.6
6.2	6.1	6.4	6.1	6.1	6.4	5.9	4.9
6.2	6.1	6.4	6.1	6.1	6.5	6.0	4.9

TABLE VII
Aggregated Balance Sheet of Other Monetary Financial Institutions (million zloty)
ASSETS

Period	Loans to domestic residents	Monetary financial institutions	General government	Other domestic residents ^a	Holdings of securities other than shares issued by domestic residents	Monetary financial institutions	General government	Other domestic residents ^a	Money Market Fund Shares/Units
XII 2007	546 372.7	71 803.5	21 274.1	453 295.1	128 585.5	19 128.4	103 971.1	5 486.0	265.3
I 2008	572 277.7	83 870.1	21 218.3	467 189.3	130 407.1	25 149.9	100 250.7	5 006.5	252.7
II	570 856.4	76 615.0	20 916.0	473 325.4	135 743.7	27 029.3	103 831.1	4 883.3	260.1
III	582 676.7	76 253.7	20 038.0	486 385.0	136 010.9	23 780.4	107 196.8	5 033.7	275.2
IV	590 291.7	77 015.6	19 800.1	493 476.0	139 317.9	24 726.9	109 300.8	5 290.2	277.6
V	607 173.6	83 863.4	19 632.3	503 677.9	140 072.4	21 483.2	113 445.9	5 143.3	280.8
VI	617 394.3	81 184.2	19 245.2	516 964.9	139 473.5	17 884.6	116 310.6	5 278.3	283.3
VII	620 431.4	79 331.1	19 356.6	521 743.7	149 198.3	25 103.8	118 764.0	5 330.5	278.5
VIII	649 075.4	88 583.3	19 756.0	540 736.1	148 028.3	20 368.7	122 458.9	5 200.7	283.2
IX	660 115.3	83 050.6	19 992.3	557 072.4	163 026.5	28 138.1	129 429.1	5 459.3	285.6
X	701 011.9	91 316.4	20 598.9	589 096.6	156 394.7	18 939.4	132 143.3	5 312.0	285.5
XI	703 238.1	85 414.8	21 154.5	596 668.8	162 714.0	23 362.5	134 299.7	5 051.8	444.9
XII	724 114.6	76 421.7	24 417.0	623 275.9	177 247.4	22 587.2	149 451.2	5 209.0	272.5

^a Non-monetary financial institutions and non financial sector.

^b Excluding financial fixed assets, included column 10.

TABLE VII
Aggregated Balance Sheet of Other Monetary Financial Institutions (million zloty)
LIABILITIES

Period	Deposits of domestic residents	Monetary financial institutions	Central government	Other domestic residents ^a	overnight	with agreed maturity	redeemable at notice	repurchase agreements	Money Market Fund Shares/Units
XII 2007	558 415.3	56 427.0	18 413.9	483 574.4	254 254.4	221 038.2	89.4	8 192.4	594.7
I 2008	578 479.1	60 029.5	25 133.8	493 315.8	251 490.5	232 826.5	56.0	8 942.8	594.7
II	584 006.1	60 425.5	20 862.2	502 718.4	248 684.6	244 103.6	54.9	9 875.3	594.7
III	585 403.6	58 718.5	21 595.7	505 089.4	256 323.3	239 553.6	78.2	9 134.3	594.7
IV	596 857.2	58 993.7	22 734.1	515 129.4	242 835.1	262 539.5	56.8	9 698.0	814.4
V	609 641.2	64 981.7	25 084.7	519 574.8	258 627.4	253 122.3	56.4	7 768.7	814.4
VI	602 000.3	58 881.1	18 259.1	524 860.1	267 051.8	249 799.7	55.7	7 952.9	814.4
VII	614 721.0	57 898.7	23 489.9	533 332.4	265 446.8	260 790.5	57.3	7 037.8	814.4
VIII	632 042.7	59 597.3	27 437.5	545 007.9	264 424.2	270 061.0	53.4	10 469.3	998.3
IX	637 046.4	63 895.5	25 217.8	547 933.1	267 159.0	273 103.0	54.5	7 616.6	998.3
X	644 152.7	71 010.3	28 053.3	545 089.1	248 992.6	290 566.2	53.8	5 476.5	998.3
XI	650 769.9	62 944.8	29 314.8	558 510.3	248 961.7	303 745.0	54.1	5 749.5	998.3
XII	664 836.7	68 287.3	21 138.1	575 411.3	252 468.0	319 420.5	54.6	3 468.2	998.3

^a Non-monetary financial institutions, local government, social security funds and non financial sector.

Holdings of shares/other equity issued by domestic residents	Monetary financial institutions		External assets	Fixed assets ^b	Remaining assets	Total assets
	Monetary financial institutions	Other domestic residents ^a				
10	11	12	13	14	15	16
6 415.6	1 133.6	5 282.0	85 959.1	33 981.9	39 070.9	840 651.0
6 094.6	1 145.0	4 949.6	87 673.3	34 101.7	47 244.2	878 051.3
6 120.6	983.2	5 137.4	87 929.3	34 207.0	47 041.7	882 158.8
6 112.9	983.6	5 129.3	89 193.1	34 384.2	46 273.1	894 926.1
6 074.2	985.9	5 088.3	90 389.7	34 496.1	42 698.9	903 546.1
6 073.9	988.3	5 085.6	88 210.7	34 617.0	44 251.7	920 680.1
5 778.0	948.0	4 830.0	89 404.6	34 755.3	42 260.6	929 349.6
5 815.6	967.3	4 848.3	84 278.3	35 055.0	43 422.3	938 479.4
5 842.1	950.2	4 891.9	88 389.5	35 253.6	42 032.7	968 904.8
7 809.9	2 808.5	5 001.4	87 563.2	35 551.4	41 324.5	995 676.4
7 654.4	2 810.4	4 844.0	73 645.7	35 823.8	55 956.2	1 030 772.2
7 750.4	2 811.7	4 938.7	78 578.2	36 073.0	58 288.8	1 047 087.4
7 300.9	2 850.3	4 450.6	80 843.4	36 674.7	66 324.1	1 092 777.6

Debt securities issued	Capital and reserves	Capital			External liabilities	Remaining liabilities	Total liabilities
		Tier-1 capital	Tier-2 capital	Reserves			
10	11	12	13	14	15	16	17
15 922.0	101 887.0	63 140.6	571.7	38 174.7	102 688.2	61 143.8	840 651.0
15 468.1	103 188.2	63 861.7	890.7	38 435.8	107 438.0	72 883.2	878 051.3
15 615.5	102 838.7	63 871.7	347.1	38 619.9	106 060.4	73 043.4	882 158.8
15 994.7	104 342.2	65 044.7	410.9	38 886.6	115 775.8	72 815.1	894 926.1
16 247.0	105 195.3	65 963.7	246.4	38 985.2	114 941.8	69 490.4	903 546.1
16 366.7	107 775.8	68 359.3	3.7	39 412.8	117 812.2	68 269.8	920 680.1
17 148.1	108 730.4	70 212.9	-543.5	39 061.0	132 478.2	68 178.2	929 349.6
17 401.8	110 939.1	71 547.4	126.2	39 265.5	126 584.1	68 019.0	938 479.4
18 298.7	111 675.5	71 574.0	482.0	39 619.5	136 420.0	69 469.6	968 904.8
18 762.5	112 994.9	73 376.4	707.2	38 911.3	156 279.3	69 595.0	995 676.4
17 737.1	112 965.8	73 639.7	-320.3	39 646.4	177 836.1	77 082.2	1 030 772.2
17 184.7	114 661.6	73 863.8	655.0	40 142.8	182 656.9	80 816.0	1 047 087.4
16 849.9	116 590.8	74 207.1	1 354.9	41 028.8	210 198.5	83 303.4	1 092 777.6

TABLE VIII

Balance Sheet of the National Bank of Poland (million zloty) ASSETS

Period	Loans to domestic residents	Other monetary financial institutions	General government	Other domestic residents ^a	Holdings of securities other than shares issued by domestic residents	Other monetary financial institutions	General government	Holdings of shares/other equity issued by domestic residents	Other monetary financial institutions	Other domestic residents ^a	External assets	Fixed assets ^b	Remaining assets	Total assets
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
XII 2007	3 424.1	3 398.6	0.0	25.5	0.0	0.0	0.0	53.9	0.0	53.9	165 823.0	2 081.3	213.6	171 595.9
I 2008	1 871.2	1 846.6	0.0	24.6	0.0	0.0	0.0	53.9	0.0	53.9	173 489.3	2 056.7	377.0	177 848.1
II	1 871.0	1 846.6	0.0	24.4	0.0	0.0	0.0	53.9	0.0	53.9	173 448.2	2 060.8	4 602.0	182 035.9
III	2 658.1	2 633.5	0.0	24.6	0.0	0.0	0.0	53.9	0.0	53.9	177 300.4	2 064.2	7 400.7	189 477.3
IV	1 778.4	1 753.5	0.0	24.9	0.0	0.0	0.0	53.9	0.0	53.9	181 775.1	2 065.8	8 130.2	193 803.4
V	1 778.7	1 753.5	0.0	25.2	0.0	0.0	0.0	53.9	0.0	53.9	177 142.2	2 071.6	10 788.3	191 834.7
XII	1 685.3	1 660.3	0.0	25.0	0.0	0.0	0.0	53.9	0.0	53.9	179 801.4	2 079.1	12 801.8	196 421.5
VII	1 700.1	1 675.3	0.0	24.8	0.0	0.0	0.0	53.9	0.0	53.9	179 067.5	2 088.4	16 611.4	199 521.3
VIII	1 684.5	1 660.3	0.0	24.2	0.0	0.0	0.0	53.9	0.0	53.9	190 006.3	2 093.7	8 814.5	202 652.9
IX	1 590.9	1 567.2	0.0	23.7	0.0	0.0	0.0	53.9	0.0	53.9	180 832.9	2 098.6	5 193.9	189 770.2
X	10 857.3	10 833.8	0.0	23.5	0.0	0.0	0.0	53.9	0.0	53.9	186 674.0	2 101.5	2 102.3	201 789.0
XI	11 366.9	11 343.6	0.0	23.3	0.0	0.0	0.0	53.9	0.0	53.9	190 827.2	2 102.4	2 393.6	206 744.0
XII	19 073.5	19 050.4	0.0	23.1	0.0	0.0	0.0	53.9	0.0	53.9	189 827.4	2 110.6	782.6	211 848.0

^a Non-monetary financial institutions and non-financial sector.

^b Excluding financial fixed assets, included in column 8.

TABLE IX

Consolidated Balance Sheet of Monetary Financial Institutions (million zloty) ASSETS

Period	Loans to domestic residents	General government	Other domestic residents ^a	Holdings of securities other than shares issued by domestic residents	General government	Other domestic residents ^a	Holdings of shares/other equity ^b issued by other domestic residents ^a	External assets	Fixed assets ^c	Remaining assets ^d	Total assets
	1	2	3	4	5	6	7	8	9	10	11
XII 2007	474 594.7	21 274.1	453 320.6	109 457.1	103 971.1	5 486.0	5 335.9	251 782.1	36 063.2	30 773.2	908 006.2
I 2008	488 432.2	21 218.3	467 213.9	105 257.2	100 250.7	5 006.5	5 003.5	261 162.6	36 158.4	40 635.4	936 649.3
II	494 265.8	20 916.0	473 349.8	108 714.4	103 831.1	4 883.3	5 191.3	261 377.5	36 267.8	44 695.0	950 511.8
III	506 447.6	20 038.0	486 409.6	112 230.5	107 196.8	5 033.7	5 183.2	266 493.5	36 448.4	46 370.1	973 173.3
IV	513 301.0	19 800.1	493 500.9	114 591.0	109 300.8	5 290.2	5 142.2	272 164.8	36 561.9	42 513.5	984 274.4
V	523 335.4	19 632.3	503 703.1	118 589.2	113 445.9	5 143.3	5 139.5	265 352.9	36 688.6	47 662.6	996 768.2
XII	536 235.1	19 245.2	516 989.9	121 588.9	116 310.6	5 278.3	4 883.9	269 206.0	36 834.4	47 338.6	1 016 086.9
VII	541 125.1	19 356.6	521 768.5	124 094.5	118 764.0	5 330.5	4 902.2	263 345.8	37 143.4	52 129.6	1 022 740.6
VIII	560 516.3	19 756.0	540 760.3	127 659.6	122 458.9	5 200.7	4 945.8	278 395.8	37 347.3	42 846.5	1 051 711.3
IX	577 088.4	19 992.3	557 096.1	134 888.4	129 429.1	5 459.3	5 055.3	268 396.1	37 650.0	38 396.7	1 061 474.9
X	609 719.0	20 598.9	589 120.1	137 455.3	132 143.3	5 312.0	4 897.9	260 319.7	37 925.3	48 133.3	1 098 450.5
XI	617 846.6	21 154.5	596 692.1	139 351.5	134 299.7	5 051.8	4 992.6	269 405.4	38 175.4	51 653.8	1 121 425.3
XII	647 716.0	24 417.0	623 299.0	154 660.2	149 451.2	5 209.0	4 504.5	270 670.8	38 785.3	56 073.9	1 172 410.7

^a Non-monetary financial institutions and non-financial sector.

^b Including units in investment funds and financial fixed assets.

^c Excluding financial fixed assets, incorporated in column 7.

^d Including right issues.

TABLE VIII

Balance Sheet of the National Bank of Poland (million zloty)
LIABILITIES

Period	Currency in circulation	Deposits of domestic residents	Other monetary financial institutions	Central government	Other domestic residents ^a	Debt securities issued	Capital and reserves	Tier-1 capital	Reserves	External liabilities	Remaining liabilities	Total liabilities
XII 2007	85 671.3	47 760.2	17 522.0	26 386.4	3 851.8	15 585.2	3 626.2	2 469.4	1 156.8	25 318.9	-6 365.9	171 595.9
I 2008	82 455.0	42 292.8	20 080.9	18 813.2	3 398.7	21 911.7	3 617.2	2 469.4	1 147.8	30 827.8	-3 256.4	177 848.1
II	83 037.2	38 797.4	16 089.0	18 761.5	3 946.9	23 516.4	3 624.4	2 469.4	1 155.0	36 461.3	-3 400.8	182 035.9
III	85 074.7	41 035.1	17 429.5	19 704.9	3 900.7	20 287.0	3 631.3	2 469.4	1 161.9	43 725.7	-4 276.5	189 477.3
IV	88 294.3	41 317.5	16 081.2	20 941.4	4 294.9	20 816.4	3 638.1	2 469.4	1 168.7	45 360.2	-5 623.1	193 803.4
V	88 102.0	43 661.8	18 514.6	20 688.5	4 458.7	17 816.4	3 645.4	2 469.4	1 176.0	44 457.0	-5 847.9	191 834.7
VI	89 634.7	54 069.8	24 550.2	24 813.2	4 706.4	13 946.2	3 653.0	2 469.4	1 183.6	40 891.9	-5 774.1	196 421.5
VII	90 599.4	47 543.6	18 117.7	24 678.7	4 747.2	20 716.4	3 660.4	2 469.4	1 191.0	43 275.3	-6 273.8	199 521.3
VIII	91 584.6	54 327.9	24 652.9	24 666.0	5 009.0	15 376.5	3 668.0	2 469.4	1 198.6	43 247.5	-5 551.6	202 652.9
IX	90 655.7	44 563.6	19 989.5	19 265.1	5 309.0	22 816.4	2 704.2	1 500.0	1 204.2	32 347.3	-3 317.0	189 770.2
X	100 602.6	51 864.3	29 106.6	16 891.0	5 866.7	14 110.6	2 711.3	1 500.0	1 211.3	22 467.6	10 032.6	201 789.0
XI	99 085.1	48 817.2	27 234.4	15 720.5	5 862.3	18 752.3	2 717.0	1 500.0	1 217.0	20 098.9	17 273.5	206 744.0
XII	101 774.0	53 096.6	25 304.4	21 282.3	6 509.9	18 029.7	2 717.2	1 500.0	1 217.2	12 584.6	23 645.9	211 848.0

^a Non-monetary financial institutions, local government, social security funds and non-financial sector.

TABLE IX

Consolidated Balance Sheet of Monetary Financial Institutions
(million zloty)
LIABILITIES

Period	Currency in circulation	Deposits of central government	Deposits of other domestic residents ^a	overnight	with agreed maturity	redeemable at notice	repurchase agreements	Money Market Fund Shares/Units	Debt securities issued	Capital and reserves	External liabilities	Remaining liabilities	Excess of inter-MFI liabilities	Total liabilities
XII 2007	77 160.0	44 800.3	487 426.2	258 106.2	221 038.2	89.4	8 192.4	329.4	12 378.8	104 379.6	128 007.1	54 777.9	-1 253.1	908 006.2
I 2008	75 469.2	43 947.0	496 714.5	254 889.2	232 826.5	56.0	8 942.8	342.0	12 229.9	105 660.4	138 265.8	69 626.8	-5 606.3	936 649.3
II	76 088.5	39 623.7	506 665.3	252 631.5	244 103.6	54.9	9 875.3	334.6	12 102.6	105 479.9	142 521.7	69 642.6	-1 947.1	950 511.8
III	77 771.0	41 300.6	508 990.1	260 224.0	239 553.6	78.2	9 134.3	319.5	12 501.3	106 989.9	159 501.5	68 538.6	-2 739.2	973 173.3
IV	79 978.7	43 675.5	519 424.3	247 130.0	262 539.5	56.8	9 698.0	536.8	12 336.5	107 847.5	160 302.0	63 867.3	-3 694.2	984 274.4
V	80 724.6	45 773.2	524 033.5	263 086.1	253 122.3	56.4	7 768.7	533.6	12 699.9	110 432.9	162 269.2	62 421.9	-2 120.6	996 768.2
VI	81 910.9	43 072.3	529 566.5	271 758.2	249 799.7	55.7	7 952.9	531.1	13 209.7	111 435.4	173 370.1	62 404.1	586.8	1 016 086.9
VII	82 695.3	48 168.6	538 079.6	270 194.0	260 790.5	57.3	7 037.8	535.9	13 014.4	113 632.2	169 859.4	61 745.2	-4 990.0	1 022 740.6
VIII	83 583.9	52 103.5	550 016.9	269 433.2	270 061.0	53.4	10 469.3	715.1	13 306.5	114 393.3	179 667.5	63 918.0	-5 993.4	1 051 711.3
IX	82 534.0	44 482.9	553 242.1	272 468.0	273 103.0	54.5	7 616.6	712.7	13 440.8	112 890.6	188 626.6	66 278.0	-732.8	1 061 474.9
X	90 677.4	44 944.3	550 955.8	254 859.3	290 566.2	53.8	5 476.5	712.8	12 908.3	112 866.7	200 303.7	87 114.8	-2 033.3	1 098 450.5
XI	90 056.5	45 035.3	564 372.6	254 824.0	303 745.0	54.1	5 749.5	553.4	12 574.5	114 566.9	202 755.8	98 089.5	-6 579.2	1 121 425.3
XII	90 741.2	42 420.4	581 921.2	258 977.9	319 420.5	54.6	3 468.2	725.8	12 292.4	116 457.7	222 783.1	106 949.3	-1 880.4	1 172 410.7

^a Non-monetary financial institutions, local government, social security funds and non-financial sector.

TABLE Xa

M3 and Counterparts (million zloty) M3

Period	Currency in circulation			Overnight deposits and other liabilities	Households	of which individuals	Non-monetary financial institutions	Non-financial corporations	Non-profit institutions serving households	Local government	Social security funds	M1
	Currency in circulation (excluding vault cash)	Currency in circulation (including vault cash)	Cash in banks vaults									
	1	2	3									
XII 2007	77 160.0	85 671.3	8 511.3	258 106.2	137 288.7	113 335.4	13 289.2	79 400.4	6 457.4	14 672.0	6 998.5	335 266.2
I 2008	75 469.2	82 455.0	6 985.8	254 889.2	144 273.9	122 249.0	14 214.8	73 388.8	6 021.0	13 484.2	3 506.5	330 358.4
II	76 088.5	83 037.2	6 948.7	252 631.5	144 508.5	123 193.4	13 190.0	70 000.5	5 819.4	14 699.2	4 413.8	328 720.0
III	77 771.1	85 074.7	7 303.6	260 224.0	147 078.0	126 165.6	12 918.2	72 441.8	6 190.5	15 916.7	5 678.8	337 995.1
IV	79 978.7	88 294.3	8 315.6	247 130.0	146 859.6	126 879.3	11 992.4	63 109.5	6 184.0	14 319.8	4 664.6	327 108.7
V	80 724.6	88 102.0	7 377.4	263 086.1	149 540.9	129 077.7	14 132.1	71 306.9	6 521.6	16 437.9	5 146.6	343 810.7
VI	81 910.8	89 634.7	7 723.8	271 758.2	153 947.3	133 208.4	13 101.2	75 442.9	6 994.8	16 035.4	6 236.7	353 669.0
VII	82 695.3	90 599.4	7 904.1	270 193.9	156 700.5	135 625.1	12 460.0	73 037.5	7 232.1	15 032.9	5 730.9	352 889.2
VIII	83 583.8	91 584.6	8 000.8	269 433.1	156 020.3	134 848.6	15 180.1	70 513.1	6 973.0	14 269.5	6 477.1	353 017.0
IX	82 534.1	90 655.7	8 121.7	272 467.9	152 593.5	131 940.8	12 448.7	76 818.3	7 419.4	16 055.4	7 132.6	355 002.0
X	90 677.4	100 602.6	9 925.2	254 859.2	143 872.7	123 886.7	10 988.4	70 780.7	6 967.9	15 763.2	6 486.3	345 536.7
XI	90 056.4	99 085.1	9 028.6	254 823.9	140 898.1	121 425.0	12 451.2	69 952.2	6 871.3	16 051.9	8 599.2	344 880.3
XII	90 741.2	101 774.0	11 032.8	258 977.9	144 232.7	120 426.0	10 061.8	71 649.5	7 053.1	17 300.7	8 680.1	349 719.1

TABLE Xb

M3 and Counterparts (million zloty) M3 Counterparts

Period	Net external assets			Credit to other domestic residents	Loans to other domestic residents	Households	of which individuals	Non-monetary financial institutions	Non-financial corporations	Non-profit institutions serving households	Local government
	External assets	External liabilities									
	1	2	3								
XII 2007	123 775.1	251 782.1	128 007.0	482 629.2	469 185.7	259 981.0	215 709.9	18 290.0	173 414.3	1 635.3	15 865.0
I 2008	122 896.9	261 162.6	138 265.7	495 784.9	482 927.6	267 834.8	222 720.5	19 175.7	178 536.6	1 666.7	15 713.5
II	118 855.8	261 377.5	142 521.7	501 791.0	488 860.9	271 896.2	225 747.4	18 570.0	181 189.3	1 694.3	15 511.1
III	106 992.1	266 493.6	159 501.5	514 428.7	501 351.2	279 915.2	232 740.2	18 751.4	186 026.9	1 716.2	14 941.6
IV	111 862.9	272 164.8	160 302.0	521 515.0	508 224.7	285 457.9	236 609.8	16 842.0	189 453.8	1 747.3	14 723.8
V	103 083.6	265 352.9	162 269.2	531 377.4	518 242.0	290 582.4	240 562.3	17 995.3	193 352.0	1 773.4	14 538.9
VI	95 835.8	269 206.0	173 370.2	544 097.6	531 097.8	299 489.2	248 602.2	18 030.4	197 642.2	1 828.1	14 107.8
VII	93 486.3	263 345.8	169 859.4	549 104.0	536 015.2	302 226.9	250 696.2	18 347.6	199 300.3	1 893.7	14 246.6
VIII	98 728.2	278 395.7	179 667.5	568 201.4	555 184.0	314 915.0	262 525.2	18 143.0	205 740.4	1 961.9	14 423.7
IX	79 769.6	268 396.1	188 626.5	584 934.8	571 557.2	326 683.4	273 585.4	19 015.3	209 377.3	2 020.2	14 461.0
X	60 015.9	260 319.7	200 303.8	616 843.1	603 823.2	349 769.6	295 567.2	21 045.7	216 199.9	2 104.8	14 703.0
XI	66 649.5	269 405.4	202 755.8	624 585.3	611 620.4	352 350.0	297 423.8	20 484.4	221 693.9	2 163.8	14 928.2
XII	47 887.7	270 670.9	222 783.1	653 541.5	640 808.1	376 002.6	321 088.8	21 373.4	223 679.1	2 243.9	17 509.0

Deposits and other liabilities with agreed maturity up to 2 years and blocked deposits	of which issued by							Deposits redeemable at notice up to 3 months	M2	Repurchase agreements	Debt securities issued with maturity up to 2 years	Money market fund shares	M3
	Households	of which individuals	Non-monetary financial institutions	Non-financial corporations	Non-profit institutions serving households	Local government	Social security funds						
13	14	15	16	17	18	19	20	21	22	23	24	25	26
214 027.5	125 784.5	122 368.5	10 421.7	64 204.3	5 481.1	3 295.3	4 840.5	50.6	549 344.3	8 192.4	3 757.7	329.4	561 623.8
225 633.7	131 399.6	128 069.2	10 301.7	65 464.9	6 031.3	7 566.2	4 870.1	15.6	556 007.7	8 942.8	3 350.3	342.1	568 643.0
236 848.7	136 742.2	133 223.9	11 441.0	66 874.5	6 488.0	9 749.1	5 553.9	13.3	565 582.0	9 875.3	2 164.3	334.7	577 956.2
232 144.9	138 221.3	134 878.1	11 974.0	61 165.6	6 284.4	9 138.4	5 361.4	36.4	570 176.5	9 134.3	2 192.9	319.5	581 823.2
254 858.7	138 860.4	135 224.2	16 780.5	74 203.2	6 896.0	12 306.7	5 812.0	15.3	581 982.7	9 698.0	2 100.2	536.8	594 317.7
245 482.7	138 464.6	135 031.8	15 825.0	66 129.5	6 636.4	11 912.1	6 515.1	15.1	589 308.5	7 768.7	2 525.5	533.6	600 136.4
241 874.5	138 838.5	135 551.2	16 770.6	62 779.0	6 522.2	10 202.4	6 761.8	14.7	595 558.2	7 952.9	2 540.8	531.1	606 583.1
252 655.7	142 018.4	138 544.7	18 487.1	67 688.8	6 581.7	11 377.5	6 502.0	16.3	605 561.1	7 037.8	2 957.7	536.0	616 092.6
261 761.5	147 326.4	143 604.7	20 673.0	68 112.7	6 863.1	11 496.1	7 290.2	12.5	614 791.0	10 469.3	2 672.3	715.1	628 647.7
264 688.0	153 380.0	149 671.8	21 217.4	65 562.9	6 606.9	10 358.6	7 562.1	13.1	619 703.1	7 616.6	2 431.3	712.7	630 463.7
281 922.2	163 923.7	160 079.5	21 149.2	71 550.3	7 149.4	10 498.0	7 651.7	12.0	627 470.9	5 476.5	2 082.3	712.7	635 742.4
295 101.2	174 394.4	170 487.0	21 105.9	74 121.2	7 371.8	9 872.7	8 235.3	12.1	639 993.5	5 749.5	2 000.1	553.4	648 296.5
310 582.5	188 500.7	183 940.0	24 841.4	77 790.1	6 926.8	4 219.8	8 303.7	11.6	660 313.1	3 468.2	1 797.5	725.8	666 304.6

Social security funds	Holdings of securities other than shares	of which issued by			Holdings of shares/other equity	of which:		Credit to central government, net
		non-monetary financial institutions	non-financial corporations	local government		non-monetary financial institutions	non-financial corporations	
12	13	14	15	16	17	18	19	20
0.0	8 107.7	1 206.5	4 279.5	2 621.7	5 335.8	3 826.2	1 509.6	61 958.1
0.3	7 853.9	1 004.8	4 001.7	2 847.4	5 003.5	3 796.0	1 207.4	58 960.8
0.0	7 738.9	1 010.1	3 873.3	2 855.6	5 191.2	3 790.8	1 400.4	66 756.7
0.0	7 894.4	1 205.4	3 828.3	2 860.7	5 183.1	3 754.0	1 429.1	68 131.7
0.0	8 148.1	1 450.1	3 840.2	2 857.9	5 142.2	3 802.1	1 340.1	67 843.7
0.0	7 996.1	1 390.4	3 752.9	2 852.8	5 139.4	3 810.5	1 328.9	69 913.3
0.0	8 116.0	1 468.4	3 810.0	2 837.6	4 883.9	3 568.2	1 315.7	75 538.0
0.0	8 186.7	1 383.1	3 947.4	2 856.2	4 902.2	3 529.0	1 373.2	72 849.1
0.0	8 071.6	1 121.6	4 079.1	2 870.9	4 945.8	3 572.2	1 373.6	72 816.7
0.0	8 322.2	1 145.3	4 314.0	2 862.9	5 055.3	3 549.6	1 505.7	87 614.6
0.0	8 122.1	987.2	4 324.8	2 810.1	4 897.8	3 421.3	1 476.5	90 284.8
0.0	7 972.3	848.7	4 203.1	2 920.6	4 992.6	3 522.2	1 470.4	92 569.9
0.0	8 228.9	827.0	4 382.1	3 019.9	4 504.4	3 059.1	1 445.3	110 918.9

TABLE Xb

M3 and Counterparts (million zloty)
M3 Counterparts

Period	Credit to central government	of which:		Deposits of central government	Longer-term financial liabilities	Deposits with agreed maturity over 2 years and deposits redeemable at notice over 3 months	Households	of which individuals	Non-monetary financial institutions
		loans	debt securities issued						
		21	22							23	24	25	26	27	28	29
XII 2007	106 758.4	419.6	101 349.4	44 800.3	120 050.3	7 049.6	4 103.7	4 072.3	2 211.6
I 2008	102 907.8	444.6	97 403.3	43 947.0	121 773.0	7 233.1	4 118.7	4 087.9	2 184.5
II	106 380.4	438.8	100 975.5	39 623.7	122 714.7	7 296.5	4 221.8	4 192.5	2 171.8
III	109 432.4	419.6	104 336.0	41 300.6	124 748.7	7 450.5	4 249.8	4 219.0	2 268.7
IV	111 519.2	430.6	106 442.9	43 675.5	125 806.1	7 722.3	4 238.1	4 208.7	2 428.3
V	115 686.5	493.1	110 593.0	45 773.1	128 288.1	7 680.9	4 231.7	4 201.9	2 489.4
VI	118 610.3	546.7	113 472.9	43 072.3	130 070.2	7 966.1	4 218.8	4 186.7	2 782.2
VII	121 017.7	571.0	115 907.8	48 168.6	131 865.0	8 175.9	4 198.0	4 167.3	2 972.2
VIII	124 920.3	590.9	119 588.0	52 103.5	133 367.7	8 340.3	4 204.1	4 172.0	3 101.2
IX	132 097.4	592.3	126 566.2	44 482.8	132 356.5	8 456.4	4 187.1	4 152.7	3 162.1
X	135 229.1	575.8	129 333.2	44 944.3	132 378.4	8 685.8	4 168.3	4 126.8	3 186.8
XI	137 605.3	738.7	131 379.1	45 035.4	133 827.0	8 685.9	4 109.4	4 063.2	3 152.9
XII	153 339.3	1 034.4	146 431.3	42 420.4	135 833.5	8 881.0	4 025.3	3 979.0	3 193.1

TABLE XI

Reserve Money and Counterparts (million zloty)

Period	External assets, net	Official reserve assets	Refinancing credit	Rediscount credit	Lombard credit	Credit for rehabilitation programmes	Credit for central government investment projects	Other credit	Overdue credit
XII 2007	140 504.2	160 090.1	3 398.6	0.0	1 552.0	0.0	1 846.6	0.0	0.0
I 2008	142 661.5	167 557.7	1 846.6	0.0	0.0	0.0	1 846.6	0.0	0.0
II	136 987.8	167 885.4	1 846.6	0.0	0.0	0.0	1 846.6	0.0	0.0
III	133 574.8	171 671.8	2 633.5	0.0	880.0	0.0	1 753.5	0.0	0.0
IV	136 414.9	176 096.6	1 753.5	0.0	0.0	0.0	1 753.5	0.0	0.0
V	132 685.2	172 192.4	1 753.5	0.0	0.0	0.0	1 753.5	0.0	0.0
VI	138 909.5	174 944.0	1 660.3	0.0	0.0	0.0	1 660.3	0.0	0.0
VII	135 792.1	174 247.0	1 675.3	0.0	15.0	0.0	1 660.3	0.0	0.0
VIII	146 758.7	185 157.1	1 660.3	0.0	0.0	0.0	1 660.3	0.0	0.0
IX	148 485.7	175 975.3	1 567.2	0.0	0.0	0.0	1 567.2	0.0	0.0
X	164 208.1	181 787.0	1 567.2	0.0	0.0	0.0	1 567.2	0.0	0.0
XI	170 728.3	185 079.3	1 567.2	0.0	0.0	0.0	1 567.2	0.0	0.0
XII	177 242.8	184 165.2	3 797.8	0.0	2 317.7	0.0	1 474.0	6.0	0.0

Note: starting from end-November 2008 data the National Bank of Poland introduced methodological change in the compilation of the central bank monetary base. The redefinition consists in including in the monetary base deposit facility held by banks in the NBP, which will be included under "Current accounts", being one of the M0 components.

Non-financial corporations	Non-profit institutions serving households	Local government	Social security funds	Debt securities issued with maturity over 2 years	Capital and reserves	Fixed assets (excluding financial fixed assets)	Other items (net)
30	31	32	33	34	35	36	37
617.0	105.6	11.6	0.1	8 621.2	104 379.6	36 063.2	-22 751.5
813.7	105.3	10.9	0.1	8 879.6	105 660.3	36 158.3	-23 385.0
789.1	103.5	10.3	0.1	9 938.3	105 479.9	36 267.8	-23 000.4
820.7	100.8	10.4	0.1	10 308.4	106 989.8	36 448.5	-19 429.1
933.9	111.5	10.5	0.1	10 236.3	107 847.5	36 561.9	-17 659.8
831.9	113.0	14.8	0.1	10 174.4	110 432.8	36 688.6	-12 638.5
835.0	115.3	14.7	0.1	10 668.8	111 435.3	36 834.4	-15 652.5
875.6	118.8	11.2	0.1	10 056.8	113 632.2	37 143.4	-4 625.3
902.4	121.8	10.7	0.1	10 634.1	114 393.2	37 347.3	-15 078.2
978.3	117.8	10.9	0.1	11 009.5	112 890.6	37 650.0	-27 148.8
1 191.9	127.7	11.0	0.1	10 826.0	112 866.7	37 925.2	-36 948.3
1 277.7	134.4	11.5	0.1	10 574.3	114 566.8	38 175.4	-39 856.6
1 515.8	136.1	10.6	0.1	10 494.8	116 457.7	38 785.3	-48 995.3

Open market operations (net)	Auction credit	Auction deposits	NBP bills	Credit to central government, net	Other items (net)	Central Bank reserve money	Currency in circulation (including vault cash)	Bank current accounts	Reserve requirements accounts
10	11	12	13	14	15	16	17	18	19
-7 768.8	0.0	0.0	-7 768.8	-26 386.4	-7 078.2	102 669.4	85 671.3	16 846.1	152.0
-14 095.3	0.0	0.0	-14 095.3	-18 813.2	-9 531.7	102 067.9	82 455.0	19 474.8	138.0
-15 700.0	0.0	0.0	-15 700.0	-18 761.5	-5 529.6	98 843.2	83 037.2	15 671.3	134.6
-12 470.6	0.0	0.0	-12 470.6	-19 704.9	-1 847.4	102 185.3	85 074.7	16 994.6	116.0
-13 000.0	0.0	0.0	-13 000.0	-20 941.4	-228.5	103 998.5	88 294.3	15 583.0	121.2
-10 000.0	0.0	0.0	-10 000.0	-20 688.5	-5 131.6	98 618.6	88 102.0	10 406.5	110.1
-6 129.8	0.0	0.0	-6 129.8	-24 813.2	4 071.9	113 698.8	89 634.7	23 959.9	104.2
-12 900.0	0.0	0.0	-12 900.0	-24 678.7	8 427.6	108 316.3	90 599.4	17 611.5	105.5
-7 560.1	0.0	0.0	-7 560.1	-24 666.0	-7 237.9	108 955.1	91 584.6	17 265.1	105.3
-15 000.0	0.0	0.0	-15 000.0	-19 265.1	-6 106.0	109 681.7	90 655.7	18 910.1	115.9
2 972.5	9 266.7	0.0	-6 294.2	-16 891.0	-23 422.0	128 434.8	100 602.6	27 712.0	120.2
-1 159.5	9 776.4	0.0	-10 935.9	-15 720.5	-29 844.7	125 570.7	99 085.1	26 366.7	119.0
5 039.3	15 252.6	0.0	-10 213.3	-21 282.3	-38 447.4	126 350.2	101 774.0	24 465.7	110.5

METHODOLOGICAL NOTES

TABLE I
Basic Statistical Data

Information contained in Table I is derived from the "Statistical Bulletin" of the Central Statistical Office [GUS]. Definitions of the categories presented in the Table can be found in the GUS publications

1. Data presented in pts. 1, 2, 6, 7, 10 and 12 comprise national economy entities regardless of their ownership type, i.e. public sector entities (state-owned entities, units of local government and mixed ownership, where public sector entities prevail) and private sector entities. The private sector includes units of private domestic ownership (among others: companies, cooperatives, natural persons conducting economic activities, social organizations, associations, foundations), private foreign ownership (among others: foreign enterprises branches, foreign representatives, partnerships with exclusive foreign capital share) and "mixed" ownership with a private sector unit capital majority or lack of sectors majority in unit capital.

2. The corporate sector comprises entities, which conduct their economic activities in the fields of: forestry, including the provision of services; marine fishing; mining, manufacturing; electricity, water and gas production and supply; construction; wholesale and retail trade; repair of motor vehicles, motorcycles as well as personal and household goods; hotels and restaurants; transport, storage and communication; real estate renting and related business activities, renting machines and equipment without an operator and of personal and household goods; computer and related activities; other business activities; sewage and refuse disposal, sanitation management and other sanitation services; recreational, cultural, sporting and other services.

3. According to the Polish Statistical Classification of Economic Activities [PKD], the notion of "industry" applies to the following sections: "mining", "manufacturing" and "electricity, gas and water production and supply".

4. Data on the sold production of industry (pt.1), and the construction and assembly production (pt. 2) refer to economic entities with of more than 9 employees.

5. Data on the value of the sold production of industry (pt.1) and the construction and assembly production (pt. 2) are disclosed net without the due value added tax (VAT) and the excise tax, while they include subsidies for specific purposes to products and services in the so-called base prices

6. Construction and assembly production data (pt.2) refer to works performed on commission in Poland by the business entities of the construction sector, i.e. classified under "construction" according to the PKD.

7. Information on the sold production of industry (pt.1) and the construction assembly production (pt. 2) are disclosed without seasonal adjustments.

8. Data on employed persons include persons employed on a full and part-time basis in the main place of work. Employed persons include: persons employed on the basis of a labour contract; owners and co-owners of units engaged in economic activities including contributing family members; outworkers; agents and persons employed by agents; members of agricultural production co-operatives. Data presented in the *Report* do not include private farmers or employees of budget entities conducting activity within the scope of national defence and public safety.

9. Unemployment rate (pt. 9) is calculated as a percentage share of the unemployed in the civilian population i.e. total of employed and unemployed persons over 15 years of age.

10. Revenues from privatisation do not constitute the current revenues of the state budget; instead they finance the budget deficit (pt. 11).

11. Data on financial results of enterprises (pt. 12) are presented as prescribed by the amended Accounting Act dated 29 September 1994 (uniform text Journal of Laws 2002 No. 76, item 694, with later amendments).

TABLE II Financial Market – Basic Information

Information comprised in Table II has been derived from the National Bank of Poland (save for the data in pt. 6, supplied by the Warsaw Stock Exchange).

1. Interest rates in Table II are presented on an annual basis at the level which was binding on the last day of a given month. The average monthly interest rate has been given only for the weighted average yield on purchased T-bills or the NBP money-market bills.

2. Two interest rates are shown in one column (pt. 1, col. 3 – interest rate on refinancing loan) means that the first interest rate refers to the refinancing loan for financing central investment projects which have a State Treasury guarantee. It is equal to the lombard rate. The other rate, which is higher by 1 percentage point, refers to other refinancing loans.

3. Deposit rate (pt. 1 col. 4) sets the price offered by the Central Bank to commercial banks for short-term deposits.

4. Total reserve requirements (pt. 2, col. 12) pertain to the volumes declared by banks and binding on the last day of the month. Since 28 February 2002, the total reserve requirements are held exclusively on the NBP accounts.

5. Information on Treasury bill tenders (pt. 3, except for the stocks of bills in circulation at the end of the month – col. 64) comprises data from tenders conducted within one month. The average yield on bills purchased is weighted by the share of the sales of bills with different maturities in the total value of bills purchased. The stock of bills in circulation at month end has been determined on the basis of the agreed maturity, calculated from the day after the tender which resulted in the sale of the bill. The above stock does not include bills in circulation which do not stem from tenders.

6. Information on tenders for the NBP money-market bills (pt. 4, except for the stock of bills in circulation at month end – col. 110) comprises data from tenders conducted within one month. The average yield on bills purchased is weighted by the share of the sales of bills with different maturities in the total value of bills purchased.

7. Information on the results of the trading sessions on the Warsaw Stock Exchange (pt. 6) is disclosed on the basis of the Warsaw stock exchange system introduced in November 2000. To assure data comparability, the data for the period from January to November 2000 has been recalculated. The National bank of Poland has no available recalculated data for 1999.

8. The Warsaw Stock Exchange Index [WIG Index] and the Warsaw Parallel Market Index [WIRR Index] are calculated by a so-called capital formula, which reflects the percentage changes in the market value of listed companies. The market value of all primary market companies for the WIG Index and the parallel market companies for the WIRR Index (stock capitalisation) is calculated at each session and compared to the value in the preceding sessions. It has been assumed that the base values of the WIG Index at the first WSE session held on 16 April 1991 and the WIRR Index from the end of 1994 were equal to 1,000 points.

9. The indices comprise companies from all the quotation markets.

10. Capitalization refers only to domestic companies.

11. The P/E ratio shows the relation of the market price to net earnings and is calculated as a quotient of the total market value of companies at month end to their aggregated profits and losses generated within the last 4 quarters, for which financial data are available.

12. The turnover ratio shows the relation between the value of sold shares to the average value of shares quoted in a given month.

13. The monthly turnover value and the turnover ratio comprise the continuous quotation and fixing.

TABLE III PLN/USD and PLN/EUR daily exchange rates

The information has been based on the data of the National Bank of Poland.

1. The NBP average exchange rate is the official exchange rate used for statistical and accounting purposes.

2. The average PLN/USD and PLN/EUR exchange rates and the USD/EUR ratio were calculated as the arithmetic average of the NBP average exchange rates for a month (based on daily exchange rates).

SECTORAL CLASSIFICATION

• **financial sector** – comprises the following sub-sectors:

- monetary financial institutions⁷³ (including the central bank and other monetary financial institutions). In Poland, the concept of other monetary financial institutions applies to banks, credit unions (SKOK) and money market funds;
- insurance corporations and pension funds;
- other financial intermediaries (including financial leasing companies, factoring companies, brokerage offices, investment funds, without money market funds, and financial companies created for securitization);
- financial auxiliaries (including bureaux de change, bourses, hire purchase institutions);

• **non-financial sector** – comprises the following sub-sectors:

- state-owned corporations;
- private corporations and co-operatives;
- individual entrepreneurs;⁷⁴
- farmers;

⁷³ In accordance with the ECB definition, monetary financial institutions (MFIs) comprise financial institutions whose business is to receive deposits and/or close substitutes for deposits from entities other than MFIs and, for their own account, to grant credits and/or to make investments in securities.

⁷⁴ Natural persons conducting business activities on their own account, with a maximum of 9 employees.

- individuals;
- non-profit institutions serving households.

In the publications of the National Bank of Poland, claims and liabilities of banks to the non-financial sector will be presented in accordance with the EU standards, i.e. sub-divided into three sectors:

- *households* – comprising:
 - individuals;
 - farmers;
 - individual entrepreneurs;
- *non-financial corporations* – comprising:
 - state-owned corporations;
 - private corporations and co-operatives (including: individual entrepreneurs with more than 9 employees);
- *non-profit institutions serving households*: separate legal entities, which serve households. Their principal resources, apart from those derived from occasional sales, are derived from voluntary contributions in cash or in kind from households, from payments made by general governments and from property income;
- *general government* – comprises the following sub-sectors:
 - central government (including public governing bodies, government administration bodies, state control and law protection bodies, courts and tribunals, state universities, state institutions of culture and welfare etc.);
 - local government (including local administrative offices [at gmina and powiat level], local parliaments, public elementary schools, institutions of culture financed by local governments, welfare institutions, etc.);
 - social security funds (comprise the Social Insurance Institution and the Agricultural Social Insurance Fund and the funds they manage, and the healthcare funds).

TABLE IV
Average interest rate on zloty denominated businesses

Data on zloty denominated businesses refer to all businesses at the end of the reporting month, these concluded prior to the reporting month and still binding as well as new businesses. This interest rate is a quotient of interest on average zloty denominated business by average volume of businesses per reporting month, commissions and other charges excluded.

The interest rate is calculated based on data received from the following banks (20):

1. Powszechna Kasa Oszczędności Bank Polski SA
2. Bank Polska Kasa Opieki SA

3. Bank BPH SA
4. Bank Handlowy w Warszawie SA
5. ING Bank Śląski SA
6. Kredyt Bank SA
7. Bank Zachodni WBK SA
8. BRE Bank SA
9. Bank Millennium SA
10. Bank Gospodarki Żywnościowej SA
11. Raiffeisen Bank Polska SA
12. BRE Bank Hipoteczny SA
13. Krakowski Bank Spółdzielczy
14. Bank Spółdzielczy w Brodnicy
15. Bank Gospodarstwa Krajowego
16. Bank Ochrony Środowiska SA
17. FORTIS BANK POLSKA SA
18. GE Money Bank SA
19. LUKAS Bank SA
20. AIG Bank Polska SA.

At the end-December 2008, the above banks held 78.7% of deposits of residents and 73.7% of credit to households and non-financial corporations.

TABLE V
Average interest on new zloty denominated businesses

Information refers to agreements carried out in a given reporting month. Appendices to existing agreements shall be deemed new businesses.

Interest rates in the statistics on new businesses differ from those in Table IV. The formula is applied to statistical information on new businesses, also known as *Narrowly Defined Effective Rate* (NDER). The concept of *Narrowly Defined Effective Rate* was coined as an opposite to widely understood effective interest rate or *Real Interest Rate* (RIR). The NDER included, the new business statistics provides RIR for the second category of consumer and house purchase loans. As opposed to the NDER, which covers for interest costs of capital, the real interest rate incorporates all charges paid by the borrower. These charges are most of all commissions (brokers included) but also compulsory loan insurance premiums against death or unemployment of the borrower.

The Table IV sample of banks applies.

TABLE VI**Average interest rate on euro denominated businesses**

General rule of calculating interest rate are the same as for Table IV (see star-matched lines) and Table V. The Table IV and V sample of banks applies as well.

GENERAL COMMENTS ON TABLES VII, VIII, IX

1. The figures refer to the end of each reporting month and have been derived from balance sheets received from the banks within the framework of the "Banking Reporting Information system (BIS)" and from the balance sheet of the National Bank of Poland credit unions (SKOK) and money market funds.

2. The presentation is structured in accordance with the ECB standards.

3. Assets in Tables VII, VIII and IX are shown gross of provisions, accumulated depreciation and write downs (except for securities presented at a market price).

4. Apart from external assets/liabilities debt securities issued and partly capital and reserves, all categories reflect operations with residents.

TABLE VII**Aggregated Balance Sheet of Other Monetary Financial Institutions – Assets and Liabilities**

1. Credits, loans and other claims to domestic residents (assets col. 1) include current accounts, reserve requirements, open market operations, deposits, loans and credits, debt purchased, realised guarantees and sureties, other claims, interest due and claims on securities purchased under repurchase agreements.

2. Debt securities issued by domestic residents (assets col. 5) held by other monetary financial institutions.

3. Money Market Funds participation units purchased by other MFIs (assets col. 9).

4. Securities and other shares and other equity issued by domestic residents (assets col. 10) include shares, investment fund participation units, investment certificates and fixed financial assets (shares).

5. External assets (assets col. 13) include all assets of non-residents denominated in zloty and foreign currencies.

6. Fixed assets (assets col. 14) include total fixed assets except for financial fixed assets.

7. Other assets (assets col. 15) include vault cash i.e. cash and other cash equivalents held at other monetary financial institutions, as well as other claims and interest due and not due from all sectors, settlement accounts, claims on various debtors, deferred income and expenditure, other financial assets, value adjustments, rights issue, other assets, other operations, interest on securities purchased under repurchase agreement.

8. Deposits and other liabilities to domestic residents (liabilities col. 1) represent overnight deposits, deposits with agreed maturities, blocked deposits, deposits redeemable at notice, received credit and loans, including refinancing, auction (open market operations) and claims from

cash collateral (classified to "with agreed maturities"), other liabilities and claims on repurchase agreements, subordinated claims save for those in securities issued.

9. Money Market Funds participation units issued by the MMF (liabilities col. 9).

10. Debt securities issued (liabilities col. 10) are liabilities on own debt securities issued by other monetary financial institutions and subordinated claims in securities issued (purchased by residents and non-residents).

11. Capital and reserves (liabilities col. 11) are divided into: a) core fund comprising share paid-in capital, called-up capital unpaid, own shares, accumulated reserves, general risk provisions, reserve capital and retained earnings, b) supplementary funds i.e. revaluation reserves and other supplementary funds specified in Banking Law Act (assigned both to residents and non-residents) other components of equity capital, c) provisions, including specific provisions, impairment allowances, mortgage notes reserves (resident, non-resident), specific provisions for off-balance liabilities (resident, non-resident), general risk provisions (resident, non-resident).

12. External liabilities (liabilities col. 15) include all liabilities of non-residents denominated in zloty and foreign currencies, except for reserves included in point 11, which comprise residents and non-residents as well as issue of debt securities and subordinated claims in securities purchased by non-residents.

13. Other liabilities (liabilities col. 16) include interest on the above-mentioned liabilities, settlement accounts, liabilities to creditors, deferred income and expenditure, suspended revenue, other liabilities from financial instruments, other liabilities, exchange rate fluctuations resulting from the conversion of subordinated liabilities, reserves for risk and expenditures not associated with the basic activities of the reporting bank, subordinated liabilities, other operations, interest on subordinated liabilities, value adjustments profit/loss during approval procedures, current year profit/loss.

TABLE VIII
Balance Sheet of the National Bank of Poland – Assets and Liabilities

1. The item credits, loans and other claims to domestic residents (assets col. 1) comprises receivables from granted loans, including rediscount, lombard, refinancing for central investments, loans granted from foreign credit facilities, open market operations, other loans and receivables from current and fixed term deposits.

2. Debt securities issued by domestic residents (assets col. 5) are securities held by the National Bank of Poland.

3. Securities and other shares and other equity issued by domestic residents (assets col. 8) – at the moment in the case of the NBP they include only fixed financial assets (equity).

4. External assets (assets col. 11) include all assets of non-residents denominated in zloty and foreign currencies.

5. Fixed assets (assets col. 12) include total fixed assets except for financial fixed assets.

6. Other assets (assets col. 13) include interest due and not due on the above-listed operations, deferred costs, inter-branch settlements and other assets excluding fixed assets.

7. Deposits of domestic residents (liabilities col. 2) represent liabilities on overnight deposits, deposits with agreed maturity, reserve requirements, auction deposits (open market operations), separated funds and other deposits.

8. Debt securities issued (liabilities col. 6) represent liabilities on the NBP debt securities issued by the NBP.

9. Capital and reserves (liabilities col. 7) in the case of the NBP it comprises equity i.e. authorised capital, as well as reserve fund and provisions, which include specific provisions, accumulated depreciation and valuation allowances.

10. External liabilities (liabilities col. 10) include all liabilities of non-residents denominated in zloty and foreign currencies.

11. Other liabilities (liabilities col. 11) include interest on the above-mentioned categories of liabilities, deferred income, inter and intra-MFI settlements, other liabilities and financial performance.

TABLE IX

Consolidated Balance Sheet of Monetary Financial Institutions – Assets and Liabilities

1. Table IX comprises a consolidated balance sheet of monetary financial institutions.
2. In the assets and liabilities of the above-mentioned balance sheet, domestic inter-MFI operations have been netted out.
3. Other assets (assets col. 10) and currency in circulation (liabilities col. 1) were decreased by cash in vaults of other monetary financial institutions.

LIST OF THE MOST IMPORTANT ABBREVIATIONS

BFG	Bankowy Fundusz Gwarancyjny Bank Guarantee Fund
BIS	Bank Rozrachunków Międzynarodowych Bank for International Settlements
EBC/ECB	Europejski Bank Centralny European Central Bank
EBOIR/EBRD	Europejski Bank Odbudowy i Rozwoju European Bank for Reconstruction and Development
ERM II	Europejski Mechanizm Kursowy Exchange Rate Mechanism II
ESBC/ESCB	Europejski System Banków Centralnych European System of Central Banks
GINB	Generalny Inspektorat Nadzoru Bankowego General Inspectorate of Banking Supervision
GUS	Główny Urząd Statystyczny Central Statistical Office
KIR SA	Krajowa Izba Rozliczeniowa SA National Clearing House SA
KDPW SA	Krajowy Depozyt Papierów Wartościowych SA National Depository for Securities SA
KNB	Komisja Nadzoru Bankowego Commission for Banking Supervision
KNF	Komisja Nadzoru Finansowego Polish Financial Supervision Authority
MF	Ministerstwo Finansów Ministry of Finance
MFW/IMF	Międzynarodowy Fundusz Walutowy International Monetary Fund
NBP	Narodowy Bank Polski National Bank of Poland
OECD	Organizacja Współpracy Gospodarczej i Rozwoju Organisation for Economic Co-operation and Development
ONZ/UN	Organizacja Narodów Zjednoczonych United Nations
pb/b.p.	punkt bazowy basis point
PKB/GDP	Produkt krajowy brutto Gross Domestic Product

RPP/MPC	Rada Polityki Pieniężnej Monetary Policy Council
SDR	Specjalne Prawa Ciągnięcia Special Drawing Rights
SEPA	Jednolity Obszar Płatności w Euro Single Euro Payments Area
SIS	System Informacji Sprawozdawczej Reporting Information System (SIS)
SORBNET	System Obsługi Rachunków Banków w Centrali NBP Real-Time Gross Settlement System [RTGS] at the NBP Head Office
SORBNET-EURO	System Obsługi Rachunków Banków w Euro w Centrali NBP Real-Time Gross Settlement System [RTGS] in Euro at the NBP Head Office
STEP2 SCT	System Transferów Kredytowych STEP2 SEPA STEP2 SEPA Credit Transfer
TARGET, TARGET2	Transeuropejski zautomatyzowany system rozrachunku brutto w czasie rzeczywistym Trans-European Automated Real-time Gross Settlement Express Transfer System
UE/EU	Unia Europejska European Union
UGW/EMU	Unia Gospodarcza i Walutowa Economic and Monetary Union
ZBP/PBA	Związek Banków Polskich Polish Bank Association
ZSK/IAS	Zintegrowany System Księgowy Integrated Accounting System

Compiled on the basis of NBP materials

Published by

**National Bank of Poland
Education and Publishing
Department**

00-919 Warszawa, ul. Świętokrzyska 11/21

phone 48 22 653 23 35, fax 48 22 653 13 21

<http://www.nbp.pl>

Design, pre-print & proofing

Oliwka s.c.

Photo of the President of the NBP

Michał Gmitruk, "Sukces" magazine

Cover photo

NBP

Printing

Printshop NBP

ISSN 1427-0277

© Copyright by National Bank of Poland, 2009