## **National Bank of Poland**

**Monetary Policy Council** 

# Report on monetary policy implementation in 2010

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In presenting the *Report on monetary policy implementation*, the Monetary Policy Council acts in accordance with Article 227 of the Constitution of the Republic of Poland, which imposes an obligation on the Council to present a report on the implementation of monetary policy guidelines within 5 months following the end of the fiscal year. In accordance with Article 53 of the Act on the National Bank of Poland, the *Report on monetary policy implementation* is published in the Official Gazette of the Republic of Poland, the *Monitor Polski*.

The Report presents the main elements of the implemented strategy of monetary policy, a description of macroeconomic conditions and decisions taken with respect to monetary policy in the reported year, as well as a description of the applied monetary policy tools. Moreover, the *Report* is accompanied by Appendices presenting the development of important macroeconomic variables, as well as by *Minutes of the Monetary Policy Council decision-making meetings* and the voting records of the Council's members on motions and resolutions.

As emphasised in Chapter 1 of the *Report*, the decisions of monetary authorities affect the economy with considerable lags, with the strongest impact being observed after several quarters. Moreover, the economy is subject to macroeconomic shocks, which, while remaining in most cases outside the control of the domestic monetary policy, may to a large extent affect the economic situation and domestic inflationary processes in the short, and sometimes in the medium term.

An ex post assessment of the conduct of monetary policy should take into account the above considerations.

This Report on monetary policy implementation in 2010 is a translation of the National Bank of Poland's Sprawozdanie z wykonania założeń polityki pieniężnej na rok 2010 in Polish. In case of discrepancies, the original prevails.

## Chapter 1.

# Monetary policy strategy in 2010

In 2010, the Monetary Policy Council, henceforth the "MPC" or the "Council", implemented the *Monetary Policy Guidelines for 2010*, adopted on 30 September 2009. In the *Guidelines*, the main elements of the monetary policy strategy implemented in 2010 were presented as follows:

According to the Article 227 section 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 section 1 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".

Nowadays central banks understand price stability in terms of inflation as low as not to negatively affect investment, savings 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.

The Monetary Policy Council bases its monetary policy on inflation targeting (IT). Having brought inflation down to a low level, in 2004 the MPC adopted a permanent inflation target of 2.5% with a symmetrical tolerance band for deviations of  $\pm$  1 percentage point. The MPC pursues IT under a floating exchange rate regime. However, the floating exchange rate regime does not rule out foreign exchange interventions should they turn out necessary to ensure domestic macroeconomic and financial stability, which is conducive to meeting the inflation target in the medium term.

The experience of the National Bank of Poland, hereinafter "the NBP", and other central banks shows that IT is an effective strategy to ensure price stability. Due to the global financial crisis and recession in the world economy since 2008, at present monetary policy is more than ever affected by factors related to financial system stability, crucial to ensure price stability in the longer term. IT enables monetary policy makers to take into account issues related to financial system stability. Therefore, while maintaining the core of its hitherto understanding of the inflation target and the way of its implementation, the Council supplements it in some respects:

- 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 the use of quarterly and annual inflation indices is justified, such as those applied in the NBP's inflation projection, in the state budget and in the statistics of the European Union, hereinafter "the EU". An important role in the assessment of inflationary pressure is also played by core inflation indices.
- Second, the adopted solution means that monetary policy is unequivocally focused on maintaining inflation as close as possible to the target of 2.5% and not only within the tolerance band. This anchors inflation expectations and thus facilitates the pursuit of monetary policy, which in the case of shocks

- requires smaller and less frequent interest rate changes. Firm anchoring of inflation expectations also fosters lower volatility of long-term interest rates in the face of shocks affecting current inflation.
- Third, the occurrence of shocks in the economy is inevitable. Depending on the strength of the shock and the degree of inertia of inflation expectations, the scale and the duration of inflation deviation from the adopted target may differ. The central bank normally does not respond to deviations from the inflation target which it deems temporary and which lie within the tolerance band. In countries with a permanently low inflation, 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 also depends 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 pose a more complex problem for monetary policy, as in this case output and inflation move in opposite directions. Inappropriate monetary policy response to such a shock may have farreaching negative consequences for the economy. An attempt to fully neutralise the impact of a supply shock on inflation using monetary policy instruments 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 by pursuing an expansive monetary policy the real effects of a supply shock resulting in an increase in inflation and a decrease in output usually leads to persistently higher inflation. This, 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 durability of the shock's effects.
- Fifth, most supply shocks are transitory and limited in scale. Thus, they do not require an immediate response. However, in the case of strong shocks even a temporary acceleration in price growth may bring about a relatively permanent rise in inflation expectations and, in turn, an increase in inflation due to the emergence of wage demands. In such a situation, monetary policy has to prevent the 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. Useful in analyzing supply shocks are core inflation indices, which help to distinguish, at least roughly, temporary effects from permanent changes in inflationary pressure.
- Sixth, because of the lags between the monetary policy actions and their effect on output and inflation, the impact of monetary policy on the current rate of inflation is limited. Current decisions of the monetary authorities affect price developments in the future just as present rate of 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 in the economy. Changes in the monetary transmission mechanism 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. Disturbances in the financial system may constitute an additional factor disrupting the monetary transmission mechanism.
- Seventh, monetary policy affects the economy not only by changing interest rates but also by keeping them unchanged for a certain period of time. The decision to keep interest rates unchanged for several periods (months or quarters) has substantial consequences for the economy as well, because it leads to a gradual widening or narrowing of the output gap.
- Eighth, monetary policy is pursued under uncertainty. High uncertainty is due, among other things, to the fact that inflation projection models used 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 information, rather than the inflation projection only;
  - (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 uncertainty, rather than an exercise of strict control over economic processes.

- Ninth, monetary policy should allow for the need to maintain financial stability which is indispensable to ensure price stability in the longer term and which enables effective operation of the monetary transmission mechanism. In this context, asset price developments are of importance. Excessive and long-term reduction in interest rates amidst low inflation and simultaneous fast economic growth may lead to rapid asset price growth, thus increasing the risk of so-called speculative bubbles. Rapid asset price growth is accompanied by the likelihood of asset price deviation from the levels justified by fundamentals, which increases the risk of an abrupt and significant decline in asset prices in the future. This poses a threat to financial system stability, and consequently, in the longer term, to sustainable economic growth and price stability. Monetary policy supporting financial system stability is thus consistent, in the longer term, with the achievement of the basic objective of the central bank's activity i.e. ensuring price stability, although it may occasionally pose a risk of temporary deviation of inflation from the target. In order to maintain consistency between attempting to keep inflation at the target and supporting financial system stability, it may be, in certain conditions, necessary to lengthen the inflation target horizon. In assessing the risk of turmoil in the financial system and the inflation outlook in the longer run, it is useful to analyse monetary and credit aggregates as well as exchange rate developments.
- Tenth, in assessing the degree of monetary policy restrictiveness not only should the level of real interest rates be considered but also the level of the real exchange rate. Thus understood restrictiveness of monetary policy impacts, along 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 the monetary policy decision-making process is the balance of factors affecting the probabilities of future inflation running above or below the 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 development of variables and information not accounted for directly in the projection. While assessing the factors affecting future inflation, central banks take into consideration the path of inflation in the past since it has a bearing on the anchoring of inflation expectations at the inflation target. In this context it is important to consider the length of the period in which inflation remained close to the target and the length of the period in which it deviated from the target.

If a binding decision is taken on the scheduled date of Poland joining the euro area and the related entry into ERM II, the Council will make all necessary adjustments of the monetary policy strategy and – in consultation with the Council of Ministers – of the exchange rate policy to conditions ensuing from the necessity of meeting the convergence criteria required for the euro adoption. In the Council's opinion, Poland's accession to the euro area should take place at the earliest possible date i.e. after gaining the necessary political support for amendments in the Constitution of the Republic of Poland and defining the path of reducing the general government deficit to the level compliant with the Maastricht fiscal criterion.

The Council expresses its conviction that in the coming years economic policy in Poland should be conducted in such a way as to – by implementing structural reforms – enable the sustainable fulfilment of the Maastricht criteria, and in this way, maximise the benefits resulting from the euro area membership.

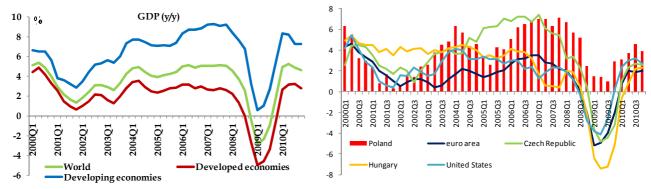
## Chapter 2.

# Monetary Policy in 2010.

#### 2.1. Macroeconomic conditions of NBP monetary policy in 2010.

In 2010 the recovery in the global economy continued, albeit at a somewhat slower pace in the second half of the year than in the first one. Pronounced differences in the level of business activity in various regions of the world persisted. Growth in many developed countries was dampened by uncertainty concerning the general economic outlook, trends in private sector demand and the situation in the banking sector. In some of these economies, high unemployment persisted. In emerging economies, mainly those of Asia and Latin America, business activity continued at a high level, which contributed to expanding international trade and boosted exports of some developed countries (amongst them the United States, Germany and Japan). The rise in exports in these countries supported a rebound in domestic demand. There was a marked improvement in business activity in Germany, Poland's largest export partner.

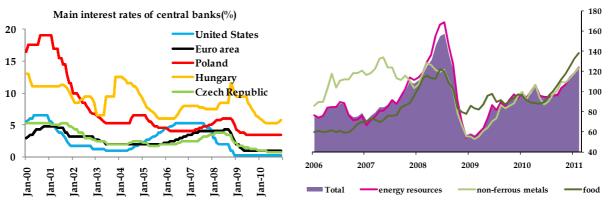
Figure 2.1 GDP growth in the global economy (left-hand graph) and in selected economies (right-hand graph).



Source: IMF, Reuters Ecowin, Eurostat data.

Central banks in major developed economies continued to pursue an expansionary monetary policy, quoting continued low inflationary pressure and high unemployment as a rationale for this course of action. In addition to keeping interest rates at historically low levels, central banks purchased financial assets, thus boosting liquidity supply in the financial markets. At the end of 2010, amidst concerns about sustainability of economic recovery, the central banks of the United States and Japan decided to continue with quantitative easing of monetary policy. At the same time, monetary authorities in many emerging economies tightened their monetary policy in response to rising inflation and growing macroeconomic imbalances.

Figure 2.2
Interest rates of selected central banks (left-hand graph) and indices of commodity prices in the global markets (right-hand graph).



Source: Reuters Ecowin, Eurostat, HWWI data.

Most developed countries continued to record large fiscal deficits, with a view to their reduction in the subsequent years. In those of the European economies which were characterised by very high fiscal imbalance, the authorities undertook measures to curb the government deficit. A significant fiscal imbalance in many developed countries was a major factor of uncertainty about the global economic outlook. In the face of high government deficit in some euro area countries, coupled with a fast growing public debt and hefty costs of providing capital to the banking sector of some euro area countries, there are mounting concerns of a possible insolvency of those countries, especially as the impaired competitiveness of their exports renders the prospects of those countries returning on the path of sustainable economic growth uncertain. These concerns have led to a significant rise in risk premiums on the yields of Treasury bonds of those countries. Moreover, they gave rise to a temporary escalation of the turmoil in the international financial markets. Particularly strong tensions were observed in 2010 Q2 following the Greek government's difficulties in obtaining funds in the financial markets. In response to these developments, the European Union and the International Monetary Fund initiated an aid programme for Greece. At the end of the year, a similar programme was launched for Ireland. In addition, the European Central Bank purchased securities of the euro area countries facing insolvency in order to alleviate the tensions in the European financial market.

After a considerable slump during the financial crisis, in 2010 the inflow of capital to emerging economies increased again. One of its driving forces was faster economic growth observed in those economies than in the developed countries, combined with - notwithstanding the debt crisis-related turmoil in the financial markets of some euro area countries – lower risk aversion amidst expansionary monetary policy pursued by major central banks. This was reflected in rising prices of assets, especially financial ones, and an appreciation pressure on currencies of many emerging economies. Some emerging countries undertook measures aimed at countering these trends, including currency interventions. Intensive inflow of capital to emerging economies reduced the scale of interest rate hikes by their central banks.

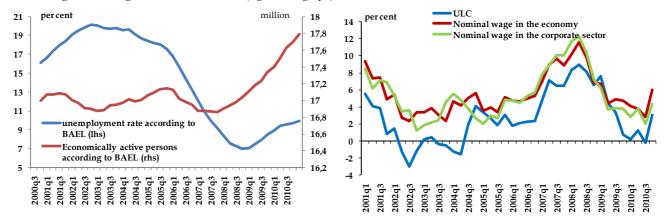
The recovery in the global economy, coupled with unfavourable weather conditions in some countries and ample liquidity supply in the global financial markets, all contributed to a rise in commodity prices, including prices of agricultural and energy commodities. The rise, particularly pronounced in the second half of 2010, translated into higher inflation in the world in the last months of the year.

With the recovery in the global economy, Poland's economic situation improved (Appendix 1). The rate of economic growth rose gradually, and stood at 3.8% in the whole of 2010 (as compared to 1.7% in 2009). After decrease in 2009, domestic demand picked up, benefiting from an increase in individual consumption and re-building of corporate inventories, considerably reduced during the global recession<sup>1</sup>. At the

<sup>&</sup>lt;sup>1</sup> In the second half of the year the rise in domestic demand was additionally boosted by one-off factors, such as: replacement purchases in the flooded areas of Poland, accelerated purchases ahead of the planned increases of most VAT rates as of 2011 and the abolishment of VAT discounts on purchases of cars with goods vehicle approval certificates as of 2011. The same factors added to imports, thus working towards a reduction in the contribution of net exports to GDP growth.

same time, despite good financial results and a steady - but modest - rise in production capacity utilisation, firms continued to restrain investment. The reluctance to increase investment may have resulted from heightened uncertainty about future demand. The decrease in housing investment of households also continued. On the other hand, public investment rose rapidly. The global economic recovery, including rising demand for German exports, was reflected in a significant rise in Polish exports, after it had dropped in 2009. As a result of the concurrent revival of Polish imports supported by the rising domestic demand, the balance of foreign trade deteriorated (Appendix 3).

Figure 2.3
Labour market variables: the number of the economically active and unemployment rate – in seasonally adjusted terms (left-hand graph) and annual growth of wages and unit labour costs (right-hand graph).



Source: GUS data, NBP calculations.

The revival in business activity in Poland was accompanied by a rise in labour demand and employment observed from 2010 Q2. At the same time, labour supply (i.e. the number of economically active persons) increased markedly in 2010. Since labour supply was rising faster than labour demand, unemployment rose, moderating wage growth. Yet, significant acceleration in wage growth was observed in the last quarter of 2010, driven, in part, by a sharp rise in wages in public administration ahead of their planned freezing in 2011. As labour productivity continued to rise at a relatively steady pace, the deceleration in wage growth until 2010 Q3 dampened growth in unit labour costs in this period.

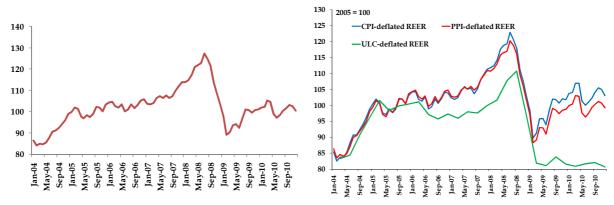
In 2010, further rise was recorded in the public sector deficit (from 7.1% of GDP in 2009 to 7.9% of GDP). This resulted primarily from a significant deterioration in the public expenditure to GDP ratio (from 44.5% of GDP to 45.7% of GDP). Public expenditure rose in particular in intermediate goods and public investment category, which was connected with increasing utilization of EU funds and expenses on combating the effects of flooding. The situation of the public finance sector was also adversely affected by the slump in direct tax revenue, resulting, in particular, from businesses accounting for the losses incurred in the previous years. Throughout the year, plans of adjustment activities were submitted, aimed at curbing the fiscal deficit in the subsequent years<sup>2</sup>. Some of these measures were provided for in the Budget Act of 2011 and other legal acts adopted in the last quarter of 2010.

Despite improvement in the economic situation, the value of bank loans extended to corporations decreased in 2010, partly in response to limited demand for corporate loans (Appendix 4). At the same time, there was a considerable slowdown in the expansion of consumer loans to households. Tightening of banks' lending policies, resulting from deteriorating quality of loan portfolio in this category of loans, as well as implementation of the so-called Recommendation T were among driving forces behind the slowdown. On the other hand, housing loans increase accelerated. After a marked slump in 2009, the share of foreign currency denominated loans in the total of newly granted loans grew slightly.

<sup>&</sup>lt;sup>2</sup> Finance Development and Consolidation Plan of January 2010, Convergence Programme Update of February and the Multi – year Plan for the Finances of the State dated August 2010.

Figure 2.4

Nominal effective exchange rate of the zloty (left-hand graph) and real effective exchange rate of the zloty (right-hand graph); (increase denotes appreciation)



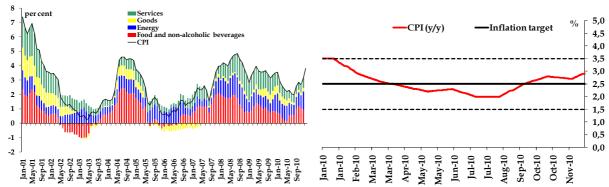
Source: Bank of International Settlements, NBP and European Commission data.

Changes in the global financial markets had a significant impact on the developments in the domestic financial market. In the first months of 2010, improved sentiment in the international markets and optimistic data on the Polish economy resulted in rising prices of Polish financial assets and an appreciation of the zloty. In 2010 Q2, general risk aversion rose in the aftermath of the fiscal crisis in Greece. As a result, yields on Polish Treasury bonds experienced a temporary hike, while the zloty weakened. Despite another period of zloty depreciation at the end of the year, triggered by growing tensions in the financial markets following the sovereign debt crisis in Ireland, in 2010 the zloty strengthened as compared to 2009. Similarly, in spite of some fluctuations, 2010 saw an overall increase in the prices of shares listed on the Polish stock market. The rise in asset prices and the appreciation of the Polish currency was supported by considerable inflows of portfolio capital to Poland. Particularly strong inflows were recorded in the Polish Treasury bond market in the first three quarters of 2010. These inflows were reflected in the rise in non-residents' share in the Polish Treasury bond market.

In 2010, the price index of consumer goods and services (CPI) fell by 0.9 percentage points on its 2009 figure, reaching 2.6% and thus running close to the NBP inflation target of 2.5%. In six months of 2010 the annual CPI growth was lower than or equal to the NBP target of 2.5%, while in the remaining six months it exceeded 2.5% (Appendix 2). In all months of 2010 CPI values remained within the tolerance band for deviations from the inflation target (2.5%+/-1 percentage point).

Between January and August 2010, a steady decrease was observed in the annual CPI (from 3.5% in January to 2.0% in August 2010), including core inflation indices, benefiting from low demand pressures and a modest growth of unit labour costs in the economy combined with a gradual appreciation of the zloty observed till the beginning of April. However, starting from September, the annual CPI index increased (it rose from 2.5% in September to 3.1% in December), which was fuelled mainly by climbing prices of agricultural and energy commodities in the global markets. At the same time, until November 2010, core inflation net of food and energy prices remained at a moderate level. Growing commodity prices in the global markets also triggered a gradual acceleration in the growth of producer prices (PPI), although, similarly to the CPI, in 2010 it decreased as compared to its 2009 figure (2.1% in 2010 versus 3.4% in 2009).

Figure 2.5
Impact of the major groups on the annual growth in the prices of goods and services (left-hand graph) and the annual growth in the prices of consumer goods and services versus the inflation target (right-hand graph).



Source: GUS data, NBP calculations.

### 2.1. Monetary policy in 2010

Similarly to the previous years, in its monetary policy decisions the Council considered, on each occasion, the outlook for inflation in the medium term. The decisions of the Council were 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 information on economic developments as well as the results of the forecasts developed by the NBP and other research centres.

In 2010, in view of the persisting limited inflationary and wage pressure in Poland and considerable uncertainty about the sustainability of the recovery in the global economy and acceleration of economic growth in Poland, as well as strong inflow of capital to emerging economies, the Council kept the NBP's interest rates unchanged, including the reference rate at the level of 3.5%. Nevertheless, taking into account that in 2010, underlying causes of liquidity problems in financial markets had expired, in October 2010, the Council decided to raise the reserve requirement ratio by 0.5 percentage points from 3.0% to 3.5%, thus bringing it back to the level of before the financial crisis<sup>3</sup>. Raising the reserve requirement ratio was also supposed to indicate the Council's readiness to respond to growing inflationary pressures.

\* \* \*

In 2010 Q1 the upswing in the global economy continued, which was supported by strongly expansionary macroeconomic policy pursued in many countries. The data released in this period showed a slow increase in the economic activity in the euro area, with a sharper economic upturn in the United Stated. Developed economies, however, saw a still unfavorable situation in the labor market and limited - despite some signs of improvement - bank lending. Yet, in the largest emerging economies, including China, acceleration of GDP growth was observed, accompanied by the increasing growth in bank lending and growing asset prices.

Major central banks continued to pursue an expansionary monetary policy keeping interest rates at historically low levels and continuing programs for quantitative easing of monetary policy. At the same time, monetary policy of banks of the Central and Eastern European countries remained accommodative (Czech Republic) and was eased further (Hungary, Romania).

During the analysed period, appreciation of the currencies of many emerging economies took place, including a marked appreciation of the zloty driven by a strong inflow of foreign capital to Poland. At the same time, the international financial markets saw increased level of uncertainty associated with the tense fiscal situation in some of euro area economies, in particular in Greece.

<sup>&</sup>lt;sup>3</sup>This decision applied to obligatory reserve requirement in force since 31 December 2010.

In Poland, GDP figures signaled a recovery in the economic activity in 2009 Q4, although growth in domestic demand remained low. Individual consumption growth continued at a low pace, and companies curbed their investment. The number of the employed in the economy continued on a downward trend, which, combined with increased workforce led to further unemployment growth. This was conducive to reducing wage pressure. Yet, stabilization of employment in the corporate sector in early 2010 signaled a slowdown of unfavorable trends in the labor market. Growth in bank lending to non-financial sector, in particular to corporate sector, remained at a low level.

In the period January-March 2010, the annual CPI inflation, in line with the expectations of the Council, decreased markedly from 3.5% to 2.6%, and thus to the level close to the NBP inflation target of 2.5%. Also, core inflation declined. Low demand pressure, moderate growth in labor costs, considerable appreciation of the zloty, and the statistical base effects were factors conducive to curbing inflation. At the same time, the Council emphasized that the decline in inflation in 2010 may be limited by growing commodity prices in the global markets and rising administered prices.

At its meetings in the period January - March 2010, the Council assessed the probability of inflation in the medium term, running below or above the target to be balanced. At the beginning of the year, the Council emphasized that the improvement in global economic situation and the previously observed easing of monetary policy supported the economy's return to the potential growth path. An important source of uncertainty about future global economic growth and inflation, and, in consequence, also about domestic monetary policy, were the effects of the up-to-date stance as well as anticipated changes in expansionary macroeconomic policy abroad. In March, the Council assessed that moderate inflationary pressures in the monetary policy transmission horizon and the uncertainty about the outlook for economic growth in Poland and abroad, coupled with the hitherto observed appreciation of the zloty, justified keeping the NBP's interest rates unchanged. As a result, in 2010 Q1, the Council decided to leave the NBP's interest rates unchanged, including the reference rate at 3.5%.

The first months of 2010 were marked by strong foreign capital inflow to emerging countries, including Poland, which led to a significant appreciation of the zloty exchange rate. On 9 April 2010, the National Bank of Poland purchased in a market a certain amount of foreign currency. In the information from the meeting held on 27-28 April 2010, the Council confirmed that the transaction had been carried out in accordance with the *Monetary Policy Guidelines for 2010*.

In 2010 Q2, further signs of recovery in the global economy were observed, although differences remained significant as regards the scale of improvement in the economic activity across regions. In the United States, there were signs of improvement in the labor market situation. Yet, withdrawal of fiscal stimulus packages (in particular aimed to boost activity in the property market and consumer demand), coincided with the renewed weakening in economic recovery. In the euro area GDP increased slightly in 2011 Q1. Its rise was restrained by decline in consumption and investment. Unfavorable situation persisted in the labor market. The uncertainty about short-term outlook for economic growth in this region was increased by intensifying crisis in the public finance sector in Greece, and raising concerns about fiscal situation of some other euro area economies. At the same time, emerging economies continued to witness rapid economic growth.

Monetary policy in major developed economies remained expansionary. In the analysed period the Fed put an end to the emergency liquidity programs implemented in the years 2007-2009 to support credit markets, while maintaining the previously announced program of quantitative easing (involving the purchase of securities). In view of the tensions in the European financial markets the period during which the ECB maintained its interest rates at historically low levels was extended. Since May 2010, the ECB made sterilized purchases, in the secondary market, of government bonds of countries facing a debt crisis risk<sup>4</sup>. Meanwhile, some developing countries, characterized by strong economic growth, embarked on a gradual tightening of macroeconomic policy. At the same time, central banks in the countries of Central and Eastern Europe continued to cut their interest rates (the Czech Republic, Hungary, Romania).

<sup>&</sup>lt;sup>4</sup> EBC also announced long-term open market operations providing banks with liquidity in the euro.

Due to uncertainty related to the fiscal crisis in Greece, volatility of asset prices in international financial markets, particularly in the commodity markets, increased. There was a marked depreciation of the euro against the U.S. dollar. The increase in risk aversion contributed to the weakening of currencies of emerging economies, including the zloty. The scale of the turmoil in the financial markets declined in June. The fall in the prices of financial assets deemed more risky, slowed down. This was driven by measures undertaken by international institutions: the aid program of the EU and the IMF for Greece, creation of the European Financial Stability Mechanism (EFSM) and the European Financial Stability Facility (EFSF), as well as the EBC's purchase of bonds of countries threatened by the debt crisis.

In Poland, there were further signs of a gradually improving economic situation. Growth was recorded, in the first place, in industrial output. There was also a slight increase in employment in the corporate sector, yet, in 2010 Q1 the number of the employed in the economy as a whole continued to decline. Persisting high levels of unemployment curbed growth in wages. Wage increases in corporate sector remained moderate. There was a further decline in wage growth in the economy. At the same time, there were no signs of recovery in investment of enterprises. The decline in corporate investment was driven by a relatively low, although gradually increasing, production capacity utilization and uncertainty about the outlook for demand. Low investment activity and a good financial situation of enterprises resulted in low demand for bank loans, despite the gradual easing of loan granting criteria. At the same time, the growth rate of household loans stabilized at moderate levels.

During the analysed period, in line with the expectations of the Council, CPI inflation continued to decline, to run below the inflation target starting from April. The drop in CPI inflation over this period was driven by a decline in the annual growth in food prices and core inflation excluding food and energy prices. Low demand pressure, the previously observed appreciation of the zloty exchange rate and moderate growth in labor costs were conducive to the lowering of the annual inflation rate. Base effects were also factors contributing to its decline.

Given these conditions, in 2011 Q2 the Council assessed that low inflationary pressures in the monetary policy horizon and the uncertainty about the impact of the external environment on the Polish economy, including the outlook for economic growth in Poland and the developments in the zloty exchange rate , justified to keep the NBP's interest rates unchanged, including the reference rate at 3.5%. In April and May - as in the preceding months - the Council assessed the probability of inflation in the medium term, running below or above the inflation target, to be balanced. In June, the Council emphasized, however, that it held a discussion on the factors which may strengthen inflationary pressure in the medium term.

In April 2010, the Council endorsed the motion of the Minister of Finance for an extension of Poland's access to a flexible credit line of the International Monetary Fund. In July, the International Monetary Fund granted Poland, once again, access to a flexible credit line of USD 20.4 billion<sup>5</sup>. In accordance with the declarations of the authorities there was no intention to make use of these funds, yet the possibility to resort to this facility was treated as a security against possible negative effects of a renewed increase in uncertainty in the financial markets.

In August and September the data coming from the world economy pointed to a slowdown in 2010 Q2 in the growth observed in some of the largest economies and a possible further weakening of the global recovery in the second half of the year. This was, in particular, the case of those developed countries in which growth was curbed due to cuts in the expenditure of households and businesses. The recovery was also restrained by the need for restructuring of assets of financial institutions. The consequences of high fiscal imbalance in a significant part of these countries, and its announced reduction, as well as monetary expansion, including the unconventional measures undertaken by major central banks, were an additional source of uncertainty about the future economic situation. At the same time, positive signs were coming from Germany, Poland's main trading partner, where in 2010 Q2 the level of economic ac-

<sup>&</sup>lt;sup>5</sup> Flexible Credit Line (FCL) is a facility of the IMF, to which access is given only to countries with sound economic fundamentals that have historically pursued a responsible macroeconomic policy and in the case of which there is a will and high probability of such policy being continued in the future. Poland first obtained access to the FCL in May 2009.

tivity picked up markedly. Yet, the risk of weakening demand in the global markets was an uncertainty factor for Germany's recovery to continue in the subsequent quarters.

Weakening economic situation in the U.S. economy prompted the Fed to announce its intention to increase the scale of the securities purchase program while keeping up the announced intention to keep interest rates at historically low levels for a longer period. Also in the euro area, the period during which the ECB's interest rates were expected to be kept at historically low levels was extended. At the same time, the largest developing economies continued gradual tightening of their macroeconomic policy. In the countries of the Central and Eastern Europe interest rates remained unchanged.

During this period, commodity prices in the global markets went up significantly. At the same time, an increase was noted in capital inflows to emerging economies, leading to an appreciation of currencies of those countries, including the strengthening of the zloty.

Data on GDP in Poland in Q2 point to a certain acceleration in consumer demand, coupled with persistently shrinking investment. Monthly data for Q3 signaled stabilization of economic growth. Further rapid growth was noted in industrial output and construction and assembly production and retail sales continued on an upward trend. Also production capacity utilization improved further. It was assessed that favourable data on retail sales in Q3 could be partly due to the temporary increase in demand associated with the replacement of durable goods in the flood-affected areas, increased purchases of cars driven by the announced abolition, scheduled for the end of 2010, of tax deductions for the purchase of cars with type approval for goods vehicle, and reallocation of some of expenditure due to increases in VAT rates at the beginning of 2011. Despite growth in employment, unemployment remained at a relatively high level. There were no signs of rising wage pressure. Until Q3, wage growth in the economy continued on a downward trend. At the same time, in July consumer confidence indicators began to deteriorate. Lending to businesses remained limited, which was largely driven by low demand for credit. Growth rate of housing loans to households picked up gradually. The annual growth rate of these loans markedly exceeded the growth rate of disposable income, achievable without the risk of rising inflation.

During the analysed period, the annual CPI inflation remained below the NBP's inflation target. At the same time, all core inflation measure declined. The Council pointed out, however, that although inflation was running well below the inflation target, the rise in food and energy prices, accelerating growth in PPI prices and announced change in VAT rates in 2011, boosting inflation expectations of individuals in August, may translate into a gradual rise in inflation in the coming months.

At its meetings in August-September, the Council decided that the moderate pace of economic growth and the accompanying limited wage and inflationary pressure, coupled with the risk of weakening global economic growth in the coming quarters, justified the maintenance of the current restrictive stance of monetary policy. Moreover, the Council assessed that increases in the NBP's interest rates could amplify the risk of a too rapid appreciation of the zloty. Given the above considerations, the Council decided to keep the NBP's interest rates unchanged, including the reference rate at 3.5%. At the same time, the Council emphasized that it would continue to examine the factors that might strengthen the inflationary pressure .

In 2010 Q4, economic activity in major developed countries was still constrained by high levels of unemployment and the ongoing adjustments in the balance sheets of economic agents. At the same time, further improvement was observed in the economic situation in Germany, where strong external demand had led to a gradual recovery in domestic demand. During this period, growth slowed down slightly in the largest emerging economies. This was driven by the tightening of economic policy in some of those economies, aimed to reduce the risk of growing macroeconomic imbalances. High degree of fiscal imbalances in many developed economies, as well as the effects of monetary expansion in view of unconventional measures undertaken by major central banks, remain an important source of uncertainty about future growth.

Major central banks continued their expansionary monetary policy. In November 2010, the Fed announced its decision to expand quantitative easing of monetary policy and the ECB increased in November and December the scale of government bonds purchases due to the escalation of tensions in the Euro-

pean financial markets. In Central and Eastern Europe, most central banks left interest rates unchanged (Czech Republic, Romania). Only Hungary, in November 2010, began tightening monetary policy.

Expectations of the increase in monetary expansion in the United States encouraged an improvement in the sentiment in the financial markets at the beginning of Q4. It contributed to an appreciation of exchange rates of emerging market currencies, including the zloty. In turn, in November, the intensification of budgetary problems in some euro area countries, notably in Ireland, were conducive to increased uncertainty in the financial markets, and - consequently - depreciation of the zloty at the end of 2010. Throughout the whole analysed period, the prices of oil and other commodities in the global markets increased.

Data on Polish economy pointed to an increase in economic growth in the second half of 2010 as compared with the first half of the year. This was driven by accelerating consumption growth, supported by growing employment and, probably, the temporary factors discussed above. Production capacity utilization was growing steadily and good financial and liquidity situation of enterprises continued. Rapid growth was recorded in industrial output; also construction and assembly production continued on an upward trend. At the same time, despite continued rise in employment, unemployment rate was growing gradually. Wage growth in the economy in Q3 followed a downward trend, which led to a decline in unit labour costs in the economy in Q3. Lending to enterprises remained limited, while the growth in housing loans to households was stable and relatively high.

During the analysed period, CPI inflation increased above the inflation target. The rise in CPI inflation was mainly driven by rising growth in food and energy prices connected with growing commodity prices in the world markets. Majority of core inflation measures, on the other hand, remained at a moderate level, i.e. below 2.5%.

At its meetings in 2010 Q4, the Council decided that limited inflationary and wage pressure in the Polish economy, uncertainty about the recovery in the global economy, and in October and November additionally the persistent risk of increased inflow of capital to emerging economies, including to Poland, amidst the extended period of expansionary monetary policy of major central banks, justified keeping interest rates unchanged till the end of 2010. As a result, the Council decided to keep the NBP's interest rates unchanged, including the reference rate at 3.5%. Nevertheless, in October-December, the Council emphasized that it would continue to analyze the signs of a possible rise in inflationary pressures.

In October 2010, the Council decided to increase the reserve requirement ratio by 0.5 percentage points from 3.0% to 3.5%, i.e. to the level observed before the financial crisis. The Council emphasised that the reserve requirement ratio had been lowered as part of anti-crisis measures during the period of strong liquidity tensions in the financial markets and as these tensions had come to an end it was justified to increase this ratio to its pre-crisis levels. The decision to raise the reserve requirement ratio was also a sign of the Council's readiness to respond to growing inflationary pressures.

\* \* \*

An important element of conducting monetary policy based on inflation targeting was, as in the previous years, communication with the public, involving the Council's presentation of its assessment of the current condition of the economy and future path of economic processes. The most important instruments of communication in 2010 included the following cyclical publications: *Inflation Reports, Information from the meeting of the Monetary Policy Council* (with accompanying press conferences held after the Council's meetings), *Minutes of the Monetary Policy Council decision-making meetings*<sup>6</sup> (Appendix 5), as well as the annually published: *Report on Monetary Policy Implementation in 2009* and *Monetary Policy Guidelines for 2011*. In the *Monetary Policy Guidelines for 2011* the Council confirmed the main elements of the hitherto pursued monetary policy strategy of the NBP, introducing some amendments thereto.

<sup>&</sup>lt;sup>6</sup>Minutes of the Monetary Policy Council decision-making meeting (Appendix 5) present a more detailed discussion of the problems and arguments which had a significant impact on the decisions taken by the Council in 2010.

## Chapter 3.

# **Monetary Policy Instruments in 2010**

In 2010, the National Bank of Poland pursued the monetary policy by influencing the level of inflation through the interest rate channel. The Monetary Policy Council set the NBP's official interest rates which determined the yield on monetary policy instruments. In order to steer short-term market rates, the NBP applied the following instruments: open market operations, lending and deposit operation (standing facilities) and reserve requirement. By influencing the market short-term rates, the Monetary Policy Council endeavoured to achieve such a level of market interest rates as would be consistent with the adopted inflation target.

Throughout 2010, according to gradual improvement of the conditions in the financial markets, increase of liquidity surplus in the banking sector and disappearing banks' demand for supplementary central bank liquidity providing operations, the NBP gradually limited the use of the instruments introduced in October 2008 under the so-called Confidence Package, i.e. repo operations as well as foreign exchange swaps.

In April 2010, the NBP carried out - for the first time since 1998 - a single intervention in the foreign currency market.

## 3.1. Liquidity in the banking sector in 2010

In 2010, the NBP pursued the monetary policy in the situation of constantly increasing liquidity surplus <sup>7</sup> in the banking sector.

The average level of banking sector liquidity surplus amounted to PLN 70,907 million in 2010<sup>8</sup>. Compared with 2009, such level increased by PLN 46,967 million – i.e. 196%. The rise in the excess liquidity exceeded by PLN 37.5 billion the level envisaged in the *Monetary Policy Guidelines for 2010*.

The rise in excess banking sector liquidity in 2010 resulted mainly from factors independent from the NBP (the so-called autonomous factors). Among these factors, the greatest impact had the purchases of foreign currencies by the NBP mainly from EU funds, and by an exchange of foreign-currency funds into zloty performed by the Ministry of Finance at the NBP. A positive balance of currency purchases by the NBP (after taking into account sales of currencies by the NBP) contributed to generating excess liquidity equivalent to an average of PLN 40,330 million. The excess liquidity was further boosted by a payment of

<sup>&</sup>lt;sup>7</sup> Liquidity surplus of the banking sector means funds retained by banks in excess of an average balance on their current accounts with the NBP, as determined by the reserve requirement ratio in the a maintenance period. Liquidity surplus is reflected in the balance of basic operations (the NBP bills issues), fine-tuning operations (repo operations and the NBP bills issues), foreign exchange swaps and standing facilities (standing deposit facility and lombard credit).

<sup>&</sup>lt;sup>8</sup> The data on the overall excess liquidity as well as the respective monetary policy operations (discussed further in this chapter) are averages for the required reserve maintenance period.

PLN 3 957 from the NBP profit to the State Budget and a payment of discounts on NBP bills in an average amount of PLN 2,610 million.

On the other hand, the greatest effect on liquidity limitation in 2010 had an increase in the volume of the currency in circulation, by an average of PLN 3,792 million, as well as a rise in the level of the required reserves, by an average of PLN 1,994 million.

The amount of the excess liquidity in the banking sector was monitored by the Monetary Policy Council on a day-to-day basis.

#### 3.2. Monetary policy instruments in 2010

In 2010, the set of monetary policy instruments applied by the NBP did not differ substantially from the one used in 2009. It included instruments which, on the one hand, addressed potential turmoil in the domestic financial markets - should the crisis in the global financial markets aggravate and affect the developments in the domestic market. On the other hand, the instruments anticipated the persisting surplus of liquidity in the banking sector.

As the situation in the domestic banking sector improved in the course of 2010, the NBP gradually phased out its non-standard operations performed between 2008 and 2010. This was done in response to banks' diminishing demand for zloty and foreign currency liquidity that was offer by the NBP through these operations.

#### Interest rate

In 2010, the principal NBP policy rate was the reference rate. Changes in the level of this rate set the direction of the monetary policy pursued. The reference rate determined the remuneration of the main open market operations, while, at the same time, affecting the level of short-term interest rates on the unsecured deposit interbank market.

The deposit rate and and the interest rate on a lombard credit determined the corridor for overnight interest rate fluctuations in the interbank market. The rediscount rate, in turn, indirectly determined the interest paid on the required reserve holdings.

In 2010, the Council maintained the NBP interest rates at the level initially set on 25 June 2009. The reference rate amounted to 3.50%, the interest rate on a lombard credit - to 5.00%, the deposit rate - to 2.00% and the rediscount rate - to 3.75%.

Simultaneously, following a decision which introduced, as of 1 January 2010, a new instrument of monetary policy - the bill discount credit, the Council of the second term introduced the discount rate, setting it at 4.00% This rate remained unchanged throughout 2010.

In approving the *Monetary Policy Guidelines for 2011*, the Council decided to discontinue the NBP's bill discount facility. Consequently, as of 1 January 2011, the Council no longer sets the discount rate.<sup>9</sup>

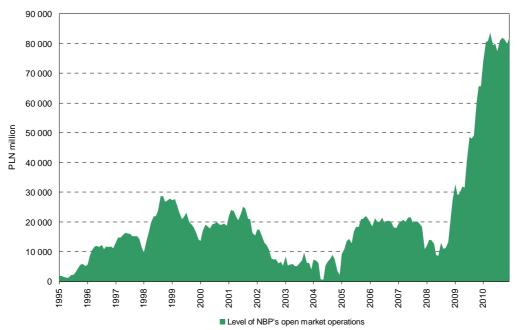
#### Open market operations

In 2010, the NBP strove to affect liquidity conditions in the banking sector through open market operations (particularly main ones) in a manner which would enable the  $POLONIA^{10}$  rate to run close to the NBP's reference rate.  $^{11}$ 

<sup>&</sup>lt;sup>9</sup> Pursuant to Resolution 13/2010 of the Monetary Policy Council of 22 December 2010 amending the Resolution on the reference rate, interest rate on refinancing loans and interest rate on term deposits as well as rediscount and bill discount interest rate at the National Bank of Poland.

Main open market operations were carried out on a regular basis, once a week, involving the issue of the NBP bills with a 7-day maturity. In 2010, the average volume of bills issued within main open market operations amounted to PLN 74,920 million and exceeded the 2009 level by PLN 43,047 million. The volume of bills issued in 2010 was increased in response to rising liquidity surplus in the banking sector.

Figure 3.1 Average monthly balance of open market operations 1995-2010



Source: NBP data.

In 2010, the turmoil in the financial markets persisted, which influenced the effectiveness of open market operations conducted by the NBP. Due to these conditions, the Bank's capacity to maintain the POLONIA rate close to the NBP's reference rate was somewhat weakened.

This was manifested by the occurrence of the so-called underbidding<sup>12</sup>. The underbidding resulted from commercial banks' increased vigilance in managing their own liquidity positions, reflected in their propensity to do it on an overnight basis. As a result, banks were reluctant to allocate all their surplus funds in the NBP bills with a longer (7-day) maturity, and chose to maintain a liquidity buffers.

Such bank's behaviour can also be explained by the fact that effective redistribution of liquid funds through the interbank market in 2010 was still prevented, as, among other things, banks continued to maintain relatively low lending ceilings, mutually lowered during the most acute phase of the crisis.

Another reason behind the underbidding was the increase in surplus funds at the disposal of the Ministry of Finance. These funds were mostly deposited with commercial banks, in large part as overnight deposits. Banks' uncertainty about the date of those deposits and their maturity increased their reluctance to participate in the operations carried out by the NBP.

Despite the above factors, a gradual improvement in the banking sector's liquidity situation could be observed especially in the first half of 2010. This was reflected in banks' falling propensity to maintain excess liquidity (with an overnight term), a lower scale of the underbidding during the auctions of the main open market operations and a substantial decline in banks' use of the NBP's deposit facility. In the

 $<sup>^{10}</sup>$  POLONIA (Polish Overnight Index Average) – average overnight rate weighted with the value of transactions on the unsecured interbank deposit market. The NBP publishes the levels of this rate on the Reuters information site (NBPS) every day at 5.00 p. m.

<sup>&</sup>lt;sup>11</sup>Monetary Policy Guidelines for 2010.

<sup>&</sup>lt;sup>12</sup> The situation where during a monetary policy operation auction the demand from banks is lower than the supply offered by the central bank.

first half of 2010, the deviation of the POLONIA rate from the NBP's reference rate narrowed steadily and the volatility of the rate was gradually reduced. Significant falls in the POLONIA rate were only observed towards the end of the respective required reserve maintenance periods. This reflected banks' cautiousness regarding their involvement in the last main market operation during a specific maintenance period.

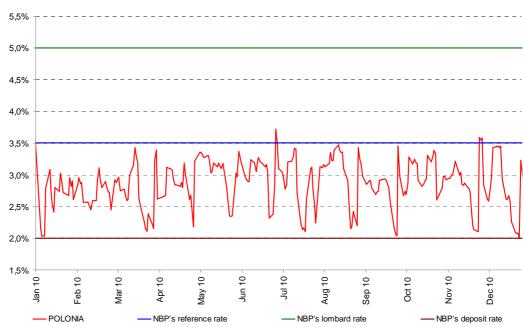
However, positive trends observed in the first half of 2010 lost momentum in the subsequent months. From July, banks manifested growing propensity to hold excess liquidity on accounts with the NBP in some of the maintenance periods. This was a consequence of rising risk aversion in the global financial markets following concerns about a fiscal situation in selected euro area countries, and was reflected in a re-emergence of frequent the underbidding and its increased scale.

Growing gap between the POLONIA rate and the NBP's reference rate gave rise to two short-term fine-tuning operations designed to absorb liquidity, which were performed by the NBP in December 2010 in the form of the NBP bills issue. The first of these operations took place on 8 December, when 2-day bills were offered; the other one was conducted on 21 December, with a 3-day maturity.

Average deviation of the POLONIA rate from the NBP's reference rate in 2010 stood at 69 basis points, <sup>13</sup> i.e. 20 basis points less than in 2009. However, average deviation remained elevated against its pre-crisis level, due to the factors described above, which maintained increased banks' propensity to hold the excess liquidity.

At the same time, volatility of the POLONIA rate, as measured by a standard deviation, decreased to 38 basis points, from 51 basis points in 2009.

Similar trends in overnight rates as well as commercial banks' approach to liquidity management were observed in the interbank markets in the euro area and in the Central and Eastern Europe, such as the Czech Republic or Hungary.



**Figure 3.2** The NBP interest rates and POLONIA rate in 2010

Source: NBP data.

The remaining fine-tuning operations were performed with a view to supplying the banking sector with liquidity, in line with the objectives set forth in the Confidence Package. The operations were collatera-

<sup>13</sup> Average deviation of POLONIA rate was calculated according to the uniform base of 365 days in the year.

lised with the NBP-approved securities: Treasury bills, NBP bills, Treasury bonds, utility bonds, bonds issued by BGK and the EIB as well as mortgage bonds.

As the situation in the domestic financial markets improved, excess liquidity in the banking sector expanded and banks' interest in repo operations faded, the NBP gradually discontinued these operations in the course of 2010. From February 2010, started announcing the volume of supply. From April 2010, the Bank discontinued its 6-month repo operations. Starting from October 2010, by discontinuing its 3-month repo operations, the Bank finally abandoned such operations.

An average volume of repo operations in 2010 amounted to PLN 5,097 million and thus was 56% lower than in 2009, when it stood at PLN 11,456 million.

#### Reserve requirement

The requirement to maintain a certain amount of reserves on accounts with the NBP applied to banks, branches of credit institutions and branches of foreign banks operating in Poland. Required reserves were maintained in an averaged system, which means that banks were obliged to hold the average balance of funds on accounts with the NBP at a level not lower than the amount of reserve requirement.

Required reserves were calculated on the basis of banks' collected deposits and funds received on the sale of securities. Excluded from the reserve calculation were funds received from another domestic bank, acquired from abroad for the period of at least two years and deposited in credit and savings accounts of building societies and in individual pension funds. Required reserves were calculated and maintained in the Polish zloty. Banks reduced the amount of the calculated reserve requirement by an equivalent of EUR 500 thousand.

Until 30 December 2010, the reserve requirement ratio amounted to 3.0%. As of 31 December 2010, the MPC raised the basic reserve requirement ratio to 3.5% (MPC resolution 9/2010 of 27 October 2010). The decision restored the reserve requirement ratio to the level effective until 29 June 2009, thus indicating the Council's readiness to respond to mounting inflationary pressures.

The reserve requirement ratio on funds received in respect of the sale of securities under repurchase agreements did not change during 2010 and stood at 0.0%.

The amount of required reserves as at 31 December 2010 (after the ratio had been put up to 3.5%) amounted to PLN 25,948 million, showing an increase of PLN 3,922 million on the amount of reserves in the previous maintenance period (which had ended on 30 December 2010, and during which a ratio of 3.0% had been effective). At the same time, it exceeded the corresponding amount as at 31 December 2009 by PLN 5,799 (an increase of 28.8%).

The remuneration on the balances held by banks on accounts with the NBP was an equivalent to 0.9% of the NBP's rediscount rate. Thus, the remuneration of the required reserve holdings in 2010 amounted to 3.375%.

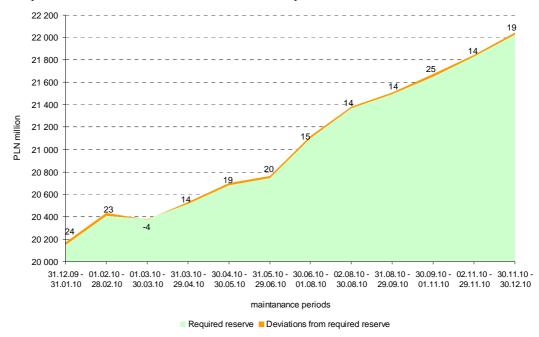


Figure 3.3 Changes in the required reserves level and deviations from the reserve requirement in 2010

Source: NBP data.

In 2010, the mean deviation of the average balances on banks' accounts with the NBP from the required level of reserves amounted to PLN 16 million (i.e. 0.08%) and was significantly lower than the mean deviation in 2009, which amounted to PLN 27 million. In all reserve maintenance periods except for March, average balances held by banks at the NBP remained slightly in excess of the required reserve level, which ranged from PLN 14 million (0.07%) in April to PLN 25 million (0.11%) in October.

In 2010, 7 instances of infringement of the reserve requirement by banks were noted, out of which 6 concerned commercial banks, while one concerned a cooperative bank. In 2009 there had been no such infringements whatsoever; yet, such a situation occurred only once in the entire period since the introduction of the reserve requirement in 1989.

#### Standing facilities

Standing facilities (i.e. lombard credit and overnight deposit) were used to provide short-term liquidity to the banking sector or allowed banks to deposit their excess holdings for overnight periods at the NBP. These operations, conducted at the initiative of commercial banks, served also as instruments to stabilise the level of liquidity in the interbank market and the scale of overnight rate fluctuations. With the use of these instruments, the central bank was able to limit excessive fluctuations of interest rates in the interbank market. The lombard rate, determining the maximum cost of funds obtainable at the NBP, set a ceiling on fluctuations of interest rates in the interbank market, while the deposit rate constituted the floor.

In 2010 banks had little recourse to the lombard credit collateralized with securities in order to replenish their current liquidity on current accounts with the NBP. The total amount of the credit used in 2010 was PLN 182.4 million against PLN 5.0 billion in 2009. The average daily use of the lombard credit amounted to PLN 0.5 million as compared to PLN 13.8 million in 2009. All lombard credits extended in 2010 were repaid on time.

In 2010 banks placed, with the NBP, overnight deposits in the total amount of PLN 378.2 billion, 58% down of the previous year's figure. The total daily amount of the deposit ranged between PLN 0.2 mil-

lion and PLN 20.1 billion. An average daily level of overnight deposits amounted to PLN 1,036.1 million as compared to PLN 2,460.6 million in 2009. The highest amounts were deposited by banks in the last days of the required reserve maintenance periods.

The list of collateral of the lombard credit accepted by the NBP, did not change in 2010. This meant that the central bank accepted a wider range of assets than before the onset of the financial crisis. Leaving an extended list of collaterals in place brought the national monetary policy operating system closer to the one used by major central banks (including the European Central Bank) and the central banks of the Central and Eastern European countries (e.g. the Czech National Bank, National Bank of Hungary). Acceptance of additional assets by the NBP can also provide incentives for the development of specific segments of the financial market.

The intraday credit facility in the PLN served as an instrument facilitating liquidity management during the business day, ensuring, at the same time, liquidity of interbank settlements at the NBP. It was a non-interest bearing credit, collateralized with debt securities, incurred and repaid during the same business day. In 2010 the daily injection of liquidity to banks using the intraday credit ranged between PLN 14.3 billion and PLN 28.0 billion. The use of the intraday credit facility rose by 29.4 % as compared to 2009.

In 2010 the NBP extended the list of zloty denominated securities acceptable as collateral for the intraday credit facility to include securities deposited with the National Depository of Securities, other than Treasury debt securities. Therefore, the list of acceptable collaterals for the intraday credit facility was adjusted to the list applicable to the lombard credit.

The intraday credit in the euro served to ensure current liquidity in the SORBNET-EURO and TARGET2-NBP systems. It was collateralized with Treasury bonds, accepted by the ECB in advance. It was incurred and repaid during the same business day. In 2010 the daily injection of euro-denominated operational liquidity to banks ranged between EUR 2.3 million and EUR 3.5 million. The use of the intraday credit in the euro rose by 67.9% in relation to 2009.

In 2010, the NBP also offered to banks the possibility to obtain funds under bill discount credit, which was envisaged to finance new loans granted to businesses by banks. No bank applied to the NBP for this facility. While adopting the Monetary Policy Guidelines for 2011, the Council decided that the NBP should cease to offer such facility.

#### Foreign exchange swaps

By introducing foreign exchange swaps in October 2008 the Monetary Policy Council of the second term helped to achieve the objectives set forth in the Confidence Package. This operation resulted from a sudden deterioration of the situation in the domestic financial markets. By means of foreign exchange swap transactions, 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.

Due to absence of banks' demand for foreign currency liquidity offered by the NBP, observed since October 2009, the central bank gradually withdrew from foreign exchange swap transactions. In January 2010 it discontinued swaps in the CHF/PLN currency pair. Starting from April 2010 it also ceased to offer this type of transaction in the USD/PLN and EUR/PLN currency pairs.

#### Foreign exchange interventions

On 9 April 2010, the National Bank of Poland purchased foreign currency in the market. This transaction was conducted in line with the *Monetary Policy Guidelines for 2010*.

## Appendix 1

# GDP and aggregate demand

In 2010, real GDP rose significantly (by 3.8% versus 1.7% in the preceding year), as domestic demand expanded by 4.3% (compared to a fall of 1% in the preceding year) <sup>14</sup>. Stronger growth of domestic demand was supported by a rise, on the one hand, in total consumption (from 2% in 2009 to 3.4% in 2010) and in gross capital formation on the other (by 8.2% as opposed to a fall of11.4% in 2009). Stronger growth in consumption resulted, in turn, from increasing individual consumption (from 2.1% in 2009 to 3.2% in 2010) and public consumption (from 2.0% in 2009 to 4.0% in 2010). Accelerated capital formation in 2010 was driven by inventory rebuild (contribution from the change in inventories stood at 1.9 percentage points in 2010, versus -2.5 percentage points in 2009), while investment once again decreased slightly (by 1.2% as compared to a fall of 1.1% in 2009). Imports in 2010 rose somewhat faster than exports, rendering a negative contribution from net exports to the GDP growth (-0.5 percentage point as opposed to 2.8 percentage points in 2009).

Gross value added grew at 3.4% in 2010, as compared to 1.8% a year before<sup>15</sup>. This stronger growth in 2009 resulted from a sharp rise in value added in industry (by 9.2% versus a fall of 0.3% in 2009) and a slightly accelerated growth of value added in market services (1.5% in 2010 as compared to 0.9% in 2009). However, value added in construction rose less robustly than in the preceding year (dropping from 9.9% in 2009 to 3.8% in 2010).

Individual consumption expanded by 3.2%, as compared to 2.1% a year before. Rising consumer demand was fuelled by a relatively high growth in household disposable income (of approx. 4% in constant prices). Households' financial savings rate decreased from 3.8% in 2009 to 3.1% in  $2010^{16}$ .

In 2010, gross fixed capital formation contracted by 1.2% y/y as compared to a fall of 1.1% y/y in the preceding year. One of the contributing factors was weaker investment in the corporate sector which resulted from slowdown in economic growth following crises on international financial markets and global recession. Enterprises were curbing investment in spite of good financial results in 2010. This coincided with a slump in housing investment by households. However, weaker investment in the economy was partially offset by an increased investment activity of the public sector.

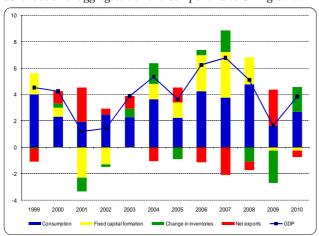
Following a fall in 2009, external trade rebounded strongly in 2010. Both Polish imports and exports rose significantly. However, with imports rising slightly faster than exports, the contribution of net exports to the GDP growth proved negative and amounted to -0.5 percentage point.

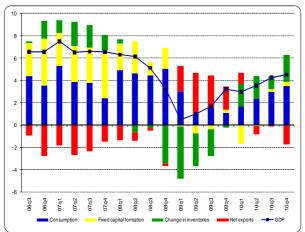
<sup>14</sup> All the numerical data on percentage changes in economic variables quoted in the text of this Appendix represent annual growth rates.

<sup>&</sup>lt;sup>15</sup> Gross Domestic Product equals gross value added increased by taxes on products (including import duties) and reduced by product subsidies

<sup>&</sup>lt;sup>16</sup> Households' financial savings rate is a relation of net liabilities to disposable income.

Figure Z.1. 1 Contribution of aggregate demand components to GDP growth.





Source: NBP calculations based on GUS data.

**Table Z.1.1** GDP and domestic demand 2002-2010

	2002	2003	2004	2005	2006	2007	2008	2009	2010
	Growth rate of GDP and its components at constant prices (%)								
GDP	1.4	3.9	5.3	3.6	6.2	6.8	5.1	1.7	3.8
Domestic demand	1.0	2.8	6.2	2.5	7.3	8.7	5.6	-1.0	4.3
Consumption	3.0	2.7	4.3	2.7	5.2	4.6	6.1	2.0	3.4
Individual consumption	3.4	2.1	4.7	2.1	5.0	4.9	5.7	2.1	3.2
Capital formation	-7.2	3.3	14.7	1.4	16.1	24.3	4.0	-11.4	8.2
Gross fixed capital formation	-6.3	-0.1	6.4	6.5	14.9	17.6	9.6	-1.1	-1.2
Exports	4.8	14.2	14.0	8.0	14.6	9.1	7.1	-6.8	10.1
Imports	2.8	9.6	15.8	4.7	17.3	13.7	8.0	-12.4	11.5
Contribution of net exports to GDP growth (percentage points)	0.5	1.0	-1.0	1.1	-1.1	-2.1	-0.6	2.8	-0.5
	Structure of GDP at current prices (%)								
GDP	100.0   100.0   100.0   100.0   100.0   100.0   10						100.0	100.0	
Domestic demand	103.5	102.7	102.4	100.7	101.8	102.9	104.0	99.9	100.8
Consumption	84.8	83.9	82.3	81.5	80.8	78.4	80.1	79.5	80.0
Individual consumption	65.9	64.8	63.7	62.5	61.6	59.6	60.7	60.2	60.5
Capital formation	18.6	18.7	20.1	19.3	21.1	24.4	23.9	20.4	20.7
Gross fixed capital formation	18.7	18.2	18.1	18.2	19.7	21.6	22.3	21.2	19.6
Exports	28.6	33.3	37.5	37.1	40.4	40.8	39.9	39.5	41.4
Imports	32.1	36.0	39.8	37.8	42.2	43.6	43.9	39.4	42.1
Net exports	-3.5	-2.7	-2.4	-0.7	-1.8	-2.9	-4.0	0.1	-0.8

Source: NBP calculations based on GUS data.

## Appendix 2

# Prices of consumer goods and services

#### Price index of consumer goods and services

In 2010, the average annual price index of consumer goods and services (CPI) decreased to 2.6%, after two years of running significantly above the NBP's inflation target of 2.5%.

All the monthly CPI values remained within the tolerance limit for deviations from the inflation target (1.5%-3.5%). Until August, the index fell steadily (from 3.5% in January to 2.0%), to subsequently pick up and reach 3.1% in December. Following a gradual decrease in the first half of the year, core inflation index net of food and energy prices - stabilised at 1.2% in the period from July to November, but rose to 1.6% at the end of the year. The first months of 2010 saw a decline in the growth of prices of food and non-alcoholic beverages. However, between June and October 2010, the annual growth rate of these prices went up and remained elevated until the end of the year, in spite of a slight drop in the last months of 2010. This was accompanied by a relatively high growth in energy prices.

The rebound in inflation observed in the latter half of 2010 was driven primarily by an accelerated growth in prices of food, non-alcoholic beverages and energy. This reflected the impact of weather conditions, which were unfavourable to agriculture, and rising world prices of agricultural and energy commodities, i.e. factors beyond the impact of domestic monetary policy.

#### Prices of food and non-alcoholic beverages

Until May 2010, the growth in prices of food and alcoholic beverages decreased steadily pace (from 3.0% in January to 0.6%), which was related to improved supply conditions in the market for pork and favourable supply trends in the remaining markets. This decline was also due to a negative base effect, driven by a considerable rise in food and beverages prices in the corresponding period of 2009. The fact that food prices went up faster in the subsequent months can be put down to the adverse effect of weather conditions on supply of fruit, vegetable and cereal, as well as a sharp rise in the prices of agricultural produce in the world markets.

#### **Energy prices**

The annual growth of energy prices decreased from 8.9% in January to 4.6% in July and August, to re-embark on an upward trend in September and reach 7.9% in December. This was caused primarily by a fall (from 22.3% in January to 5.8% in July), and a subsequent rise (to 14.4% in December) in the annual growth of prices of fuels sold to private vehicle owners. Slower pace of annual fuel price growth in mid-year resulted from a negative base effect due to a sharp rise in

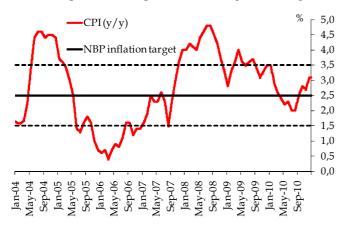
these prices in the corresponding period of the preceding year. The acceleration in these prices towards the end of the year was, in turn, spurred by rising world prices of oil.

From March 2010, growth rate of prices of energy products rose steadily, which, in part, resulted from a positive base effect due to a fall in these prices in the corresponding period of 2009; this included a reduction in the prices of natural gas for households in June 2009, which were raised again in June and October 2010. At the same time, in the latter half of 2010 the prices of heating fuels (mainly coal) embarked on an upward path.

#### Inflation net of food and energy prices (core inflation)

The annual growth in prices of consumer goods and services net of food and energy fell gradually until July, when it stabilised at 1.2%, to pick up again in December 2010 to 1.6%. The significant deceleration in the price trend in this period concerned both goods and services. With respect to goods, the strongest reduction was observed in the growth of excise goods prices, due to a negative base effect resulting from a significant rise in these prices in 2009, the effect of amendments to excise tax regulations and rises of excise tax on these goods<sup>17</sup>. Another factor with a mitigating effect on the growth of prices was the weakening upward trend in the prices of vehicles (passenger cars). Growth in the prices of services was mainly diminished by a slower rise in the prices of home maintenance services. Throughout 2010, there was also a steady and significant reduction in the growth rate of prices in the "hotels and restaurants" category as well as prices of cultural and recreational services. The increase in the annual service price index, and consequently core inflation index net of food and energy in December 2010 was connected mainly with a positive base effect resulting from a sharp fall in the Internet service prices in the corresponding period of the preceding year.





Source: GUS data, NBP calculations

<sup>&</sup>lt;sup>17</sup> In 2009 excise tax on alcoholic beverages and tobacco products was raised. At the same time, new regulations regarding excise tax were introduced as of July 2009, pursuant to which tobacco products labelled with excise stamps in the previous years were recalled from the market. Tobacco products which were legally traded from July 2009 had to be provided with excise stamps of 2009 and thus taxed at the new rate. The increases in excise tax rates resulted from the harmonization of the national legislation to the minimum excise tax rate allowed in the EU.

 $\begin{tabular}{ll} \textbf{Table Z.2.1} \\ \textbf{Changes in the prices of consumer goods and services in 2009 - 2010} \\ \end{tabular}$ 

Changes		Food and	ner geous	of which: Inflation			of which:					
	CPI	non- alcoholic beverages	Energy	Energy carriers	Fuels	net of food and energy prices	Goods	Excise products (alcohol, tobacco)	Other goods	Services	Home main- tenance	Other services
	1000					ure of weight				•		
2009 2010	100.0 100.0	24.6 24.1	15.3 15.8	11.0 11.6	4.3 4.2	60.1 60.1	32.0 31.4	5.6 5.7	26.4 25.7	28.1 28.7	6.1 6.3	22.0 22.4
2010	100.0	24,1				orresponding					0.5	22.4
2009 I	2.8	3.1	4.9	14.8	-18.8	2.2	0.2	7.8	-1.4	4.5	8.4	3.4
II	3.3	3.4	6.9	14.4	-12.1	2.4	0.4	8.3 9.2	-1.3	4.7	8.4	3.7
III	3.6	4.8	6.3	13.9	-12.5	2.5	0.6	9.2	-1.2	4.7	8.5	3.6
IV V	4.0 3.6	5.6 5.2	6.6 4.6	13.8 11.1	-11.4 -11.5	2.6 2.8	1.0 1.2	9.8 10.0	-0.8 -0.6	4.5 4.5	8.5 8.5	3.4 3.4
VI	3.5	4.7	5.0	10.6	-8.5	2.7	1.3	10.2	-0.5	4.3	8.3	3.2
VII	3.6	4.0	5.3 5.2	10.1	-6.0	2.9	1.8	12.1	-0.3	4.2	8.1	3.1
VIII IX	3.7 3.4	4.5 3.6	5.2	9.8 8.9	-6.0 -4.9	2.9 2.9	1.7 1.7	10.3 9.4	-0.2 0.1	4.3 4.1	7.9 7.8	3.2 3.1
X	3.1	3.0	4.2	7.5	-4.6	2.9	1.9	8.9	0.4	4.1	7.6	3.1
XI	3.3	3.4	5.3	5.9	3.7	2.8	1.8	8.3	0.4	3.9	7.5	2.9
XII 2010 I	3.5 3.5	3.4 3.0	7.4 8.9	5.8 4.5	12.3 22.3	2.6 2.4	1.8	8.0 7.5	0.5	3.4	7.4 5.6	2.2
II	2.9	2.8	5.8	2.8	14.5	2.2	1.7	7.4	0.4	2.8	5.4	2.1
III	2.6	1.4	6.4	3.2	15.6	2.0	1.6	7.7	0.3	2.4	5.0	1.7
IV V	2.4 2.2	0.7 0.6	6.8 6.9	3.2 3.3	17.0 16.9	1.9 1.6	1.4 1.2	7.2 7.0	0.2 -0.1	2.3 2.1	4.8 4.5	1.6 1.5
VI	2.3	2.2	5.6	4.1	9.8	1.5	1.0	6.2	-0.2	2.0	4.3	1.3
VII	2.0	2.4	4.6	4.1	5.8	1.2	0.6	3.6	-0.1	1.9	4.1	1.2
VIII IX	2.0 2.5	2.3 4.3	4.6 5.0	4.1 4.2	5.9 7.1	1.2 1.2	0.5 0.6	3.6 3.3	-0.2 0.0	1.9 1.8	4.0 4.0	1.3 1.2
X	2.8	4.8	6.2	5.0	9.5	1.2	0.6	3.3	0.0	1.8	4.0	1.2
XI	2.7	4.3	5.7	5.2	7.2	1.2	0.6	3.8	-0.1	1.8	4.0	1.2
XII	3.1	3.9 4.1	7.9 5.5	5.5	-6.9	1.6 2.7	0.8 1.3	9.4	-0.4	2.4 4.3	3.9	3.2
I-XII 2009.	3.3	4.1	5.5	10.4	-6.9	2.7	1.3	9.4	-0.4	4.3	8.1	3.2
I-XII 2010	2.6	2.7	6.2	4.1	11.9	1.6	1.0	5.3	0.1	2.2	4.5	1.6
					9	hare in CPI	(in p.p.)					
2009 I	2.8	0.8	0.7	1.6	-0.8	1.3	0.1	0.4	-0.4	1.3	0.5	0.8
II III	3.3 3.6	0.8 1.2	1.0 1.0	1.6 1.5	-0.5 -0.5	1.4 1.5	0.1 0.2	0.5 0.5	-0.3 -0.3	1.3 1.3	0.5 0.5	0.8 0.8
IV	4.0	1.4	1.0	1.5	-0.5 -0.5	1.6	0.2	0.5	-0.3 -0.2	1.3	0.5	0.8
$\mathbf{V}$	3.6	1.3	0.7	1.2	-0.5	1.6	0.4	0.5	-0.2	1.3	0.5	0.7
VI VII	3.5 3.6	1.2 1.0	0.8 0.8	1.2 1.1	-0.4 -0.3	1.6 1.8	0.4 0.6	0.6 0.7	-0.1 -0.1	1.2 1.2	0.5 0.5	0.7 0.7
VIII	3.7	1.1	0.8	1.1	-0.3	1.8	0.5	0.6	0.0	1.2	0.5	0.7
IX	3.4	0.9	0.8	1.0	-0.2	1.7	0.6	0.5	0.0	1.2	0.5	0.7
X XI	3.1 3.3	0.7 0.8	0.6 0.8	0.8 0.7	-0.2 0.2	1.7 1.7	0.6 0.6	0.5 0.5	0.1 0.1	1.1 1.1	0.5 0.5	0.7 0.6
XII	3.5	0.8	1.1	0.7	0.5	1.5	0.6	0.5	0.1	1.0	0.5	0.5
2010 I	3.5	0.7	1.4	0.5	0.8	1.5	0.6	0.4	0.1	0.9	0.4	0.6
II III	2.9 2.6	0.7 0.3	0.9 1.0	0.3 0.4	0.6 0.6	1.3 1.2	0.5 0.5	$0.4 \\ 0.4$	0.1 0.1	0.8 0.7	0.3 0.3	$0.5 \\ 0.4$
IV V	2.4	0.3	1.1	0.4	0.7	1.1	0.5	0.4	0.0	0.7	0.3	$0.4 \\ 0.4$
V	2.2	0.1	1.1	0.4	0.7	1.0	0.4	0.4	0.0	0.6	0.3	0.3
VI VII	2.3 2.0	0.5 0.6	0.9 0.7	0.5 0.5	0.4 0.3	0.9 0.7	0.3 0.2	0.3 0.2	0.0	0.6 0.5	0.3 0.3	0.3 0.3
VIII	2.0	0.5	0.7	0.5	0.3	0.7	0.2	0.2	-0.1	0.5	0.3	0.3
IX	2.5	1.0	0.8	0.5	0.3	0.7	0.2	0.2	0.0	0.5	0.3	0.3
X XI	2.8 2.7	1.1 1.0	1.0 0.9	0.6 0.6	0.4 0.3	0.7 0.7	0.2 0.2	0.2 0.2	0.0	0.5 0.5	0.3 0.3	0.3 0.3
XII	3.1	0.9	1.3	0.6	0.6	0.7	0.2	0.2	0.0	0.7	0.3	0.3
I-XII 2009	3.5	1.0	0.8	1.2	-0.3	1.6	0.4	0.5	-0.1	1.2	0.5	0.7
I-XII 2010		0.7	1.0	0.5	0.5	1.0	0.4	0.3	0.0	0.6	0.3	
2010	2.6	U./	1.0	0.5	0.5	1.0	0.3	0.3	0.0	0.0	0.3	0.4

Source: GUS data, NBP calculations

## Appendix 3

# Balance of payments<sup>18</sup>

Following a decline in 2009, the current account deficit of the balance of payments amidst the global crisis and a slowdown in economic growth in Poland, rebounded in 2010. In 2010 it amounted to EUR 12.0 billion (as compared to EUR 6.7 billion in 2009). The current account deficit to GDP ratio went up from 2.1% in 2009 to 3.4% in 2010. The main driving force behind the deepening of the current account deficit was a rise in the deficit on trade in goods. At the same time, for the second consecutive year growth was recorded in the income account deficit Furthermore, the surplus in trade in services and, to a lesser extent, the surplus in current transfers narrowed.

The revival in international trade (after a decline of 13% in 2009, the volume of global trade in 2010 increased by 15.1%<sup>19</sup>) supported the rebound in Poland's foreign trade. Recovery in Polish exports, after a strong collapse in the first half of 2009, occurred in the wake of the boom in German exports. At the same time, however, stronger import growth led to a deepening of Poland's foreign trade deficit.

According to preliminary GUS estimates, the deficit in Polish foreign trade rose from EUR 9.3 billion in 2009 to EUR 13.5 billion in 2010 r.<sup>20</sup> Deficit in trade with the former Soviet Union countries and with developing countries (in particular, China) deepened further. At the same time, the surplus in trade with the EU-15 and the so-called new EU Member States increased (the surplus in trade with the EU countries rose from EUR 11.7 to EUR 15.2 billion).

In 2010, the value of Polish exports increased by 19.5% (after a fall of 15.5% in 2009). The strongest rise among all categories of goods exported from Poland was recorded in the exports of intermediate goods, partially due to a revival in exports of the EU-15 and intensified trade between subsidiaries of foreign companies in the countries of Central and Eastern Europe (CEE), driven by the recovery in exports to non-EU economies. Due to a slow rebound in consumption and investment demand in the EU countries, exports of final goods from Poland grew at a much slower pace. The EU-15 countries were Poland's only major trading partners to which exports from Poland reached the 2008 level. Exports to the former Soviet Union countries were rebuilding relatively slowly.

In 2010, the value of imports to Poland grew by 21.7%. Faster growth in imports than that in exports was mainly related to the increase in fuel prices, while the growth of imports of other categories of goods was close to export growth<sup>21</sup>. As compared to other categories of goods, the rise in imports of intermediate goods was high, which was driven by a strong demand of the export sector in Poland. The geographical

<sup>&</sup>lt;sup>18</sup> If not specified otherwise, all the data analysed in Appendix 3 refer to values denominated in EUR.

<sup>&</sup>lt;sup>19</sup> According to CPB Netherlands Bureau for Economic Policy Analysis estimates.

 $<sup>^{20}</sup>$  The increase in foreign trade deficit was the effect of both higher growth in the volume of imports than that of exports as well as faster rise in import transaction prices than in export transaction prices. In 2010 the volume of imports went up by 11.1% (y/y), while the volume of exports increased by 10.4%. Import transaction prices expressed in EUR climbed by 9.5%, while export transaction prices stepped up by 8.3%.

<sup>&</sup>lt;sup>21</sup> The value of imports of oil increased in 2010 by 53.9%, which was driven by a rise in oil prices expressed in EUR by 47.6%. Crude oil excluded, the value of imports to Poland rose by 19.8%.

structure of imports saw a persistently growing share of imports from China, which is due to the ongoing process of production being shifted to this country from the developed economies.

In 2010, the value of errors and omissions amounted to EUR 13.6 billion as compared to EUR 15.2 billion in  $2009^{22}$ . The Polish National Bank is now carrying out works aimed to identify the reasons for such a significant scale of errors and omissions  $^{23}$ . The revised balance of payments data for the period since 2004 will be released along with the publication of the balance of payments data for 2011 Q1<sup>24</sup>.

In 2010 the average nominal zloty exchange rate appreciated by 8.4% against the euro and by 3.4% against the US dollar as compared with 2009. However, due to lower growth of unit labour costs in manufacturing in Poland than that registered by Poland's trading partners, the real effective exchange rate (deflated by the index of unit labour costs in manufacturing; REER<sup>25</sup>) depreciated in 2010 by 0.9% as compared to 2009.

In 2010, most indicators of external imbalances of the Polish economy deteriorated. Growing utilization of EU funds in 2010 (classified on the capital account) did not offset the increase in the current account deficit. As a result, both current account deficit to GDP ratio as well as current and capital account deficit to GDP ratio rose. In 2010, the inflow of foreign direct investment declined as compared to 2009. However it was a result of a one-off transaction of a direct investor who sold assets in Poland. This transaction excluded, the level of the inflow of foreign direct investment to Poland in 2010 was close to the one recorded in 2009. The current account deficit was in approximately 31% financed by the inflow of foreign capital in the form of direct investment (as compared to 92% in the previous year). The total external debt to GDP ratio as at the end of December 2010 was 66.1%, which means that it deteriorated by 4.6 percentage points as compared to 2009. The reserve assets to imports ratio improved slightly. The short-term external debt<sup>26</sup> to official reserve assets ratio, which shows how much of the central bank foreign reserves would be allocated to repay short-term external debt as at the end of December 2010 stood at 78.2% and showed an improvement of 9.8 percentage points as compared to 2009.

<sup>&</sup>lt;sup>22</sup> Errors and omissions are part of balance of payments and it occurs in balance of payments statistics in all countries. It is an effect of discrepancies resulting from lack of information on type of flows which occured between a country and abroad. The negative values of errors and omissions have been reported in Poland since 2004.

<sup>&</sup>lt;sup>23</sup> The driving forces behind this phenomenon include most probably: understatement of imports of used cars from the EU, revisions of transfers in other sectors, revision of the so-called branding strategy, hypotheses concerning the financial account and settlement of derivatives, or revision of the volume of foreign assets held by the non-financial sector entities.

 $<sup>^{\</sup>rm 24}$  Revised balance of payments data will be published on 29 June 2011.

<sup>&</sup>lt;sup>25</sup> Indicators taking account of changes in production costs are good measures of changes in the competitive position of domestic producers in foreign markets. Due to the predominant share of manufacturing products in trade, the real exchange rate deflated by unit labour costs in manufacturing was used to assess changes in the competitive position of Polish exports. Calculations are based on quarterly data on unit labour costs in 2010, whereas Q4 data are estimates.

<sup>&</sup>lt;sup>26</sup> Short-term foreign debt are debt instruments with maturity less than one year. They include primarily funds held on current and fixed deposit accounts and commercial loan debt (including commercial loans from shareholders).

**Table Z.3.1** Selected indicators of external imbalances

Indicators of external imbalances	2004	2005	2006	2007	2008	2009	2010
Current account balance/GDP	-4.0%	-1.2%	-2.7%	-4.7%	-4.8%	-2.1%	-3.4%
Current and capital account balance/GDP	-3.5%	-0.9%	-2.1%	-3.6%	-3.7%	-0.5%	-1.6%
Balance on trade in goods/GDP	-2.2%	-0.9%	-2.0%	-4.0%	-4.9%	-1.0%	-1.7%
Current account balance/current account inflows	-9.4%	-2.9%	-5.9%	-10.1%	-10.6%	-4.9%	-7.4%
Direct investment/current account balance	116.1%	184.4%	115.8%	90.0%	40.6%	91.6%	31.4%
Foreign debt/GDP	46.5%	45.9%	47.3%	51.0%	48.0%	62.7%	66.1%
Official reserve assets expressed in terms of monthly imports of goods and services	4.0	4.7	3.9	3.9	3.3	5.4	5.6
Short-term debt/ total foreign debt	19.1%	20.4%	20.4%	26.0%	26.9%	24.9%	23.4%
Short-term debt/official reserve assets	67.5%	63.6%	71.3%	92.6%	106%	88%	78.2%

Source: NBP calculations based on GUS and NBP data.

### Appendix 4

# Money and credit<sup>27</sup>

#### Loans to households

The nominal value of household debt increased in 2010 by PLN 37.1 billion (against PLN 46 billion in 2009). The growth rate of household loans decreased from 12.4% in December 2009 to 8.9% y/y in December 2010.

The slowdown of the annual growth in household loans resulted from a significant fall in consumer credit growth - from 12.8% y/y in December 2009 to 1.8% y/y in December 2010. The increase in consumer loans in 2010 reached PLN 1. 3 billion, i.e. markedly less than in 2009 and in the record high in this respect year of 2008, when consumer loan debt rose to PLN 15.5 billion and PLN 27.1 billion respectively. The results of the survey studies conducted by the NBP indicate that a significant drop in consumer credit growth in 2010 resulted primarily from the reduced supply of consumer loans, coupled with a slight decrease in the demand for consumer loans<sup>28</sup>. Banks have limited the supply of consumer loans in view of the risk of the anticipated economic situation and an increasing share of bad loans in their loan portfolio. Tightening of banks' lending policy could have also partly stemmed from the need to implement by the end of 2010 the T Recommendation requirements<sup>29</sup>.

In contrast to the situation in the consumer loan market, the housing loan market in 2010 reported a recovery<sup>30</sup>. The value of housing loans in 2010 amounted to PLN 30.5 billion against PLN 24.5 billion a year before. In the first half of 2010, the growth rate in housing loans showed a slightly upward trend, and then stabilized at around 14% y/y.

Similarly to 2009, also in 2010 the majority of new housing loans were zloty denominated loans. Their share in the structure of newly granted loans followed initially an downward trend and decreased from 88% in December 2009 to 65% in July 2010, then gradually increased to nearly 77% in December 2010.

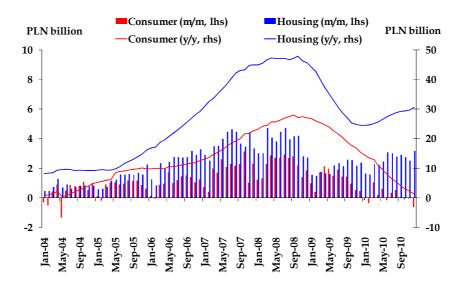
<sup>&</sup>lt;sup>27</sup> If not indicated otherwise, the growth rates presented below refer to figures adjusted for the impact of fluctuations of the exchange rate of the zloty against the main currencies.

<sup>&</sup>lt;sup>28</sup> Senior loan officer opinion survey on credit market. www.nbp.pl

<sup>&</sup>lt;sup>29</sup> Provisions of T Recommendation were aimed, inter alia, to standardize creditworthiness assessment procedures, curb aggressive competition among banks and guarantee transparency of banking procedures to borrowers.

<sup>&</sup>lt;sup>30</sup> The implementation in August 2010 of some of the provisions of T Recommendation did not have, at the end of 2010, any significant impact on the level of lending in the housing market. In practice, some banking institutions did not have to introduce any changes in their credit offer, as they had already met the requirements of T Recommendation before. Moreover, relevant provisions regarding the admissible ratio of expenditure related to the service of credit and financial commitments to customer's income took effect only as of 23 December 2010.

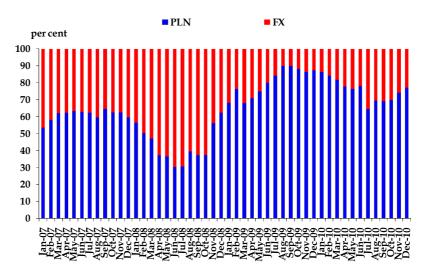
Figure Z.4.1 Year-on-year and month-on-month changes in household loans.



Source: NBP data.

Figure Z.4.2

Currency structure of newly granted housing loans to households.



Source: NBP data.

Calculations are based on the information obtained for interest rate purposes from the sample of 20 selected banks whose share in the market of loans to non-financial sector accounts for approximately 75%.

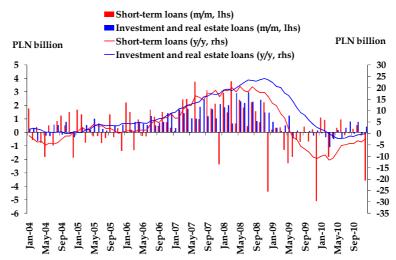
#### Loans to enterprises

Improved economic situation of enterprises and gradually increasing production capacity utilization did not have any material impact on the change in demand for corporate loans. The nominal value of corporate debt decreased in 2010 by PLN 1.9 billion as compared to a decline of PLN 7.8 billion in 2009. The annual growth of corporate loans was negative throughout 2010, although followed a gradual upward trend starting from May 2010.

The drop in corporate debt was primarily driven by a decrease in current loans and long-term real property loans. Corporate debt resulting from current loans fell in 2010 by PLN 2.3 billion (against a fall of PLN 10.9 billion in 2009), while the annual growth rate of these loans followed a gradual upward trend in the second half of 2010, increasing from an average of approx. -9.0% in the first half of 2010 to -2.5% in

December 2010. The decline in this loan category was driven, on the one hand, by a further tightening of banks' lending policy, mainly towards small and medium sized businesses and, on the other hand, with a relatively good liquidity situation of enterprises, reducing their demand for this type of loans.

Figure Z.4.3 Year-on-year and month-on-month changes in loans to enterprises.



Source: NBP data.

The year 2010 saw also continued low demand for long-term real property loans. The value of this category of corporate debt declined in 2010 by PLN 2 billion (against an increase of PLN 1.8 billion in 2009). At the same time, the annual growth in this category of loans decreased gradually (to -7.8% in December 2010 as compared to 3.7% in December 2009).

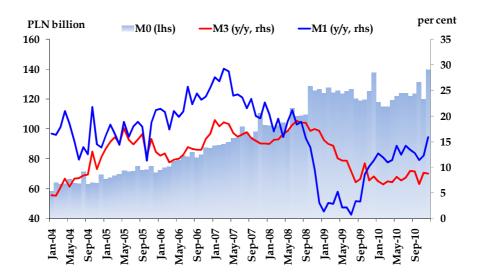
2010 brought, on the other hand, an increase in the value of long-term investment loans (an increase of PLN 1.8 billion against an increase of PLN 0.9 billion in 2009), used by companies to finance new or extend the already existing production and service capacity. Despite some recovery in investment loans throughout the year, own funds of enterprises remained the main source of investment of financing which was supported by good sales results reflected in a rapid growth in corporate deposits.

#### Deposits and monetary aggregates

In 2010 M3 monetary aggregate increased by PLN 63.3 billion as compared to an increase of PLN 55.1 a year before. The growth rate of M3 monetary aggregate was relatively stable and reached an average level of 8% y/y.

Slower growth was recorded in broad money than in more liquid money components (M1 aggregate) (on average of around 13% y/y). Current deposits of households and enterprises increased significantly. Their value rose by the total of PLN 54.8 billion in 2010 (21% y/y). The second component of M1 money-currency in circulation - increased during this period by PLN 2.9 billion. Its annual growth rate gradually increased, from -1.1% in December 2009 to 3.3% in December 2010. The share of other components of broad money (M3-M1), primarily fixed-term deposits with a maturity less than 2 years increased slightly - by PLN 1.6 billion and in December 2010 it was higher than a year before by 0.5%. As a result of the above changes, liquidity ratio of M3, measured by the share of cash and current liabilities in M3, grew in 2010 by 3.5 percentage points to approximately 57%.

**Figure Z.4.4** Annual changes in M3 and M1 aggregates and currency in circulation.

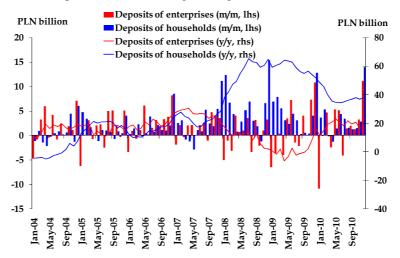


Source: NBP data.

Household deposits grew in 2010 by PLN 38 PLN billion against an increase of PLN 51.5 billion one year earlier. Following a regular decline in the growth rate from a very high level of around 25% y/y, since the second quarter of 2010 the growth rate of household deposits has stabilized at around 10% y/y. Growth of household deposits persisting at a nearly two-digit level was the result of rapid growth in current deposits (at a rate exceeding 20% y/y), driven by growing popularity of overnight deposits and savings deposits with daily capitalization of interest. However, deposits with maturity less than 2 years decreased in 2010 by PLN 3.9 billion (-2% y/y).

An alternative to fixed-term deposits, limiting the growth of M3 in 2010, were investments in investment fund units, shares or insurance policies. In 2010, the value of investment fund assets increased by PLN 18.6 billion, nearly half of which were new net contributions (in 2009 new net contributions to the fund amounted to approximately PLN 2 billion). As compared to investments in investment funds, the scale of investment in shares or insurance policies was significantly lower and was estimated in both cases to slighly exceed PLN 6 billion.

Figure Z.4.5
Year-on-year and month-on-month changes in household and corporate deposits.



Source: NBP data.

The value of corporate deposits increased in 2010 by PLN 17.1 billion zł (against an increase of PLN 15.9 billion a year earlier). In the first half of 2010, the growth rate of deposits increased gradually to around 16% in May 2010, then began to fall to around 10% in December 2010. According to the NBP survey studies, liquidity situation of the enterprise sector was in 2010 relatively good and stable<sup>31</sup>. At the same time, respondents declared an investment growth, which in nearly 50% was supposed to be financed from their own resources.

<sup>31</sup> Information on the Condition of the Enterprise Sector, Including the Economic Climate in 2010 Q3 and Forecasts for 2010 Q4 - results of the NBP surveys, www.nbp.pl.

## Appendix 5

# Minutes of Monetary Policy Council decision-making meetings held in 2010

#### Minutes of the Monetary Policy Council decision-making meeting held on 26 January 2010

At the meeting, the Monetary Policy Council discussed primarily the outlook for economic growth and inflation abroad and in Poland, the situation in the labour and credit markets and zloty exchange rate developments.

While addressing the outlook for global economic growth, it was pointed out that the latest data on US and euro-area economies indicated the continuation of positive tendencies in industry and a further improvement of enterprises' sentiment. At the same time, it was argued that the still difficult situation in labour markets in those economies could negatively affect consumption, which may be signalled by unfavourable data on retail sales. The Council stressed that high uncertainty as to the scale of recovery in the world economy continued. Some Council members pointed primarily to the expected phasing out of stimulus packages in many countries as a source of uncertainty related to the sustainability of the recovery. According to other Council members, the persistently high fiscal deficit and fast rising public debt remain to be important risk factors. At the same time, the Council assessed that economic activity in developing economies, whose demand may prove important in supporting the recovery in developed economies, would be of great significance for global economic growth.

While discussing inflation abroad, it was pointed out that an increase in the annual price indices of consumer goods and services in the United States and in the euro area in December 2009 had resulted mainly from the positive base effect connected with a strong drop in energy prices a year before. Some Council members emphasised that according to most forecasts inflation in those economies would remain at a relatively low level in the coming years, which would be conducive to lower inflation in the world economy. Other Council members, however, pointed to the rising inflation expectations in the United States. Moreover, they argued that the output gap in the largest developing economies was closing, which could limit the decline in the prices of goods imported from those countries and its disinflationary influence on inflation both in the world and in Poland.

At the meeting the Council also discussed the situation in the world commodity markets. It was assessed that commodity prices in the years to come may be relatively high. In this context, some Council members pointed out that commodity markets may see long price cycles, as supply can only be increased as a result of significant investments, and so it adjusts to a demand rise with a considerable lag. Moreover, other Council members argued that commodity prices were not only affected by demand and supply in the underlying market but also by the situation in the markets of financial instruments tied to commodity prices, including, among others, by the purchases of those instruments by foreign pension funds. In the assessment of those Council members, the lack of limits on open positions may be conducive to high commodity prices despite relatively sluggish growth in the world economy.

While discussing the situation in the Polish economy, it was emphasised that the released data, and in particular the gradual stabilisation of employment in the enterprise sector and improved indicators of economic climate, including output forecasts, as well as good liquidity and financial standing of enterprises, signalled a gradual recovery in economic activity. Yet, some Council members pointed out that the data on industrial output in December 2009 fell significantly short of expectations. While addressing the outlook for economic growth in Poland, the majority of the Council argued that GDP growth in subsequent quarters may be stronger than previously assessed. At the same time some Council members stressed that, while assessing the pass-through of the expected GDP growth acceleration to inflation, one should consider a possible slowdown in the growth of potential output, stemming in particular from the decline in total factor productivity growth started in 2004. Moreover, it was pointed out that according to the NBP survey the share of non-profitable exports in total exports was very low, which means that enterprises may be able to sustain their price competitiveness even in the case of zloty appreciation. On the other hand, it was emphasised that the impact of the exchange rate on the profitability of exports was currently lower than it used to be due to the strengthening of international ties among enterprises and a considerable import intensity of exports. Some Council members indicated, however, that a potential zloty appreciation might - in the short run - have a strong negative impact on GDP growth as it could trigger the build-up of inventories of imported goods. Other Council members pointed to the expected continuation of relatively weak economic growth in Poland's main trading partners, which may curb export growth and, consequently, GDP growth. In the opinion of those Council members, due to the significance of external demand and international ties among enterprises, economic growth in Poland at the moment was much more dependent on economic activity abroad as compared to the period of the previous economic slowdown.

While addressing the factors affecting investments, some Council members emphasised that since production capacity utilisation in the enterprise sector was still low and – as during recovery from the previous economic slowdown – investments respond to improvement in economic activity with some delay, no quick investment recovery should be expected. It was also argued that investment in the coming period would depend on spare production capacities not only in Poland but also in other countries with strong ties with Polish enterprises, and particularly in Germany. This means that despite the positive sentiment of investors towards emerging countries, including Poland, the inflow of foreign direct investment in the coming years may – in the opinion of those Council members – prove significantly lower than it had been before the global crisis. Other Council members, however, pointed out that according to the NBP survey on economic climate the utilisation of production capacities in 2009 Q4 was close to that observed in 2003-2004, when after the previous economic slowdown investments rebounded, which could signal a faster than expected investment recovery.

While analysing labour market data, the Council members argued that the deterioration of the situation in this market was considerably less pronounced than in the period of the previous slowdown, which was confirmed by a markedly higher current ratio of vacancies to the number of unemployed. Such a situation increases the risk of wage rise acceleration taking place faster than during recovery from the previous economic slowdown. Some Council members assessed that in the coming years demographic developments would negatively affect labour supply, while in the case of the previous economic slowdown they had been conducive to curbing the wage pressure and, consequently, the inflationary pressure. Moreover, the decline in the share of enterprises lowering their margins observed in 2009 Q4, and a probable - in the opinion of those Council members - margin increase in the phase of economic recovery, indicate that inflation may rise even if a low growth rate of unit labour costs was sustained. Other Council members pointed out that, due to the rise in the unemployment rate, moderate (after adjustment for one-off effects) wage growth and good financial conditions in enterprises, no significant inflationary pressure from the labour market should be expected in the coming period. In this context, the so-called labour hoarding on the part of enterprises was being emphasised, which consists in reduced lay-offs during an economic slowdown, which in the period of recovery should allow for increasing labour productivity and meeting rising demand without a significant employment rise, and probably also without significant pay increases. In the opinion of those Council members, this may be a factor easing the inflationary pressure.

Some Council members pointed out that the situation in the credit market was not improving: lending to the enterprise sector continued to shrink, while the rise in loans to the household sector remains considerably lower than in the previous years. Other Council members, however, argued that, according to the preliminary results of the NBP survey of commercial banks, their tendency to tighten credit policy had been halted in 2009 Q4 and in 2010 banks expected to significantly increase lending to the non-financial sector.

While discussing the outlook for lending, some Council members pointed to a significant increase in loans granted in foreign currencies that had been observed prior to the crisis in the world financial markets. Those members emphasised that it was possible that lending in foreign currencies would rise significantly once again, which may be limiting the impact of NBP interest rate changes on the volume of credit in the economy.

While discussing inflation developments, some Council members pointed out that in December 2009 CPI inflation rose to 3.5% (driven primarily by the positive base effect connected with a strong decline in fuel prices in December 2008), and in the coming months inflation might be expected to decrease significantly. At the same time, it was emphasised that core inflation net of food and energy prices had fallen to 2.6% due to the deceleration in prices of services.

While addressing inflation expectations, some Council members pointed to a rise in the majority of indices of individuals' inflation expectations recorded in January 2010 and to the deteriorated structure of responses to the question about expected change of prices in the next 12 months. Those Council members assessed that the slightly widened spread of forecasts by bank analysts and the continuation of a relatively high dispersion of individuals' expectations may reveal some uncertainty as to the assessment of inflationary processes by economic agents. Other Council members argued that inflation expectations in Poland are adaptive in nature, and so they are greatly dependent on past inflation, which should be taken into consideration while interpreting their changes. In the context of inflation expectations and their pass-through to wage developments, the Council also discussed the power of trade unions, which play a significant role in wage negotiations in the public sector, though in the scale of the whole economy they group a relatively small number of employees.

The Council also discussed the zloty exchange rate developments against its equilibrium level. Some Council members argued that a high level of integration of the Polish economy with the euro area should be conducive to reducing the deviations of the real zloty exchange rate from the equilibrium rate. Other members of the Council pointed out that in their decisions on emerging markets foreign investors often rely on a very limited set of information, which may result in exchange rate deviations from the level warranted by fundamental factors. At the same time some Council members indicated that public finance sector imbalances, both in Poland and abroad, was a factor increasing the risk of high zloty exchange rate volatility.

While considering decisions on the NBP interest rates in the months to come, some Council members assessed that the expected economic growth acceleration would be a factor conducive to higher inflation in the medium term. In the opinion of those Council members, this may indicate that a time might be approaching for considering a change in the assessment of probabilities of inflation in the medium term running below or above the inflation target and, possibly, the subsequent monetary policy tightening. Other Council members, however, argued that, taking into account uncertainty as to the sustainability of the recovery in the world and in the Polish economy, as well as the unknown impact of the expected macroeconomic policy tightening abroad on future world economic growth and inflation, the probabilities of inflation running below and above the target in the medium term were still balanced and the NBP interest rates should remain unchanged in the coming period.

The Council assessed that the data on the economic situation in Poland and abroad released since its last meeting warranted maintaining the interest rates unchanged at the current meeting.

The Council kept the interest rates unchanged: the reference rate at 3.50%, the lombard rate at 5.00%, the deposit rate at 2.00%, the rediscount rate at 3.75% and the discount rate at 4.00%.

#### Minutes of the Monetary Policy Council decision-making meeting held on 24 February 2010

At the meeting, the Monetary Policy Council discussed primarily the interaction of the outlook for economic growth and inflation abroad and in Poland in the light of the February projection of the NBP, and the situation in the labour and credit markets.

It was pointed out that the better than expected GDP data for 2009 Q4 as well as the rise in industrial output and retail sales in January 2010, signalled further improvement in the economic activity in the United States. It was pointed out that increase in inventories might indicate an improvement in the assessment of future demand. A gradual deceleration of the unfavourable tendencies in the American labour market was also stressed. At the same time, some Council members listed the following factors likely to pose risk for sustainable recovery in the American economy: weakening of upward trends in the real estate market, further curbing of bank lending to the private sector and persistently high budget deficit

While analyzing the situation in the euro area, the contrast between GDP growth in this economy as compared to GDP growth in the American economy was emphasized. A marked decline in industrial output in December 2009 and a low GDP growth in the euro area in 2009 Q4, including the stagnation in Germany, was stressed. Considerable differences in the situation of particular euro area countries were noted and it was argued that fiscal problems of Greece, Ireland, Italy, Portugal and Spain is an important risk factor for sustainable recovery in this economy. At the same time, further improvement in the business confidence indicators in the euro area was noted. Additionally, high growth in Asian economies whose demand might constitute a factor stimulating recovery in the economies being Poland's major trading partners was stressed.

Moreover, some Council members pointed out that an important risk factor for sustainable recovery in the global economy and, as a result, in the Polish economy, were the effects of the expected unwinding of stimulus packages in many countries. Other Council members indicated that deterioration in economic activity abroad and, consequently, in the Polish economy, might occur, among other things, due to a difficult fiscal situation in the developed countries. Some members of the Council argued that – despite weak GDP growth in the euro area, and in particular in Germany – a gradual increase in the Polish exports and imports had been noted, which resulted from Polish trade being more strongly connected with exports of Poland's main trading partners than with domestic demand in those countries. Additionally, some Council members indicated that in the case of considerable weakening of economic growth in the external environment of the Polish economy, depreciation of the nominal zloty exchange rate would be more likely than its appreciation. Combined with decreasing unit labour costs in industry this would increase price competitiveness of enterprises as compared with foreign countries, supporting positive contribution of net exports to GDP growth.

While discussing the situation in the Polish economy, the Council pointed at higher than expected growth in industrial output, continued improvement in business confidence indicators and further upward revision of GDP growth forecasts for 2010, prepared by external analysts. In the opinion of some Council members the released data indicate faster than previously expected acceleration of GPD growth. Some members of the Council assessed that retail sales growth in December 2009, being lower than anticipated in majority of forecasts, had resulted primarily from unfavourable weather conditions and was not a sign of weakening demand. Members of the Council pointed at a difficult situation in the public finance sector, including worse – as compared with the previous years – situation of the local government entities. Some Council members argued that the decrease in the number of employed in the public sector, as indicated by the BAEL data for 2009 Q4, and the possibility of this decrease being continued in view of the necessary reduction of public finance imbalance, might translate into lower income of some households, and, as a result, lower domestic demand. Yet, other Council members – pointing at difference between the growth of income from employment in the enterprise sector and the growth of income from employment in total – argued that the public finance sector, so far, had been increasing wage pressure rather than easing it.

While analyzing labour market data, majority of the Council members assessed that gradual stabilization of employment in the enterprise sector observed in the past few months might signal some deceleration of the unfavourable labour market tendencies. Yet, in the opinion of some Council members further rise in unemployment rate, driven by increased labour force participation amidst low labour demand, should support maintaining low wage pressure in the coming months. However, other Council members pointed at the negative impact of demographic factors on labour supply which would stimulate the wage pressure in the coming years.

While discussing the outlook for bank lending, some members of the Council assessed that banks' credit policy towards enterprises continued to be restrictive. This may have a negative impact on enterprises' activity the more so as persistently high share of companies has low liquidity. Those Council members indicated that Recommendation T issued in February 2010 by the Polish Financial Supervision Authority would contribute to reduced loan availability for households. According to those Council members the possible further weakening of bank lending to the private sector will be a factor curbing economic growth in Poland, which may – in the opinion of some Council members – speak in favour of the central bank taking additional measures stimulating indirectly bank lending.

Other members of the Council argued that high net profitability of enterprises coupled with high depreciation write-offs, and, as a result – in the opinion of those Council members – good liquidity situation of companies enables them to finance both their current and investment activities with their own funds, which limits their demand for loans. Those Council members also stressed a continued decline in the number of companies with very low liquidity and no liquidity problems being reported by majority of enterprises. They also pointed at the accelerating quarterly increases in household debt, including, in particular, a relatively high growth in housing loans. Those Council members indicated that the amount of housing loan instalments depended primarily on the level of interest rates in Poland. In their opinion, too late tightening of monetary policy aimed at stabilizing inflation at the target might require considerably stronger increases of the NBP interest rates in the future which would be conducive to significantly higher housing loan instalments.

While discussing the inflation developments it was pointed out that a slight rise in inflation above the upper limit for deviations from the inflation target in January 2010 was most probably a temporary phenomenon. Majority of the Council members emphasized that subsequent months were expected to bring a strong decline in inflation, even close to the lower limit for deviations from the inflation target. In the opinion of those Council members the strong decline in inflation would be driven primarily by base effects connected with high increases in regulated prices at the beginning of 2009 and by a decline in import prices being the result of the hitherto observed zloty appreciation, which will also contribute to the decline in core inflation. In the opinion of some Council members this effect will be additionally supported by the limited demand and wage pressures. Those Council members also pointed out that, on the basis of the currently available data, no increases in certain taxes, including exercise duty, should be expected this year. Increases in those taxes were previously assessed as a risk factor for decline in inflation. Other Council members stressed that despite strong decline in economic growth, inflation in Poland continued at a relatively high level.

While discussing the outlook for inflation in the medium term, some Council members emphasized that factors supporting low inflation would include: stable inflation expectations, relatively low production capacity utilization, possible tightening of fiscal policy resulting from the need to reduce public finance sector deficit and low demand pressure connected with a slow recovery in the global economy. Those Council members also pointed out that future decline in inflation was additionally signalled by continuously decreasing growth in M3 aggregate. Other Council members indicated, however, that higher inflation in the coming years might be driven by higher energy prices connected with further growth in oil prices. Those Council members argued that limited possibilities of increasing the supply of energy commodities justified the expectations of their price increases in response to the slowly rising demand in the global economy. At the same time – in the opinion of those Council members – attempts to increase the production of biofuels would also result in the rise of food commodity prices in the world markets.

The Council discussed the outlook for inflation in the light of the results of the February NBP projection. It was pointed out that the central projection path, under the assumption of constant NBP interest rates, indicated a gradual rise in inflation from 2010 Q4 - above the upper limit for deviations from the inflation target at the end of 2012, with core inflation in the years 2011-2012 expected to continue markedly above 2.5%. Some Council members argued that headline inflation remaining below the inflation target until mid-2011 would be driven by a strong decline in the growth of food and energy prices, i.e. categories likely to be affected by shocks, whose forecasts might be subject to considerable error. In the opinion of those Council members higher than assumed in the projection might also be, on the one hand, the growth in unit labour costs and, on the other hand, growth in private consumption (according to the projection, the latter should remain markedly below the average level for the years 2000-2009). They assessed the situation in which until the end of the projection horizon the negative output gap widens as very unlikely. As a result, according to those Council members, inflation in the medium term may run above the central projection path. Other members of the Council argued, however, that different than assumed in the projection developments in zloty exchange rate may translate into more favourable than presented in the February projection assessment of risk for stabilizing inflation at the target in the medium term.

The discussion at the Council's meeting also focused on issues connected with Poland's monetary integration with the euro area, including participation of the zloty in the Exchange Rate Mechanism II. The Council discussed the conditions to be fulfilled for Poland to join the euro area. The Council agreed that Poland should join the ERM II and the euro area at the earliest possible date, after meeting the necessary legal, economic and organisational conditions.

While discussing the outlook for monetary policy in the coming months, some Council members emphasized that in line with the February projection the probability of inflation running in the medium term above the inflation target was higher than the probability of inflation running below the target which – in their opinion – justified signalling in the Information from the MPC meeting that the balance of risks for inflation might soon change. Other members of the Council argued, however, that the uncertainty related to macroeconomic developments in the global economy, and in particular, in the euro area, does not allow to assess clearly whether the risk for inflation in the medium term running above the inflation target had considerably increased.

The Council assessed that the data on the economic situation in Poland and abroad released since its last meeting justified maintaining the interest rates unchanged at the current meeting.

While considering the decisions on the NBP interest rates in the future, some Council members agreed that the expected rise in inflation in the years 2011-2012 might indicate the need of tightening of the monetary policy in 2010, although the timing of possible interest rate increases would depend on the current developments. Some Council members noted that further stabilization in the international financial markets might translate into a decline in risk premium accounted for in market interest rates, which – under constant NBP interest rates – would mean some easing of monetary conditions. In the opinion of other Council members too early tightening of monetary policy might, however, be conducive to an excessive appreciation of the zloty exchange rate.

The Council kept the interest rates unchanged: the reference rate at 3.50%, the lombard rate at 5.00%, the deposit rate at 2.00%, the rediscount rate at 3.75% and the discount rate at 4.00%.

#### Minutes of the Monetary Policy Council decision-making meeting held on 31 March 2010

During its meeting the Monetary Policy Council discussed primarily the outlook for economic growth and inflation in the world and in Poland, zloty exchange rate developments, the situation of the public finance sector and the future monetary policy.

While discussing the situation in the external environment of the Polish economy, a further rise in economic activity in the United States, particularly noticeable in industry, was emphasised. It was assessed

that the stabilisation in the unemployment rate combined with an employment decline slower than in the previous period may signal a gradual deceleration of unfavourable tendencies in the labour market. At the same time, it was stressed that February brought a deterioration in US consumer sentiment, which could have been connected with the still high unemployment level and a worsening situation in the real estate market. Some members of the Council argued that a limited scale of lending to the private sector and the bad situation in the real estate market, on the one hand, and the persistently high budget deficit, on the other, constitute risk factors to a permanent recovery of economic growth in the United States.

While analysing the situation in the euro area, it was pointed out that the economic climate there was improving at a markedly slower pace than in the United States, although – similarly to the US economy – the decelerating decline in employment and the stabilisation of the unemployment rate might be signalling that negative tendencies in the labour market were slowing down gradually. It was also argued that in the coming period economic activity in the euro area would be supported by a growing demand from developing economies, particularly Asian ones. Some Council members, however, pointed out that the outlook for euro-area exports may be negatively affected by their geographical structure and a weakening competitiveness of the German economy, connected with the recent rise in unit labour cost in this economy. It was also assessed that the latest monthly data, including a drop in retail sales and a deterioration of some economic climate indicators in January might point to a continuation of weak internal demand in the euro area. In the view of some Council members, the data on GDP for 2009 Q4 and the latest monthly data may indicate that the improvement of activity in this economy was only transitory and, to a large extent, resulted from government stimulus programmes.

In this context it was pointed out that the sustainability of the global economic recovery remained subject to uncertainty. In the opinion of some Council members this uncertainty is connected primarily with tensions in the financial markets caused by financial problems of some euro-area countries, notably Greece, and with macroeconomic policy in the largest European economies and in the United States being gradually less and less expansionary. Other members of the Council believed that this uncertainty mainly results from the build-up of public debt in many countries. While analysing the factors raising the uncertainty as to the outlook for economic growth in the world, some Council members also pointed to the faster growth of retail sales as well as of CPI and PPI inflation in China, which may indicate a growing imbalance in this economy. Those members argued that due to strong trade links between China and the euro area a possible weakening of economic activity in China would have negative effects on economic growth in the euro area and, consequently, also in Poland.

While addressing the monetary policy of major central banks it was emphasised that they were gradually withdrawing non-standard monetary policy measures. At the same time, it was assessed that due to the still weak economic recovery in the world and low inflationary pressure in major developed economies, interest rate hikes in those economies should not be expected in the coming period. It was also pointed out that the monetary policy in some countries of the region had been further eased in the recent period. On the other hand, some Council members emphasised that in certain developed economies the interest rate hiking cycle had already begun.

While discussing the situation in the Polish economy it was pointed out that in 2009 Q4 the annual growth of domestic demand was still relatively slow and GDP growth was primarily driven by net exports. At the same time, it was assessed that in the light of the latest monthly data the economic recovery primarily concerned industry, i.e. the sector most deeply affected by the economic downturn. It was also pointed out that retail sales data were lower than expected and that the construction and assembly output had fallen strongly in the first months of 2010, though – at the same time – it was assessed that those data could have been distorted by unfavourable weather conditions and in subsequent months some improvement could be expected. Some Council members suggested that the decline in the growth of retail sales may point to a delayed adjustment of the households' demand to the conditions of economic downturn. Moreover, some Council members argued that the fact that lending to the enterprise sector was markedly lower than a year ago could signal slow growth of this sector's investment. Other members of the Council, however, assessed that the rising trend of some consumer sentiment indicators observed in the past few months may be signalling a recovery in consumer demand in the coming period. They also

argued that a low growth of loans to enterprises reflected their low demand for credit due to their very good financial results and high liquidity. In the opinion of those Council members, such assessment could be supported by the results of NBP economic climate surveys, according to which in 2009 Q4 the percentage of enterprises applying for loans declined, while the share of approved loan applications increased. Moreover, they assessed that in the coming period the rise in housing loans to households may accelerate once again, which was indicated by commercial banks' forecasts.

While discussing developments in consumer prices of goods and services, a marked decline in annual CPI inflation in February 2010 was pointed to, driven by a fall in annual price indices of fuel, energy commodities and food, and by a decline in core inflation. Some members of the Council emphasised that in the light of available forecasts inflation in the coming months would continue to decline, driven mostly by statistical base effects connected with a strong rise of administered prices in 2009, the appreciation of the zloty observed so far, moderate growth of unit labour costs and the currently low demand pressure. They indicated that the demand pressure was low due to the still unfavourable situation in the labour marked, reflected in a fall in the number of working persons according to the BAEL in 2009 Q4 and in a limited wage increase, and also due to the slow growth of loans to the non-financial sector. Other members of the Council indicated that an inflation decline in the coming period may be curbed by a rise in the prices of energy commodities in the world markets and the prices of natural gas for individual subscribers in the domestic market. In the opinion of some Council members, in the longer run the inflationary pressure would be rising due to the growing demand pressure connected with the economic recovery and the public finance sector imbalance, as well as due to a possible rise in wage pressure in a part of this sector. Some Council members also pointed out that despite the decline, in the recent period inflation had been higher than previously forecasted.

The prospects for Poland's compliance with the Maastricht price stability criterion were also addressed at the meeting. Some Council members stressed that the 12-month average HICP inflation, considered while assessing the compliance with the Maastricht price stability criterion, exceeded significantly the estimated reference value for this criterion. Those members also pointed out that a continuation of the positive differences between the Harmonised Index of Consumer Prices and the Consumer Price Index observed over the past year and a possible future inclusion of the prices of owner-occupied housing services in the HICP could affect the outlook for Poland's meeting of the price stability criterion.

The Council paid much attention to developments of the zloty exchange rate, which had strengthened significantly in the recent period. Some Council members assessed that the pace of zloty appreciation might have been excessive, arguing that since February 2009 the zloty had strengthened more than other currencies of the region. They pointed out that the zloty appreciation increased the restrictiveness of monetary conditions in Poland and might adversely affect the competitiveness of Polish exports decelerating the pace of economic recovery. It was also stressed that a fast appreciation of the exchange rate raised the risk of its increased volatility in the future. Other members of the Council assessed that the movements of the zloty exchange rate and of other currencies of the region were largely influenced by the situation in international financial markets and that the recent strengthening of the zloty was associated with a fall in global risk aversion. They also pointed out that the zloty appreciation was supported by the inflow of foreign capital into the Polish Treasury securities market, which was associated with large borrowing needs of the state budget. Those members argued that due to the higher scale of the earlier zloty depreciation connected with the financial crisis than in the case of other currencies of the region, the exchange rate of the zloty did not exceed the estimated equilibrium exchange rate despite the recently observed appreciation. According to these members of the Council, the current level of the zloty exchange rate did not significantly reduce the competitiveness of Polish exports, which was confirmed - in their view - by NBP studies showing improvement in exporting companies' assessments of their current and expected situation. Moreover, those members pointed out that the competitiveness of exports was positively affected by a decline in unit labour costs in industry. They also assessed that the growth of Polish exports was more dependent on trade growth in countries that are Poland's major trading partners than on the exchange rate level, although at the same time they stressed that the high exchange rate volatility may have an adverse effect on the development in the sector producing internationally tradable goods compared to the non-tradable goods sector.

Council members pointed to the unfavourable situation in the public finance sector, as evidenced by the very high cumulative budget deficit recorded by local government units in 2009 and a central budget deficit reaching a relatively high level relative to the full-year plan in the first two months of 2010. Some Council members assessed that a possible continuation of weak consumer demand would be conducive to reducing VAT revenues and increasing the budget deficit. According to those Council members, in the light of available data the consolidation measures planned by the government may prove insufficient to reduce the public finance sector imbalances in line with the objectives outlined in the Convergence Programme – 2009 Update. At the same time, those members emphasised that in case these problems aggravated, an outflow of foreign capital could occur that would be conducive to a weakening of the zloty.

The Council assessed that a moderate inflationary pressure over the monetary policy transmission horizon and uncertainty as to the outlook for economic growth in the world and in Poland, combined with the appreciation of zloty exchange rate so far, justified keeping NBP interest rates unchanged at the current meeting.

While addressing future decisions on the NBP interest rates, some members of the Council declared that in view of a risk of an excessive zloty appreciation leading to a surge in the restrictiveness of monetary conditions, their temporary easing by lowering the NBP interest rates could be considered. Some Council members argued that in the current situation an interest rate cut was unjustified and it could contribute to higher volatility of prices in the financial markets. Moreover, in the assessment of the majority of the Council, a temporary reduction of the NBP interest rates would necessitate a stronger monetary tightening in the longer term.

The Council kept the interest rates unchanged: the reference rate at 3.50%, the lombard rate at 5.00%, the deposit rate at 2.00%, the rediscount rate at 3.75% and the discount rate at 4.00%.

#### Minutes of the Monetary Policy Council decision-making meeting held on 28 April 2010

During its meeting the Monetary Policy Council discussed primarily the situation in the external environment of the Polish economy, including the possible consequences of the fiscal crisis in Greece, and the outlook for economic growth and inflation in Poland.

While addressing the situation abroad, it was pointed out that the economic activity abroad was gradually rising, although the scale of the recovery varied strongly between the regions. It was indicated that in March – for the first time since the beginning of the recession brought about by the financial crisis – a marked rise in employment in the United States was observed, which further boosted consumer demand in that economy. At the same time, it was emphasised that further improvement in the labour market would be achieved gradually. Moreover, it was assessed that the persistently limited scale of lending in the United States contributed to curbing demand in this economy in the months to come.

In the discussion about the euro area some members of the Council pointed at further increase in industrial output and improvement in business confidence indicators. Those members pointed out that rapid economic growth in the developing Asian countries leads to growing demand of these countries for euro area exports, thus contributing to GDP growth in the euro area. Other members of the Council emphasised, however, that the revival in the economic activity in the euro area was significantly weaker than in the United States, whereas, in the opinion of some Council members, this was mostly the effect of a relatively larger scale of fiscal and monetary expansion in the US economy in the preceding period. Those members also pointed out that the persistently unfavourable situation in the euro area labour market contributed to curbing consumer demand, which was reflected in the decline in retail sales in the first months of 2010. Yet, it was emphasised that unfavourable weather conditions were also an important factor behind this decline.

The Council paid much attention to the fiscal situation in the major developed economies. It was assessed that public debt accumulation in the United States and in the euro area, being the effect of the previously introduced stimulus packages, constituted the main risk factor for their economic growth. On

the one hand, reduction of budget deficits, although likely to support economic growth in the longer run, could lead to another decline in activity in those economies in the short run. On the other hand, maintenance of the loose fiscal policy would be a factor limiting economic growth due to the ensuing increase in long-term interest rates.

While addressing the situation in Greece, some members of the Council pointed out that the fiscal crisis in that country would trigger tensions in the international financial markets and a rise in the market interest rates also in other economies, in particular, in the euro area countries with distinctly strong fiscal imbalances. The differences in the public finance situation and in capacity for its improvement amplify the diversity in the outlook for growth in particular euro area economies. In the opinion of those Council members, a contingent insolvency of the Greek government would entail losses for financial institutions operating in Europe that hold Greek government securities, which might contribute to a repeated limited access of European enterprises to bank credit. This would also significantly increase agents' uncertainty about the future economic situation, leading to a decline in the economic activity. At the same time, some members of the Council argued that although granting financial aid to Greece by other euro area countries would mitigate the current crisis, it might, in the longer run, translate into a decline in the confidence of financial market participants in the fiscal policy pursued in the euro area countries. This would, in turn, on the one hand, contribute to a rise in the market interest rates in those economies, and, on the other hand, weaken the euro exchange rate and increase the volatility of exchange rates of other currencies, including the zloty.

While analysing the situation in the Polish economy, a slight upward revision of GDP in 2009 Q4 and better than expected data on industrial output and retail sales were indicated. It was also stressed that economic recovery was observed mainly in industry. Some members of the Council pointed out that in March 2010 the sold production of industry reached higher level than before the economic slowdown, and its growth in the recent period was observed in the majority of the sections. They emphasised the improvement in enterprises' expectations about their economic situation and future demand as well as the fact that, although economic recovery had not translated yet into a rise in corporate investment activity, a higher than in the previous quarters percentage of firms surveyed by the NBP continued the already started investment projects. Those members also emphasised that the change in inventories might have a positive contribution to GDP growth in the subsequent quarters, which was signalled by a decreasing percentage of the surveyed enterprises reporting excessive levels of inventories of finished products and by an increasing percentage of firms assessing their inventory levels as too low. Yet, other members of the Council pointed at the deepening decline in the annual growth of corporate investment in 2009 Q4 as well as the decline in construction and assembly output and still low growth of retail sales in the whole of 2010 Q1. The Council also emphasised that the outlook for economic growth in Poland depended largely on the developments in the external environment, including the way the fiscal crisis in Greece will be contained and the fiscal problems of other economies solved.

Some members of the Council argued that the possible persistence of weak economic activity in the euro area, which is Poland's main trading partner, would limit the growth in Polish exports, thus slowing down GDP growth. Other members of the Council pointed out that – despite low economic activity in the euro area – in the past months Polish exports increased steadily, which was driven by the growing demand of Asian countries for European goods, produced with the use of Polish intermediate goods. They also pointed out that in the light of the NBP surveys, the situation of Polish exporters was improving and profitability of exports was high despite the appreciation of the zloty.

While discussing the situation in the labour market, it was emphasised that the data for March 2010 signalled possible deceleration of unfavourable tendencies in that market: acceleration in the annual wage growth and some stabilisation of employment in the enterprise sector, stabilisation of the employment rate (adjusted for seasonal factors) and a rise in the number of new job offers. Some Council members argued that a certain improvement in the labour market situation in 2010 Q1 was also indicated by the results of NBP survey studies of enterprises which pointed to a probable acceleration of wage growth in the following quarter. Other members of the Council assessed that the situation in the labour market will

be improving only gradually and the improvement may not occur in some sectors of the economy, particularly construction.

In the discussion about current inflation it was pointed out that in March 2010 the annual CPI inflation fell to a level close to the NBP inflation target; all measures of core inflation and the HICP had also declined, while the PPI remained negative. Some Council members, however, argued that the decline in CPI inflation in March was largely driven by lower annual growth of the prices of food and Internet services, which – according to these Council members – are not sensitive to shifts in demand pressure. In this context, they assessed that demand pressure might be better reflected by the growth of prices in the category restaurant and hotel services which remains relatively high. Those members also pointed out that Poland had not complied with the Maastricht price stability criterion for many months.

While analysing the outlook for inflation, some members of the Council pointed out that in line with the available forecasts the CPI inflation in the coming months would be running below the NBP inflation target. This would primarily result from a moderate demand pressure reflected in low production capacity utilisation, recently observed zloty appreciation and low growth of labour costs in the economy, including their decline in industry. In the opinion of those Council members, demand pressure should be curbed by a relatively high unemployment rate and low growth of lending to the private sector, including in particular the decline in loans granted to enterprises. At the same time, it was assessed that inflation decline may be limited by rises in commodity prices in the world markets (though this effect may be offset by the so-far zloty appreciation) and by the persistently elevated growth of some administered prices. Other members of the Council assessed that the scenario of the annual CPI inflation running markedly below the inflation target for an extended period was rather improbable as the recovery in the Polish economy and an improvement in the labour market situation (which was probable in the light of the latest data), including in particular a possible acceleration of wage growth, will lead to a gradual build-up of demand and cost pressures. They argued that a decline in unit labour costs was typical of the current phase of the business cycle and it may be expected that further recovery in the economic activity would be accompanied by their faster growth. Moreover, in view of those Council members, the drop in lending to enterprises may be reflecting low credit needs on the part of companies due to their good financial situation. It was emphasised, however, that in the assessment of banks the decline in the demand for credit mainly applied to large enterprises, while the demand of small and medium-sized enterprises was rising.

Some Council members pointed to the data on industry which indicated that in comparison to the situation before the economic slowdown the highest increase in output was recorded in the case of consumer goods. In view of those Council members, this may suggest that the utilisation of production capacity in enterprises producing consumer goods was higher than in the industrial sector on average, which may be relevant for the assessment of the future price growth of those goods. Other members of the Council, however, emphasised that consumer goods were internationally tradable goods, which should be curbing their price growth even amid high utilisation of production capacity in their producers.

The members of the Council also referred to the unfavourable public finance situation. It was pointed out that the loose fiscal policy was contributing, through the large issue of Treasury securities, to increased involvement of non-residents in the bond market. This raises the vulnerability of the Polish economy to a possible turmoil in the global financial markets leading to capital outflows from emerging market economies. Some Council members assessed that in the event of no public finance consolidation the costs of financing the public debt would continue to rise due to, among others, a possible ensuing increase in the inflation expectations of economic agents. They also pointed out that the yields on Treasury securities in Poland were currently higher then in some other countries of the region. Other members of the Council believed that the current fiscal imbalance did not pose a direct risk of higher inflation amid the currently low inflation pressure, though they shared the opinion that the continuation of such imbalance in the longer term would be a factor limiting the GDP growth.

While addressing the exchange rate issues, some Council members assessed that zloty exchange rate developments might have been affected by expectations of future changes in the interest rate disparity between Poland and the euro area. Other members of the Council, however, argued that changes in zloty

exchange rate were to a large extent driven by factors other than the current and expected interest rate disparity, including in particular shifts in the sentiment in the global financial markets.

The Council assessed that the low inflationary pressure over the monetary policy transmission horizon and the uncertainty as to the impact of the situation in the external environment on the outlook for economic growth in Poland justified keeping the NBP interest rates unchanged at the current meeting.

The Council kept the interest rates unchanged: the reference rate stands at 3.50%, the lombard rate at 5.00%, the deposit rate at 2.00%, the rediscount rate at 3.75% and the discount rate at 4.00%.

#### Minutes of the Monetary Policy Council decision-making meeting held on 25 May 2010

During its meeting the Monetary Policy Council discussed primarily the situation in the external environment of the Polish economy, zloty exchange rate developments and the outlook for economic growth and inflation in Poland.

While addressing the developments abroad, strengthening recovery in the United States was emphasized, in particular an improvement in the labour market and restoring consumer demand. Some Council members assessed that the recovery in the US economy may persist even after withdrawal of fiscal stimuli, although the scale of improvement in economic activity may be curbed by still limited access to loans and the appreciation of the US dollar against the euro. At the same time a gradual increase in euro area economic activity and improving economic conditions in Central and Eastern Europe, a region with a substantial share in Polish exports, were pointed at. In particular, attention was drawn to positive data from the German economy. Some Council members emphasized positive impact of a rapid economic growth in China on short-term prospects of German exports, and consequently, on the exports of Central and Eastern European countries. At the same time those members pointed out that the growing macroeconomic imbalances in China, reflected in the rising inflation in the country, generated a risk to global economic growth in the longer term.

During the discussion on the economic outlook for the euro area, the risks associated with the fiscal problems of many countries of the region were highlighted. Some Council members argued that in order to contain growing public debt in these countries, substantial fiscal consolidation must be conducted. If combined with the rise in market interest rates and more difficult access to loans it could have a dampening impact on economic growth in the euro area in the short- and medium-term. Some Council members pointed, however, to uncertainty regarding the possibility of carrying out significant fiscal adjustments in some euro area countries. At the same time other members of the Council deemed the possibility of limiting spending of households and enterprises as a result of the increased uncertainty associated with the fiscal imbalances and curbing of public spending in some euro area countries to be a downside risk to a medium-term economic growth of this region. They argued that this constitutes more important downside risk to the euro area economic growth than the increase in the long-term interest rates.

On the other hand, some Council members indicated that the recently observed euro depreciation, increasing the price competitiveness of euro area exports could favourably affect the economic growth in this region. Other Council members argued, however, that the euro exchange rate fluctuations had a moderate impact on the competitiveness of euro area exports due to the structure of exports of major euro area economies.

While analysing global price developments, the rise in inflation in the major emerging economies was emphasized. At the same time, some Council members indicated that inflationary pressures remained low in the major developed economies, where core inflation fell in April 2010 to historically low levels. They made a point that a drop in oil prices in the world markets in May 2010 could contribute to a decline in headline inflation in the world. Other Council members, however, assessed that the recent fall in oil prices had been associated with the appreciation of the US dollar, and therefore its disinflationary impact would be limited. Furthermore, they also pointed out that a strong growth in euro-denominated

commodity prices observed until April 2010 may be conducive towards an increase in inflation in the euro area.

While analysing the situation in the Polish economy, it was highlighted that the persistent upward trend in industrial output, further increase of economic indicators, and improving situation on the labour market confirmed the continued recovery. Some Council members indicated that the low level of investment in the corporate sector may limit future economic growth in Poland. Other Council members argued that the low level of investment was typical of the current phase of the business cycle.

While discussing the impact of the national mourning and the flood on the Polish economy, some Council members believed that those events would have a minor impact on the economic growth in Poland. Other Council members assessed that the national mourning could significantly affect consumer demand, and therefore April 2010 was likely to bring lower growth of retail sales. Moreover, some Council members pointed out that the flood had not yet come to an end, so there was considerable uncertainty regarding the scale of its impact on the economy. They made a point that the increase in investment (including public investment) as a result of the necessary removal of flood-related damage may be conducive to higher growth in subsequent quarters. At the same time, some Council members referred to uncertainty about the impact of flood on the inflationary developments in Poland, noting that the flood can contribute towards the growth in some prices, including those of unprocessed food and insurance.

In the discussion on inflationary developments, some Council members assessed that inflationary pressures in the Polish economy remain moderate at the current juncture. More specifically, those members highlighted a clear decline in core inflation rates observed in recent months, which - besides statistical effects - largely reflected an earlier appreciation of the zloty exchange rate and easing of cost and demand pressures. In their view, these factors should be determining inflation also in the coming months. Moreover, as those Council members claimed, continued relatively low growth in unit labour costs - characteristic of the current phase of the business cycle - and stable inflation expectations of economic agents should favour inflation running at the level which would pose no risk to meeting the inflation target over a one-year horizon. In addition, some Council members indicated that subdued lending and low capacity utilization in the economy would also have a dampening impact on the inflation in Poland. It was emphasized that most available forecasts implied the persistence of low inflation in coming months.

Other Council members stressed, however, that April 2010 was a consecutive month of a marked hike in inflation on a monthly basis, and also noted that the level of consumer prices rose by 1.6% in the first four months 2010 as a result of those increases. They emphasized that the balance of risks for short-term NBP inflation forecasts was asymmetrical and pointed to a greater risk of higher inflation than would follow up from the central path. Those members also drew attention to the hikes observed in recent months in prices of certain goods imported from countries with low production costs and to the stabilisation of China's share of Polish imports. According to those Council members it may indicate that while recovering from the current economic slowdown, inflation would not be reduced by the increasing share of these goods in consumption, as was the case during the previous downturn. Moreover, some Council members pointed out that the recent weakening of the zloty exchange rate, increases in administered prices and strengthening economic recovery should contribute towards higher inflation in Poland.

While discussing the zloty exchange rate and its impact on inflation, the Council considered that the current exchange rate of the zloty was marked by high volatility. In view of the Council, changes in investors' sentiment in global financial markets, largely determined by changing perception of fiscal risk in Greece and some other euro area economies, significantly influenced short-term zloty exchange rate fluctuations. Some Council members pointed out that in line with the convergence of the Polish economy, the appreciation of the zloty exchange rate may be expected in the longer term, and that the current disturbances were not of a permanent character. Uncertainty on financial markets may, however, impact zloty exchange rate developments in the short term.

In the discussion on the labour market situation, a gradual increase in employment in the corporate sector and a decline in the seasonally-adjusted unemployment rate in April 2010 were pointed at. Some Council members took note that employment growth in the corporate sector had not been so far accom-

panied by a significant increase in wage pressure. Other Council members, however, emphasized that the growth rate of social security and health contributions indicated that the increase in wages in the economy may be stronger than in the corporate sector, whereas a rapid growth in disposable income in Q4 2009 may reflect a fast growth in income from other sources than labour. Moreover, those members assessed that the growing ability of enterprises to finance spending may make them more willing to increase wages or employment. At the same time, those members pointed out that April 2010 was the second consecutive month of increase in the annual real wages in the corporate sector.

While analysing credit market developments, it was pointed at further decline in the value of corporate loans, in particular in investment loans, and low growth of loans to households. Some Council members argued that low level of lending to the corporate sector was typical of the current phase of the business cycle. They emphasized that the demand for credit may also be limited by favourable liquidity conditions of enterprises, as evidenced by the liquidity ratios which rose in Q1 2010 to their historical heights and by a robust growth in corporate deposits. Other Council members pointed out, however, that the data on the liquidity of enterprises covered relatively large companies, whereas limited access to loans adversely affects the development prospects of small and medium-sized enterprises, which have higher demand for external financing in the form of bank loans.

Referring to the prospects of lending, some Council members pointed out that thanks to their strong capital position banks could increase the supply of loans. According to those members of the Council, at the time being the turmoil in international financial markets limits the increase in the supply of housing loans denominated in foreign currencies by creating obstacles to their refinancing. If the turmoil recedes, this segment of the credit market may show a rapid expansion.

While addressing the fiscal policy, some Council members assessed that fiscal policy tightening in the short term would result in a slower economic growth in Poland. However further fiscal consolidation is required to reduce the general government deficit. Moreover, those members assessed that postponing Poland's accession to the euro area would reduce incentives for early fiscal reforms.

While referring to Poland's compliance with the price stability criterion of the Maastricht Treaty, some Council members pointed out that countries with negative twelve-month average HICP inflation rates had been included to determine the reference value for the price stability criterion in the May 2010 Convergence Reports of the European Commission and European Central Bank, which resulted in a very low level of the reference value. According to these members, regarding the countries with negative twelve-month average HICP inflation rates as the best-performing countries in terms of price stability may complicate the prospective fulfilment of this criterion by Poland.

While analysing monetary policy abroad and at home, some Council members indicated that the central banks from Central and Eastern Europe had further eased their monetary policies and, according to market expectations, the ECB should raise interest rates at the earliest in the following year. Other Council members argued, however, that the parameters of monetary policy in Poland may change earlier than in the developed economies. Some Council members assessed at the same time that the increase in ex post real interest rate (CPI-deflated) in April 2010 was indicative of a more restrictive monetary policy.

The Council assessed that the uncertainty concerning the impact of the situation in the external environment on the outlook for economic growth in Poland and on the zloty exchange rate justified keeping the NBP interest rates unchanged at the current meeting. Moreover, some Council members argued that a more comprehensive assessment of the outlook for inflation and economic growth in Poland will be possible after considering the June inflation and GDP projection.

The Council kept the interest rates unchanged: the reference rate at 3.50%, the lombard rate at 5.00%, the deposit rate at 2.00%, the rediscount rate at 3.75% and the discount rate at 4.00%.

#### Minutes of the Monetary Policy Council decision-making meeting held on 30 June 2010

The Monetary Policy Council discussed primarily the outlook for economic growth and inflation in the Polish economy, the economic situation in the global economy with emphasis on the euro area, and the situation of the public finance sector.

While discussing the situation in Poland's real economy, it was emphasised that the latest data indicated a stabilisation of economic growth. Some members of the Council pointed out that the structure of economic growth in 2010 Q1, including the high share of inventory build-up, might signal slower GDP growth in the months to come. Moreover, some members of the Council indicated that the flood may also have had a negative impact on GDP in 2010 Q2.

While analysing the outlook for economic growth in Poland, some members of the Council expressed an opinion that its considerable acceleration was currently very unlikely. They emphasized that low economic activity in the euro area would be a factor curbing GDP growth in Poland. Special attention was paid to the risks to the outlook for German exports, and, consequently, for Polish exports, brought about by a growing macroeconomic imbalance in China due to fast economic growth observed in that country. Some members of the Council pointed to the need to take a different look at the link between economic growth in Western Europe and the growth of Polish exports to that region. They emphasized that it was necessary to accept the new reality, namely that in the years to come growth in the Western European countries would reach approx. 1-1.5% annually, which, however, should not prevent Polish exports from growing by 6-10% per year. At the same time they pointed out that in the period from 2004 till the outbreak of the crisis Polish exports had grown 14-23% yearly despite the fact that GDP of the Western European countries grew by a mere 2-2.5% per year.

Some members of the Council emphasized that intensified financial-market turmoil driven by fiscal imbalances in some Western European countries and potential problems faced by financial institutions from European countries could be a more significant threat to domestic economic growth than the absence of clear signs of economic recovery in the euro area. Yet members of the Council pointed out that the hitherto observed zloty exchange rate depreciation might support GDP growth in Poland. Some members of the Council also pointed to the possibility of faster than currently anticipated revival in domestic demand, which might be supported by the good financial condition of enterprises.

While discussing the investment activity of enterprises it was pointed out that corporate investment was being curtailed due to low production capacity utilization, relatively low demand growth and high uncertainty about the outlook for global economic growth as well as about changes in public finances. In the opinion of some members of the Council, corporate investment might thus remain low in the coming years. Other members of the Council assessed, however, that an increase in corporate investment in response to revived demand might be equally as fast as its decline during the crisis. In the opinion of those members of the Council a fast revival of corporate investment might be supported by enterprises' very good financial condition, including the liquidity condition.

Some members of the Council assessed that limited bank lending would have a negative impact on investment, especially that of SMEs whose financial condition was not as good as the situation of large enterprises. Other members of the Council argued, however, that almost 2/3 of enterprises in Poland did not use bank loans to finance their investment; therefore, the banks' lending policy will not significantly limit their investment activity. Moreover, some members of the Council indicated that the currently low growth in corporate lending was a result of low demand for credit, which was connected with low investment activity and was characteristic of an early stage of economic recovery.

While analysing the results of the June GDP projection based on the NECMOD model some members of the Council assessed that the strong acceleration of public investment and absorption of EU funds in the period preceding the 2012 UEFA European Football Championship anticipated in the projection was very unlikely. For this reason and due to slower economic growth abroad, in the opinion of those members of the Council the year 2011 might be expected to bring lower investment and GDP growth than assumed in the projection.

While analysing the inflationary processes in Poland, some members of the Council judged that the current stage of economic recovery had a non-inflationary character. They pointed out that the negative output gap and slow growth of unit labour costs in the economy would contribute to keeping inflation low. At the same time, some members of the Council assessed that the hitherto observed zloty exchange rate depreciation would be conducive to a rise in inflation. Other members of the Council emphasized, however, that the impact of the zloty exchange rate depreciation on inflation in Poland might be limited by a large share of intra-corporate trade in imports.

While discussing the outlook for inflation developments in Poland, some members of the Council assessed that due to the persisting low level of production capacity utilization and a high unemployment rate, an acceleration of economic growth did not threaten the stabilization of inflation at the level of the NBP inflation target. Other members of the Council argued, however, that even a moderate acceleration of GDP growth might lead to a rise in demand pressure, since - as a result of the global financial crisis potential output growth in Poland might have declined. Those members stressed that both the June projection based on the NECMOD model and other forecasts prepared at the NBP pointed at a rise in inflation above the inflation target over the monetary policy horizon. They pointed out that in accordance with the results of the June projection the probability of inflation running above the inflation target over the monetary policy horizon was twice as high as the probability of inflation running below the inflation target. They argued that CPI inflation might run at a level higher than that suggested by the central projection path. This may be driven by both faster growth in food and energy prices and an earlier intensification of the wage pressure in the Polish economy than those assumed in the projection. They expressed an opinion that the possibility of growth in food and energy prices over the next twelve months being faster than assumed in the projection was suggested by short-term forecasts prepared at the NBP. Moreover, in the opinion of those members of the Council, the world prices of energy commodities, and, in consequence, energy prices in Poland, might grow faster than expected in the projection also over a longer horizon.

While addressing the June projection's results concerning wages in the economy, some members of the Council pointed out that the relatively low wage growth in the subsequent quarters resulted from the assumption of incomplete adjustment of employment to the fall in demand during the economic slowdown (the so-called "labour hoarding"). At the same time, they indicated that this "labour hoarding" might be attributed to growing specialization of enterprises which results in higher costs connected with staff rotation and to a decline in the pool of qualified labour force caused by emigration. According to those members of the Council, given such sources of this phenomenon it might be a factor intensifying the wage pressure, unlike in the previous economic recovery period. Those members emphasized that in the quarters to come a higher growth in wages in the economy than that anticipated in the projection might be suggested by: accelerating growth in wages in the corporate sector at the beginning of 2010 Q2, high wage growth in the public sector in 2010 Q1 and a relatively large number of job offers per one unemployed person.

In the opinion of those members of the Council, faster growth of wages might also be driven by a good financial condition of firms, including public sector enterprises, which might reduce their resistance to wage demands of employees. A similar impact may be exerted on the one hand, by regulatory changes increasing the flexibility of wage determination in the public sector, and, on the other hand, by the increase in the minimum wage scheduled for the end of 2010. Those members of the Council assessed that the recently observed high wage growth in the mining industry might boost wage demands in other public sector enterprises. Other members of the Council pointed out, however, that the persisting relatively high unemployment would be a factor limiting wage growth in the economy.

Some members of the Council argued that also the number of persons employed in the economy might be higher than that assumed in the projection. This is suggested by gradually growing employment in the enterprise sector whose changes in the past were indicative of changes in employment in the whole economy. Both a faster wage growth than that anticipated in the projection as well as a higher growth in the number of the employed would mean a stronger inflationary pressure stemming from the labour market and would increase the growth in consumption demand.

While discussing the fiscal imbalance in the Western European countries, members of the Council paid attention to the high uncertainty surrounding the implementation of measures aimed to reduce it. It was emphasised that a fiscal consolidation in some of the euro area countries was necessary as its absence could increase turmoil in the financial markets. Some members of the Council assessed that the fiscal consolidation might have a negative impact on economic growth in Poland's trading partners, and, as a result, on Polish exports. Some members of the Council indicated that the fiscal policy tightening might result in private demand revival and faster economic growth in European countries (i.e. the so-called non-Keynesian effects of fiscal tightening might occur). On the other hand, countries which fail to implement a consolidation of public finances or which continue to pursue expansionary fiscal policy, might see a decline in economic growth caused by the fiscal imbalance's negative impact on private demand. Those members pointed out that the impact of the fiscal consolidation on economic growth would depend largely on the structure of the fiscal adjustment (including, in particular, on whether the deficit would be reduced mainly through tax increases or expenditure cuts, and on which expenditures would be reduced). They also emphasised that the emergence of expansionary effects of a fiscal tightening was dependent upon the credibility of the fiscal policy measures.

At the same time, other members of the Council assessed that the scale of the planned fiscal tightening in the Western European countries was not large. Therefore, in the opinion of those members of the Council the impact of the fiscal consolidation on economic growth would be small. They emphasized that amidst low interest rates the occurrence of strong non-Keynesian effects of the fiscal tightening was very unlikely.

The Council paid significant attention to the public finance situation in Poland. It was pointed out that high liquidity in the international financial markets at the moment facilitated the financing of the state budget deficit, and the public finance situation in Poland was hitherto more favourable than that observed in many European countries. Some members of the Council indicated that together with the progressing economic recovery in Poland the general government deficit to GDP ratio, an important indicator used by investors to assess a country's credit risk, would improve as well. Yet, the majority of Council members emphasized that economic recovery alone would not be sufficient to reduce the deficit of the general government sector in Poland to a low level, and that it was necessary to undertake measures aimed at rationalizing public expenditure. It was pointed out that if the other European economies consolidated their public finances and Poland ran a persistently high general government deficit, the costs of its financing might increase.

At the same time, some members of the Council assessed that a considerable reduction in the public finance imbalance in Poland was rather unlikely in the coming months. Those members pointed out that no drafts of legal acts had hitherto been presented which would allow for a considerable reduction of the state budget deficit in the next few years. Some members of the Council indicated that due to some expenditures being transferred outside the state budget, current data on state budget implementation did not allow for an assessment of the situation in the general government sector as a whole. It was emphasised that should the general government deficit remain high it might be necessary to pursue a more restrictive monetary policy.

While analysing the monetary policy abroad and in Poland, it was pointed out that given the absence of clear signs of economic recovery in the euro area, interest rates in this region might be expected to run at a low level for a longer period of time. In the opinion of some members of the Council this was one of the factors to be taken into account while deciding about the monetary policy parameters in Poland. Other members of the Council argued, however, that due to the differences in business cycles in Poland and in the euro area, observed over the past few years, the adjustment of monetary policy parameters in Poland might be needed earlier than in the euro area.

While discussing the impact of the interest rate disparity on the exchange rate, some members of the Council indicated that at the moment this disparity did not have any significant impact on exchange rate developments, as suggested by similar exchange rate developments observed in emerging economies regardless of whether they had already embarked on a monetary policy tightening or not. Those members

emphasized that should many countries continue to observe tensions in the public finance sector, the exchange rate's sensitivity to interest rate changes might remain limited.

While discussing developments in the Polish zloty exchange rate some members of the Council pointed out that due to the real convergence process the real zloty exchange rate should appreciate in the long run. At the same time those members of the Council indicated that in the past few years the exchange rate of the zloty had been highly volatile. It was pointed out that currently changes in international financial market sentiment had a considerable impact on zloty exchange rate. In the opinion of those members of the Council, given the likelihood of risk aversion remaining high in the financial markets, the exchange rate of the zloty will not be a factor curbing inflation in the Polish economy. Yet, some members of the Council assessed that the currently observed zloty depreciation might be temporary.

While discussing the current level of interest rates in Poland, it was assessed that the uncertainty concerning the situation in the external environment and its impact on the Polish economy, including the zloty exchange rate developments, justified keeping the NBP interest rates unchanged.

At the same time, some members of the Council indicated that interest rates in Poland were running at a level lower than the natural rate for the Polish economy. According to those Council members further economic recovery and a growing risk of inflation running above the NBP inflation target might speak in favour of raising the interest rates. Yet, other members of the Council assessed that the absence of clear signs of economic recovery in the euro area, limited investment activity of enterprises and no signs of revival in bank lending to firms might justify the continuation of the existing monetary policy.

The Council kept the interest rates unchanged: the reference rate at 3.50%, the lombard rate at 5.00%, the deposit rate at 2.00%, the rediscount rate at 3.75% and the discount rate at 4.00%.

#### Minutes of the Monetary Policy Council decision-making meeting held on 24 August 2010

During its meeting the Monetary Policy Council discussed the economic growth and inflation in Poland, situation in the labour market and in the public finance sector, both in Poland and abroad, and the outlook for GDP growth in the external environment of the Polish economy.

While discussing the outlook for economic growth in Poland, some members of the Council assessed that the recently released data were indicative of a stabilising rate of economic growth. They pointed out that domestic economic activity might be limited by potentially weakening growth in the external environment of the Polish economy. At the same time, these members pointed to the persistently weak investment demand of the private sector. It was emphasised that most enterprises do not intend to carry on investments increasing their production capacity given their expectations of economic growth stabilising at the current level. Moreover, some Council members pointed out that the announced change in VAT rates would be mitigating household consumption growth in 2011. Those members also emphasised that demand in the Polish economy would be curbed by the tightening of banks' lending policy with respect to households' loans resulting from Recommendation T entering into force.

However, forecasts indicating the possibility of a marked GDP acceleration in Poland were also invoked. It was pointed out that GDP growth in the coming quarters would be driven by inventories being rebuilt by enterprises. In turn, growing employment will be conducive to private consumption rising faster than so far observed. In the opinion of some members of the Council further recovery in economic activity will also be supported by growing exports. Those members argued that given the current exchange rate of the zloty, high export growth would be a driving force behind improvement in the financial condition of exporters, and, consequently, behind an increase of employment and wages by those entities. Growing aggregate wages in the sector of exporters will be, in turn, conducive to growing consumption which may lead to a rapid revival of investment in the private sector given the level of capacity utilization currently exceeding the long-term average.

While discussing the situation in the labour market, it was pointed out that growing employment in the enterprise sector was accompanied by low wage growth. It was emphasized that such improvement in

the labour market situation was favourable from the point of view of inflationary developments as it curbed the risk of a simultaneous increase in demand and cost pressure. Some members of the Council pointed out that neither data concerning planned changes in wages in enterprises nor wage expectations were indicative of the risk of considerable acceleration in wage growth.

Other members of the Council emphasized, however, that some information from the labour market pointed to the wage pressure possibly rising in the subsequent quarters. The accelerating wage growth in enterprises in 2010 Q2 and the possibility of a rise in public sector wage growth in 2010 Q3 as a result of increases in teacher wages were highlighted. Those members also drew attention to improving forecasts of employment in enterprises, in particular, in microenterprises, the most likely to yield to wage pressure. At the same time, some members of the Council argued that with the economic growth strengthening further in Poland the risk of rising wage pressure is increased by a relatively high and still growing level of wage expectations of the unemployed, adversely affecting their readiness to take up employment. Some members of the Council also indicated that lifting of restrictions on the access to the labour market in Germany and Austria for citizens of EU member states from Central and Eastern Europe in 2011 might lead to a drop in the number of the economically active in the Polish economy, and, in consequence, contribute to increase in wage pressure.

While analysing the inflationary processes in Poland, some members of the Council pointed out that, as anticipated, CPI inflation was running at a relatively low level. Those members also pointed at a continuing decline in all core inflation measures. At the same time, they emphasised that despite previously expressed concerns about the developments in domestic food prices, in the past few months changes in those prices were acting towards inflation decline. Yet, other members of the Council indicated that CPI inflation was currently higher than indicated by some of the forecasts made at the beginning of 2010.

Referring to inflation developments, some members of the Council pointed out that according to the available forecasts, inflation was running close to the NBP inflation target in the monetary policy horizon. They assessed that inflation would be curbed by moderate economic growth. In their opinion, low growth of unit labour costs in the economy, including their continuing decline in industry, is also a factor limiting the rise in inflation. Other members of the Council emphasised, however, that in the past the growth rate of unit labour costs in industry had not been a good leading indicator of inflationary pressure in the economy. Since inflation fell to a low level, this growth rate was positive only at the peak of the boom and during the economic slowdown. They assessed also that amidst likely acceleration of economic growth, increasing demand pressure would contribute to a rise in inflation. At the same time, they pointed out that in the case of a considerable slump in economic growth, zloty exchange rate depreciation resulting from a possible worsening of the public finance situation could constitute a risk for price stability.

Some members of the Council emphasized that a marked increase in the growth of producer prices might be indicative of the risk of inflation acceleration. They also pointed out at rising cereal prices in the global markets. Some members of the Council argued that despite unfavourable demand situation in some countries, the global cereal supply should not be significantly reduced, which – given high stocks of these commodities – should limit the rise of their prices. Yet, other members of the Council pointed out that given still significant liquidity surplus in the global financial markets there was a risk of considerable rise in food prices.

Referring to the change in VAT rates scheduled for the beginning of 2011, members of the Council pointed out that the increase in the price level driven by this change should be rather insignificant, and given stable inflation expectations, its impact on CPI inflation might be expected to be only temporary. Some members of the Council emphasized, however, that changes in VAT rates might boost inflation expectations. In the opinion of those members of the Council, the risk of rising inflation expectations was also increased by growing prices of some food commodities in the world markets and the possibility of a rise in administered prices resulting from the need to reduce high public finance deficit. At the same time, some members of the Council assessed that inflation expectations were currently running at an increased level.

While discussing the situation in the public finance sector in Poland, some members of the Council pointed out that despite relatively favourable data concerning realization of the state budget and revenues from social insurance contributions, there was a risk of a significantly higher deficit in the public finance sector in 2010 than previously anticipated. In the opinion of those members of the Council, budgetary situation of local governments might be a factor contributing to an increase in public finance deficit. Yet, some members of the Council drew attention to the uncertainty about the growth of local governments' debt in 2010 and assessed that a potential rise in the public finance deficit in relation to GPD did not have to be significant.

While analysing medium-term risks for economic growth and inflation, the Council also discussed the Long-term Financial Plan for the State. It was emphasized that consolidation measures presented in this Plan were not sufficient to significantly limit the public finance deficit and halt the fast growth of public debt. Some members of the Council also pointed out that there was a risk of higher level of expenditure, as compared to the level anticipated in the Plan, being adopted in the Budget Act for 2011. At the same time, some members of the Council claimed that continuation of loose fiscal policy would increase the risk of growing inflationary pressure in the Polish economy, in particular, in the case of reversal of capital flows in the global financial markets. Yet, other members of the Council argued that fiscal policy should not boost inflationary pressure given the planned tightening of the fiscal policy in 2011, although the scale of this tightening would not be considerable. It was emphasised that a more comprehensive assessment of the implications of fiscal environment for the monetary policy would be possible after getting acquainted with the draft state budget for 2011.

While discussing the external environment of the Polish economy, members of the Council pointed at a decline of GDP growth in 2010 Q2 in the United States and China and acceleration of GDP growth in the euro area, driven mainly by a strong rise in economic activity in Germany. In the opinion of some members of the Council, incoming information suggests that recovery in the American economy begins to falter which is likely to have a negative impact on the global economic outlook. Other members of the Council assessed that decline in GDP growth in the United States was in line with the expectations of lower potential output growth in major developed economies after the financial crisis. On the basis of the above and based on the past recession experience they insisted that the likelihood of double dip in the global economy was minor.

Referring to the fiscal situation abroad, some members of the Council argued that, although the tensions in financial markets related to high imbalance of public finance in some euro area member states had subsided, the problem of excessive debt remained unsolved. Those members emphasized that it was at present impossible to rule out another wave of tensions related to high indebtedness which would adversely affect the global economic outlook. At the same time, some members of the Council pointed out that persisting high imbalance of public finance in major developed economies might have a negative effect on their potential growth.

During the meeting the uncertainty about the current potential output growth in Poland was also addressed. Some members of the Council assessed that potential output growth declined as a result of the global financial crisis and also due to other factors, not related with the crisis. Other members of the Council maintained that moderate rise in unemployment in Poland during the economic slowdown and still growing number of economically active persons reduced the likelihood of decline in potential output growth.

During the discussion about interest rates in Poland and abroad, some Council members pointed to the continuation of expansionary monetary policy by major central banks in developed countries. According to those members, under such circumstances, increase in interest rate disparity relating to a potential rise in the NBP interest rates could contribute to increased capital inflow to the Polish economy and to an excessively rapid zloty appreciation. Other Council members argued, however, that the impact of the increased interest rate disparity on the zloty exchange rate might be limited. In this context, those members indicated that a few central banks in developed and developing countries had recently increased interest rates. According to those members of the Council, the impact of the increased interest rate disparity on the zloty exchange rate might also be limited by other factors affecting the exchange rate, including the

situation in the public finance sector. It was further indicated that amidst strong inflow of portfolio capital connected with high borrowing needs of the government, changes in investor attitudes to emerging economies could constitute a major risk for the zloty exchange rate developments.

Monetary aggregate developments were also discussed at the meeting. Some members of the Council emphasised that the growth of M3 remains low. In particular, some of those members pointed out that there was no revival in lending and the growth of loans to enterprises stabilised at a low level. Other members of the Council indicated that the growth of M3 had increased in past few months and was higher than during the recovery from the previous economic slump. They also drew attention to the rise in demand for most loan types, as signalled by banks.

While considering the decision on interest rates, some Council members argued that the present GDP growth, with a possibility of its acceleration and a likely reduced potential output growth, could contribute to a rise in inflationary pressure in the monetary policy transmission horizon. Those members emphasized that the current level of interest rates was adequate for a situation of strong slowdown in the growth of the Polish economy and the recession in its environment, and that given recovery gaining strength in Poland it was justified to increase the NBP interest rates. Moreover, according to those members of the Council, the increase in interest rates would contain the risk of a rise in inflation expectations and favour the growth in savings rate in the economy, and would, in consequence, contribute to maintaining sustainable economic growth in a longer period. In addition some Council members argued that in order to tighten monetary policy an increase in the required reserve rate might be justified.

Other Council members pointed to the continuing adverse growth outlook in the external environment of the Polish economy and the lack of clear signals of further acceleration in the domestic economic growth. Those members emphasized that the currently low inflationary pressure and weakening of factors contributing to a rise in inflationary pressure in the recent period justified keeping the NBP interest rates unchanged. They also indicated that a rise in interest rates could increase the risk of a too quick zloty exchange rate appreciation. Some Council members argued that an increase of interest rates could weaken the recovery of economic growth in Poland too much.

A motion to raise the required reserve rate by 50 basis points was put forward. The motion did not pass. A motion to raise NBP interest rates by 50 basis points was also put forward. The motion did not pass. The Council kept the interest rates unchanged: the reference rate at 3.50%, the lombard rate at 5.00%, the deposit rate at 2.00%, the rediscount rate at 3.75% and the discount rate at 4.00%.

#### Minutes of the Monetary Policy Council decision-making meeting held on 29 September 2010

During its meeting the Monetary Policy Council discussed issues related to economic growth and inflation, situation in the labour market and in the public finance sector, changes in monetary and credit aggregates and developments in the zloty exchange rate.

While considering external conditions the Council members pointed to the continuation of moderate economic activity abroad. It was emphasised that after strong GDP growth observed in the euro area in 2010 Q2, the pace of recovery in this economy would most probably decelerate slightly. It was indicated that the recent period saw a deterioration in the outlook for GDP growth in the United States, even though it was assessed that the risk of a double dip in the US economy was rather low. Some members of the Council pointed out that economic growth abroad was to a large extent associated with stimulus packages and that the persisting uncertainty as to the sustainability of the recovery was urging central banks in the largest developed economies to continue with expansionary monetary policy. Other Council members emphasised that the weakening of GDP growth in developed economies was consistent with the expected lower potential output growth in those economies following the financial crisis. They pointed out that this weakening was also driven by a deep fiscal imbalance and the ensuing uncertainty as to the outcome of economic decisions. Those Council members also claimed that the effects of expansionary monetary policy, including the effects of unconventional measures undertaken and envisaged by

the major central banks, are another important uncertainty factor for global economic growth and inflation.

While discussing the outlook for economic activity in Poland, some Council members assessed that both the available forecasts and the incoming data, including data on GDP in 2010 Q2 and on industrial output and retail sales in 2010 Q3, suggested that GDP continued on an upward trend. Those members assessed that the economic growth expected in the coming quarters, even though low in relation to the period before the global financial crisis, will be relatively strong as compared to the potential output growth that was lowered – in their opinion – due to the crisis. Other Council members argued that GDP in Poland had been positively affected by stimulation packages introduced in other countries that are currently expiring and they assessed that economic growth would remain moderate. At the same time, these Council members pointed to the worsening business tendency indicators.

While addressing the outlook for consumption growth, some deterioration in consumer sentiment indicators over the recent period was emphasised. Some members of the Council argued that this was to a large extent connected with the worsening assessment of the overall economic situation in the country and, to a lesser degree, with the worsening assessment of the financial standing of households, which meant – in the opinion of those Council members – that the deterioration of consumers' sentiment did not unequivocally signal a gloomy outlook for consumption growth. They pointed to the positive impact of the improving situation in the labour market on the future consumption growth. Other Council members stressed that the good data on consumption in Q2 and retail sales in Q3 might have resulted from a transitory rise in demand connected with the replacement of durable goods in the areas affected by floods, increased car purchasing due to the abolition of VAT discounts on the purchase of cars with goods vehicle approval certificates which is scheduled for the end of 2010 and the transfer of some expenses related to the VAT rate increase to be introduced at the beginning of 2011.

The Council paid considerable attention to the prospects of investment growth. It was argued that the level of production capacity utilisation had once again increased in 2010 Q3, which in combination with the very good financial results of enterprises in the first half of 2010 should support the revival of investment activity. In turn, the persisting uncertainty about future demand is likely to deter enterprises from expanding their production capacity, even though – according to some Council members – the relative importance of this factor will be rather decreasing in relation to the effect of rising production capacity utilisation and the very good financial situation of enterprises. At the same time, those members emphasised that the rapidly growing revenue from exports could be conducive to boosting investment of exporters. The possibility of such a revival is supported by NBP analyses which suggest that in Q2 the negative investment growth had been halted in this group of companies. Other Council members emphasised that GUS data on investment activity of enterprises had not confirmed so far any investment recovery.

While referring to the labour market situation, it was pointed out that the number of the employed in the economy increased in 2010 Q2 and employment in the enterprise sector continued to rise gradually in Q3. On this occasion, some Council members emphasised that, due to the limited scale of redundancies in 2008-2009, the number of the employed in the economy was close to the level recorded in the period before the economic slowdown. At the same time, the average monthly employment increases in the enterprise sector range at a relatively high level, lower only to that in 2007. Some Council members pointed out that rising employment was accompanied by increases in the number of the economically active, which weakened tensions in the labour market and the rise of wage pressure. Other Council members, however, argued that a further increase in labour supply was likely to be constrained by demographic factors which decelerated the growth of working-age population. Some Council members pointed out that an additional factor that could adversely affect the supply of labour in Poland was the abolition of restrictions on Polish citizens in accessing the labour market in Germany and Austria starting from May 2011.

Some Council members argued that the current wage increase was not large, and that the NBP economic climate survey showed that the percentage of enterprises planning to raise wages remained moderate, which might be indicative of wage discipline being maintained in the enterprise sector. Other Council

members stressed that the percentage of employees who, according to declarations of companies, were to be covered by pay rises in Q4 approached its long-term average. Those members assessed that the dampening effect of low growth of unit labour costs on inflation may begin to wane, as evidenced by the first – since 2008 Q2 – acceleration in unit labour cost growth in the economy in 2010 Q2. Moreover – according to those Council members – raising the minimum wage in 2011 might be a factor increasing the wage pressure.

While discussing inflation developments, it was stressed that both the annual CPI and core inflation remained at low levels, even though a rise in the CPI close to the target could be expected as early as in September 2010. It was pointed out that inflation would be raised by strong increases in the prices of agricultural commodities in the world observed in recent months. At the same time, however, some Council members argued that the growth of food prices in Poland was lower than previously anticipated, considering both domestic (negative impact of floods on crops) and external factors (high growth of world food prices). On this occasion, some Council members claimed that, due to the size of the domestic agricultural market, also in the future the transmission of price increases in the world markets on the prices in Poland may be limited. Other Council members pointed out that, due to the links between agricultural markets at an international level, the growth of domestic food prices might be expected to accelerate in the coming period, bringing about higher inflation than it had been previously assessed. Some members also indicated a strong increase in the annual growth of producer prices in industry, which may signal an acceleration of cost pressure.

While analysing changes in inflation expectations, it was pointed out that in the case of households the expectations had fallen in September, yet some Council members emphasized that they continued to run above the current inflation. It was also stressed that the forecasts of financial sector analysts had stabilized above the NBP inflation target. At the same time, some Council members pointed out that the stabilisation of inflation forecasts of bank analysts was accompanied by rise in their expectations of NBP interest rate hikes. In this context, those Council members argued that the lack of monetary policy tightening might pose a risk of an upward revision of these forecasts. In their opinion, another factor that could be conducive to raising analysts' forecasts and inflation expectations (especially those of enterprises) was the continuing recovery in economic activity and the associated rise of cost pressure as well as diminishing of demand barriers.

While discussing the situation in the public finance sector, some Council members pointed out that some of the measures announced in the budget draft for 2011 were one-off, which meant that they would not contribute to any permanent deceleration in the rate of public debt accrual. Other members emphasised that although the fiscal imbalance in Poland was large, it did not differ significantly from the average in EU countries. According to those Council members, the relatively favourable assessment of Poland's economic situation and the reduction of new issues of Treasury securities by some countries characterised with currently largest fiscal imbalance might be helpful in sustaining high demand for Polish Treasury securities. This should facilitate the financing of the public finance deficit, unless investor sentiment deteriorated strongly and capital flows in global financial markets reversed. While addressing the impact of fiscal policy on inflation, some Council members argued that the announced wage freeze in the public sector, the abolition of certain tax reliefs and exemptions, and rises in VAT rates, once effective, would reduce the demand pressure in 2011 to some extent.

While analysing the developments of monetary and credit aggregates, some Council members pointed out that M3 growth was still moderate, similarly to the growth of lending to the private sector, which resulted, on the one hand, from stable growth in lending to households and, on the other hand, from the lack of revival in lending to the corporate sector. Other Council members stressed that August 2010 brought further acceleration of M3 growth, and the growth of housing loans was significantly faster than the growth of disposable income of households. Some members of the Council pointed out that despite NBP interest rates being maintained unchanged the interest charged on loans to households decreased. Moreover, some Council members argued that since May 2010 the value of loans to enterprises (after adjusting for exchange rate fluctuations) had been gradually increasing, and that the slow growth of these loans resulted primarily from enterprises' limited demand for credit. A limited growth in corporate de-

mand for credit is indicated by NBP survey results, where the percentage of enterprises applying for loans remains low, with a clear increase in the share of loan applications approved by banks.

While referring to the zloty exchange rate, some Council members argued that the recently observed appreciation of the zloty would be conducive to curbing inflation. The Council also discussed factors that could affect the zloty exchange rate in the future, including the equilibrium exchange rate, the role of interest rate disparity, the risk of changes in investor attitude to emerging economies and surplus liquidity in global financial markets. In particular, some Council members pointed out that under expansionary monetary policy continuously pursued by central banks in major developed economies a possible NBP interest rate hike could be conducive to an excessively rapid zloty appreciation. Other Council members, however, argued that the impact of the interest rate disparity on the zloty exchange rate might be offset by other factors affecting the exchange rate, including the situation of the public finance sector in Poland and abroad, and high uncertainty persisting in global financial markets.

While considering the decision on interest rates, some members of the Council argued that GDP growth in 2010 Q2 and the possibility of its acceleration in subsequent quarters under the likely reduced potential output growth, combined with further improvement in the labour market situation, could – in the absence of an NBP interest rate hike – contribute to a rise in inflationary pressure in the monetary policy transmission horizon. Similarly to the Council meeting held in August, those members also emphasised that the current level of interest rates was adequate for the situation of turmoil in global financial markets and the ensuing severe slowdown observed in the Polish economy. In the opinion of those Council members, a hike in interest rates, despite the expansionary monetary policy pursued by major central banks in the world, would mean adjusting the rates to the change of the conditions. According to those Council members, such an adjustment of interest rates would also limit the risk of a rise in inflation expectations.

Other members of the Council argued that the moderate rate of economic growth and the accompanying limited wage and inflationary pressures, along with the risk of weakening global economic growth in the subsequent quarters, justified keeping the NBP interest rates unchanged. Moreover – they argued – an NBP interest rate hike, amidst major central banks maintaining the expansionary monetary policy, could increase the risk of an overly rapid zloty exchange rate appreciation.

A motion to raise the NBP interest rates by 50 basis points was put forward at the meeting. The motion did not pass. The Council kept the interest rates unchanged: the reference rate at 3.50%, the lombard rate at 5.00%, the deposit rate at 2.00%, the rediscount rate at 3.75% and the discount rate at 4.00%.

#### Minutes of the Monetary Policy Council decision-making meeting held on 27 October 2010

At the meeting the Monetary Policy Council discussed the outlook for economic growth and inflation, situation in the public finance sector and in the labour market, monetary and credit aggregates and the exchange rate of the zloty.

While analysing the current situation in the real economy and the outlook for economic growth in Poland, fast growth in industrial output, retail sales and exports was pointed out. Some Council members argued that the data on the consumption of households in 2010 Q2 and retail sales indicated that the economic growth, which had so far been mainly reinforced by growing external demand, was increasingly supported by domestic factors. In their opinion the current consumption growth cannot be fully attributed to one-off factors such as rebuilding of assets in the areas affected by floods and transferring some purchases from 2011 in view of the expected change of VAT rates and changes in the regulations on VAT deduction on car purchases. In the opinion of those Council members, the improving labour market situation, including the relatively fast employment growth in the enterprise sector, would act towards further consumption growth. In turn, the strengthening private consumption amid further high export growth could translate into investment recovery in enterprises, even though due to the uncertainty surrounding the future economic situation, including the situation in the public finance sector, corporate investment growth in the quarters to come could remain low. Those members emphasised that the possi-

bility of investment revival is suggested by an increase in production capacity utilisation above the long-run average and favourable financial and liquidity situation of enterprises, allowing them to self-finance investment. Moreover, in the opinion of those Council members, investment growth in the economy in the coming quarters – apart from the quickly growing public investment – might be also supported by housing market recovery, the symptoms of which appeared in 2010 Q3.

Other Council members argued, however, that the incoming data did not unequivocally confirm that the recovery in economic activity was sustainable. They pointed out that some forecasts indicated the possibility of economic growth weakening in 2011 or stabilising at a relatively low level in the next two years. They also emphasised that retail sales growth was most likely being raised by the rapid increase in the sale of automobiles and durable goods, which was driven by one-off factors. After the expiry of the impact of these factors – in the opinion of those Council members – the growth of household consumption may slacken, which is confirmed by the low growth of real wages. Those members also pointed out that investment growth was still very low, and in the recent period the sentiment of enterprises had worsened, including their expectations on output, demand and employment.

While discussing the outlook for inflation in Poland, the Council addressed the results of the inflation projection based on the NECMOD model and other forecasts. It was pointed out that, in line with the October projection, in its entire horizon the probability of inflation running above the NBP inflation target of 2.5% is higher than the probability of inflation running below this target. Other internal NBP forecasts also point to such distribution of those probabilities.

The members of the Council pointed out that in the short term inflation would be driven by rising food prices, caused by supply-side shocks in the country and abroad, changes in indirect tax rates and the rise in administered prices, primarily energy prices. Some Council members assessed that inflation would also be raised by delayed effects of the strong depreciation of the zloty during the economic crisis, which could not yet fully translate into consumer prices in Poland. In the opinion of other Council members, inflation would be limited by factors such as zloty exchange rate appreciation observed in recent months, low inflation in the external environment of the Polish economy and still weak demand and wage pressure, including the positive development of the relationship between the growth of labour productivity and aggregate wages. Some Council members assessed, however, that taking into account a possible decline in the potential growth of the Polish economy as a result of the financial crisis and other factors, the current rate of economic growth was already relatively high and would not be a factor limiting the inflation rise in Poland.

In the opinion of some Council members, after the expiry of factors temporarily raising inflation, in the absence of monetary policy tightening, inflation was likely to remain at an elevated level due to the expected increase in domestic wage and demand pressures, including a likely acceleration in unit labour cost growth and the inflation rise abroad. This is indicated by the forecast steady growth of core inflation net of food and energy prices in the projection based on the NECMOD model. Other Council members, however, assessed that inflationary pressures may be eased by an appreciation of the zloty and fiscal policy tightening in 2012 announced by the government. They also pointed out that inflation would decrease after the supply-side inflationary factors expire.

Board members also discussed the situation of the public finance sector. Some members pointed out that the scale of the planned fiscal tightening in 2011 was not sufficient for curbing the public debt accumulation. Some Council members also indicated that due to the risk of lower than projected revenues from the VAT and lower income from privatisation in 2011, the scale of fiscal tightening and also the reduction of the borrowing needs of the central budget may prove smaller than assumed. Those members also pointed out that the revenues which would be reducing the borrowing needs of the central budget in 2011 were of one-off nature and would not curb the growth of public debt in the following years. Therefore, in order to halt the rapid public debt accumulation it would be necessary to increase the scale of fiscal tightening in the years to come. These members also emphasised that the likely lack of consent to deduct the cost of pension reform from the general government deficit would necessitate a strong fiscal tightening in the coming years in order to meet the requirements of the Stability and Growth Pact. According to those members, the strong fiscal tightening would be a factor curbing economic growth and

inflationary pressure in Poland. Some Council members, however, pointed to the uncertainty concerning the fiscal policy after 2011. Moreover, some Council members pointed out that, because of the possibility of the so-called non-Keynesian effects of fiscal tightening, such tightening does not have to significantly reduce the short-term economic growth if it is mainly based on the reduction of general government expenditure. If, however, it was based on indirect tax increases, then it would act towards a short-term increase in inflation in Poland, rising the risk of inflation becoming entrenched at a heightened level.

While discussing the situation in the external environment, the continued recovery of moderate growth in the global economy was emphasised, including the persistence of low GDP growth in major developed economies and a gradual decline in the growth of the Chinese economy as a result of macroeconomic policy tightening in this country. The effects of high fiscal imbalance and its planned reduction, as well as the effects of monetary expansion, including non-standard measures undertaken and envisaged by major central banks continue to be an important uncertainty factor for the global economic growth. Some Council members assessed that the decline in China's economic growth could translate – through its adverse impact on the outlook for German exports – into a slowdown in the Polish exports. However, other Council members, assuming that the competitive exchange rate devaluations would not intensify and no collapse in the world trade should be anticipated, believed that the rapid growth in major emerging economies could be expected, which would support the relatively high demand for German and, indirectly, also for Polish exports.

Some Council members pointed out that GDP growth rate in the euro area was now close to the growth rate of the economies of the United States and the United Kingdom, which had historically grown faster than the euro area. Those members argued that this may be associated with different economic policy responses to the financial crisis in those economies. In particular, they pointed out that the relatively rapid improvement of business sentiment in Germany during the recovery from the recession might have been supported by the fact that fiscal deficit had not been allowed to rise to a high level in Germany, which limited the risk of increased future tax burden in this country.

Some Council members pointed out that – in view of the probably extended period of low interest rates being maintained by major central banks and the reintroduction of quantitative easing in the United States – a possible rise in interest rates of the NBP could increase the risk of rapid capital inflows and excessive appreciation of the zloty.

In turn, other Council members believed that the potential rise in interest rate disparity could only have a limited impact on the zloty exchange rate path. They pointed out that the exchange rate of the zloty, similarly to the currencies of other emerging economies, was significantly affected by changes in risk perception by investors in global financial markets. Therefore, any appreciation of the zloty would most probably be accompanied by the appreciation of the currencies of other emerging economies, i.e. Poland's competitors in international markets. Moreover, some Council members pointed out that the reintroduction of quantitative easing in the United States could also foster the appreciation of the euro against the dollar, which would have a beneficial influence on the relationship between the prices of Polish exports and imports.

Some Council members also assessed that stabilisation of the share of non-residents' investment in the domestic treasury bill markets in October 2010 might be a sign of certain curbing of the inflow of capital to this market, which reduced the probability of strong appreciation of the zloty exchange rate. Those members also emphasised that this share was currently at a relatively high level which might increase vulnerability of the zloty exchange rate to changes in the risk perception in the global markets.

Some members of the Council also addressed changes in the external environment of the Polish economy driven by the financial crisis, which were likely to impact the developments of the equilibrium interest rate in Poland. They assessed that the possible decline in the potential growth of the Polish economy might not have been accompanied by a similar fall in the equilibrium interest rate in Poland due to the likely increase in the investment risk premium in the emerging economies (a decline in the current account deficit regarded as sustainable by investors).

While analysing the situation in the labour market, it was pointed out that the rise in employment in the corporate sector accompanied by the simultaneous increase in the unemployment rate in September 2010 (in seasonally adjusted terms) continued, which might be driven by the persisting growth in the number of economically active persons, contributing to curbing the wage pressure. Some members of the Council also indicated that upon recovery from the current economic slowdown, employment started to rise amidst markedly lower GDP growth than in the past, which, coupled with growing number of economically active persons, might point at favourable structural changes in the Polish labour market in the past few years. It was also pointed at the stabilisation of the ratio of new job offers to the number of unemployed. At the same time, other Council members pointed at the uncertainty about the impact of the abolition of restrictions on Polish citizens accessing the labour market in Germany and Austria starting from May 2011 on the supply of labour in Poland, in particular, the number of highly qualified workers. Some members of the Council emphasised that amidst high percentage of enterprises where output had recently been increasing considerably faster than employment, the corporate sector might be expected to see further employment growth. Moreover they assessed that high wage restraint in the enterprises in the period of economic slowdown was rather a disturbance than a structural change that should fade off together with improvement in the economic situation. As a result, over the monetary policy transmission horizon, wage pressure in the economy may be expected to intensify.

Members of the Council also discussed the developments of inflation expectations. It was argued that following a rise observed in August 2010, the subsequent months recorded a drop in the majority of measures of household inflation expectations which were currently at the level close to the NBP's inflation target. Council members pointed at a decline in the number of enterprises which, in the business condition surveys, declared increases of their own prices, despite the expected rise in the commodity prices. Yet, according to some Council members, basing on the historical data, the resulting decline in markups may be expected to have minor and quickly fading off impact on inflation. At the same time, Council members pointed at an increase of inflation expectations of enterprises and financial sector analysts concerning growth in prices in the whole economy. It was emphasised that the anticipated rise in VAT and excise tax did not result in any considerable increase in inflation expectations. Yet, some members of the Council pointed at a risk of a rise in inflation expectations at the beginning of 2011, following the implementation of the announced changes in the indirect taxes rates.

The meeting also discussed the developments of monetary aggregates. Council members pointed at the continuation of a relatively stable M3 supply growth, declining annual growth in household lending and persistently negative, albeit gradually rising annual growth in corporate lending. It was emphasised that corporate demand for credit remained weak, and debt increase in the banking sector concerned mainly large enterprises; on the other hand, no clear revival in lending to the sector of small and medium-sized enterprises could be seen. In the opinion of some members of the Council, the currently observed moderate growth in monetary aggregates did not point at a risk of growing inflationary pressure. Other members of the Council emphasised, however, that M3 growth was not low when compared to the growth of nominal GDP. Those members paid particular attention to the developments in housing loans, which increase more substantially than other categories of loans to households and enterprises. Those members pointed out that given the decline in the interest on mortgage loans as a result of reduction of bank markups and banks' expectations of rising demand for those loans, a further acceleration might be expected in the growth of housing loans which already exceeded the achievable growth of disposable income.

While considering the decision on interest rates, some members of the Council argued that the expected acceleration of economic growth supporting the improvement in labour market situation may – in the absence of monetary policy tightening – lead to a gradual rise in wage and inflationary pressure in the medium term. Those members of the Council claimed that the NBP interest rate increase would be justified in order to reduce the risk of the emergence of such pressure. Such an increase would constitute an adjustment of monetary policy parameters to the current assessment of economic situation following the period of a strong decline in economic activity caused by the global financial crisis. It would be also conducive to anchoring the inflation expectations at the level of the NBP's inflation target.

In the opinion of other members of the Council, the persistently moderate economic growth in Poland, currently low wage and demand pressure (confirmed by core inflation running at a low level) and the possibility of increasing inflow of capital to emerging economies, including Poland, amidst the extended period of expansionary monetary policy pursued by major central banks, combined with the risk of further slowdown of the global economic growth, justified keeping the NBP interest rates unchanged at the present meeting of the Council. Those members also emphasised that growing interest rate disparity combined with the appreciation of the exchange rate could support the increase in foreign currency lending.

The meeting also discussed a rise in the required reserve rate by 50 basis points. Some members of the Council pointed out that the required reserve rate was reduced as part of the anti-crisis measures undertaken in the period of strong liquidity disturbances in the financial markets. As this period ended, it was justified to increase this rate to the level maintained before the financial crisis. Such a decision would also constitute a signal of MPC's readiness to react to increasing inflationary pressure. Other members of the Council emphasised, however, that a rise in the required reserve rate would have a limited impact on the liquidity in the domestic money market and would not be a factor likely to translate into limiting the inflationary pressure in the economy. At the same time, they pointed out that a rise in reserve rate is not the best signal of MPC's readiness to react to growing inflationary pressure.

A motion to raise the required reserve rate by 50 basis points from 3.0% to 3.5% was put forward at the meeting. The motion passed. The decision applies to reserve requirement to be held from 31 December 2010. Also a motion to raise the NBP interest rates by 50 basis points was put forward at the meeting. The motion did not pass. The Council kept the interest rates unchanged: the reference rate at 3.50%, the lombard rate at 5.00%, the deposit rate at 2.00%, the rediscount rate at 3.75% and the discount rate at 4.00%.

#### Minutes of the Monetary Policy Council decision-making meeting held on 23 November 2010

At the meeting, the Monetary Policy Council discussed the outlook for economic growth and inflation, the situation in the labour market, monetary and credit aggregates and the zloty exchange rate developments.

The Council emphasised further recovery of economic activity in Poland, which will most likely continue in the quarters to come. Some Council members pointed to the fact that international institutions had increased their forecasts of Poland's GDP growth for 2011. These members stressed that GDP growth was increasingly supported by domestic factors, in particular by individual consumption growth, which is encouraged by the improving labour market situation. They also pointed to the relatively high level of production capacity utilisation, which should translate into revival of enterprises' investment demand, particularly considering their very good financial situation. The continuation of high - in their assessment - GDP growth in the coming quarters should be additionally supported by the favourable outlook for exports, connected in particular with high economic activity in Germany and a fast increase in German exports. In the opinion of those Council members, in 2011 no significant demand reduction should be expected on the part of the public finance sector in Poland. On the other hand, other Council members argued that there was still a risk of a slowdown in the global economic growth, and that domestic demand was dependent on consumer sentiment, which had once again slightly deteriorated in November, and on the level of public investment, which could be delayed. In the opinion of those Council members, the postponement of public investment and the reduction of other expenditure of the public finance sector, in combination with a possible further increase in taxes, would also result from a necessary fiscal policy tightening in 2011, which in the short run would be slowing GDP growth. Moreover, some Council members pointed out that without a significant recovery in investment loans, it would be impossible to boost corporate investment.

While discussing the situation in the labour market, some Council members emphasised that the growth in the number of economically active persons meant that in the recent months the rising employment had not been matched by a declining rate of unemployment, which resulted in the fact that the level of

labour market tensions was not growing, and wage pressure remained limited. The absence of significant wage pressure was also confirmed – in their opinion – by the data on wages in the economy, whose growth in 2010 Q3 was low. Other Council members, however, argued that a further increase in employment in the enterprise sector, combined with the growing number of job offers, signalled a revival in the labour market, which could contribute to a gradual build-up of wage pressure. According to those Council members, the very good financial results of companies could be conducive to accelerated wage growth, particularly in the state-controlled companies of the raw material sector. Some Council members continued to indicate that the opening of the German and Austrian labour markets in May 2011 constitute an uncertainty factor for the development of the labour supply in Poland. Some Council members emphasised that developments in the labour market, including the amount of labour supply, would also depend on changes in the tax and pension policy.

While discussing changes in credit aggregates, it was indicated that the slight slowdown in the growth of loans to households (resulting largely from the gradual implementation of Recommendation T) was accompanied by continued low growth of lending to the corporate sector. At the same time, some Council members noted that, taking into account the increasing percentage of irregular loans, banks would not be willing to ease their lending policies. This should reduce the risk of excessive credit expansion and asset price rises, as well as of the increase of inflationary pressures. According to these Council members, the limited risk of excessive inflationary pressure was also indicated by the decelerated growth of monetary aggregates over the recent period. Other Council members argued that the monthly increases in housing loans to households remained at a relatively high level (lower only to that in 2007-2008), while loans to companies had been steadily rising for several months. These Council members believe that the expected acceleration of GDP growth may be supporting an accelerated credit growth – on the one hand, by strengthening the private sector demand for credit and, on the other hand, by encouraging banks to ease their lending conditions. They pointed out that the decline in the growth of money supply in October had been due to the base effect resulting from an increased demand for short-term credit in October 2009 fuelled by the privatisation of PGE.

While analysing the rise in CPI inflation in October 2010 to 2.8%, it was pointed out that it had resulted from higher growth of energy and food prices, i.e. factors largely beyond the influence of monetary policy. Some Council members emphasised the fact that core inflation net of food and energy prices remained low, while some forecasts indicated that, after a temporary increase, CPI inflation would decline in the second half of 2011. Other members of the Council pointed out that other measures of core inflation had risen and the subsequent months could also bring an increase in core inflation net of food and energy prices. Moreover, those members argued that the increase in food and energy prices could not be considered temporary. In their assessment, it resulted largely from the impact of global factors (i.e. from a strong increase in commodity prices in the world markets associated with rising demand from the emerging economies). These factors could support high growth of prices of those goods also in the future.

The Council also discussed about inflation expectations and the risk of second-round effects. Some Council members argued that inflation expectations in Poland were to a large extent adaptive, so the rise in current inflation would translate to higher inflation expectations, increasing the risk of second-round effects. Expectations can also be raised by the growing prices of frequently purchased goods, and also the increase of most VAT rates in 2011. Other Council members assessed that the risk of the growing inflation expectations translating into wage growth was small, since trade unions had little power in the Polish economy. They also emphasised that the growth of unit labour costs was still low, which meant that due to increasing labour productivity a possible acceleration of wage growth would have only limited impact on inflation.

While analysing the impact of external conditions on the outlook for economic growth and inflation in Poland, some Council members pointed to the relatively high economic growth in the world, including the continued recovery in developed countries and a high growth of GDP in developing countries. According to these members of the Council, the growing activity in the global economy would support acceleration of GDP growth in Poland and maintaining high growth of commodity prices in the world markets in the years to come – translating into a rise in domestic inflationary pressures. Some Council

members emphasised in particular the relatively favourable situation in Germany, which, through the positive impact on Polish exports and GDP growth, could also be conducive to a gradual rise in domestic inflationary pressure. Other Council members pointed out that activity in the German economy was heavily dependent on GDP growth in China, which was tightening its macroeconomic policies, which would be conducive to reducing Chinese economic growth. At the same time, Council members emphasised that an important uncertainty factor for the global economic growth remained the difficult fiscal situation of some euro-area countries and the effects of further expansionary fiscal and monetary policy in the United States, as well as tensions between the governments of the world's largest economies related to the exchange rate policies.

While discussing the changes in the external environment of the Polish economy which are likely to impact the developments of the exchange rate of the Polish zloty, members of the Council pointed, on the one hand, at the Fed's decision on increasing the scale of monetary expansion, and, on the other hand, at the deepening of budgetary problems in Ireland. Some Council members emphasized at this point that response of financial markets to both events was weaker than to similar developments observed previously. This may indicate that any further turmoil connected with the situation in some euro-area countries would have a limited impact on the investors' sentiment in the global financial markets. Some members of the Council argued, at the same time, that developments of the zloty exchange rate might be driven not only by external factors but also by domestic ones, especially by the size of the issue of treasury securities. Those members indicated that gradual reduction of the inflow of portfolio investments to Poland in the recent period could have been caused by a decrease in the issue of new bonds, resulting from satisfying the country's borrowing needs for 2010.

While addressing the impact of the domestic monetary policy on the zloty exchange rate amidst extended period of monetary expansion of major central banks, some members of the Council emphasized that importance of a possible rise in interest rate disparity might be limited due to growing – as a result of the crisis – role of changes in the global risk aversion to exchange rate developments. In the opinion of those Council members lower responsiveness of the exchange rate to changes in the disparity is a factor speaking in favour of tightening monetary policy in Poland as soon as possible. Those members also argued that a possible appreciation of the zloty would be most likely accompanied by the appreciation of currencies of other emerging economies. They pointed out that that the risk of the zloty appreciation being stronger than that of other emerging currencies was limited by high deficit in public finance sector in Poland. Other members of the Council emphasized that developments of the zloty exchange rate were an important factor affecting – together with the level of interest rates – the total restrictiveness of monetary conditions and thus they should be taken into consideration in the conduct of the monetary policy.

During the meeting, members of the Council also discussed about possible changes in the potential output growth of the Polish economy. Some members of the Council emphasized that regardless of changes in the potential output growth, two factors – on the one hand, a decline in the current account deficit considered safe by financial market participants, and, on the other hand, rising deficit in public finance – could support a possible increase of the equilibrium interest rate. Other members of the Council indicated that high level of liquidity in the global financial markets could support a possible decrease in the equilibrium interest rate.

The Council also discussed the balance of costs of a too late and too early tightening of the monetary policy.

While considering the decision on interest rates, some members of the Council assessed that the risk of growing wage and inflationary pressure connected with accelerating GDP growth and the risk of growing inflation expectations justified increasing the NBP interest rates. In their opinion, an increase of interest rates by 50 basis points could constitute a one-off adjustment of monetary policy parameters to the current economic situation, following a period of a strong economic slowdown caused by the global financial crisis. On the other hand, an increase of interest rates by 25 basis points could start a gradual tightening of the monetary policy, whose scale and pace would depend on the economic developments in the coming quarters.

In the opinion of the majority of Council members, the absence of a significant wage and inflationary pressures, persistently weak demand pressure and limited lending justified keeping the NBP interest rates unchanged in November. In the opinion of those members of the Council the persisting risk of excessive zloty appreciation connected with a strong monetary expansion in major developed economies as well as uncertainty related to economic developments abroad spoke also in favour of keeping the interest rates unchanged.

A motion to raise the NBP interest rates by 50 basis points was put forward at the meeting. The motion did not pass. Also 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 3.50%, the lombard rate at 5.00%, the deposit rate at 2.00%, the rediscount rate at 3.75% and the discount rate at 4.00%.

# Minutes of the Monetary Policy Council decision-making meeting held on 22 December 2010

At the meeting, the Monetary Policy Council discussed issues related to developments in the external environment of the Polish economy, the outlook for domestic economic growth and inflation, and the situation in the public finance sector.

While addressing the external developments it was pointed out that the recovery in the global economy continued, with a slight acceleration of GDP growth in 2010 Q3 in the United States and slower GDP growth in the euro area. At the same time, a deepening divergence in the economic situation among EU Member States was stressed, in particular, favourable economic conditions observed in Germany, Great Britain and France, the main recipients of Polish exports, contrasted with the intensification of problems in the EU peripheral countries. Some Council members emphasized that positive economic developments in major trading partners of Central and Eastern European countries translated into higher economic growth forecasts for those countries, including Poland.

Members of the Council pointed out that tensions connected with the deep fiscal imbalance gradually spread to other countries and in the future might affect major developed economies. In this context it was argued that further turmoil in the financial markets is possible, which might limit the scale of the capital inflow to the emerging economies, including to Poland. At the same time some Council members emphasized that the necessary reduction of the fiscal imbalance in the euro area countries in the short term would contribute to the decline of GDP growth in those countries. Other members of the Council pointed to the possibility of non-Keynesian effects of the planned fiscal tightening in the euro area countries.

Some members of the Council indicated that the expansionary monetary policy, including non-standard measures undertaken by major central banks, coupled with improved sentiment in the financial markets contributed to a strong rise in commodity prices in the global markets, thus intensifying long-term tendencies. This, in turn, boosted the cost pressure and thereby also inflationary pressure in the emerging economies, which translated into high PPI growth in Central and Eastern European countries, including Poland. In the longer term, the expansionary monetary policy and long-term upward trends in commodity prices might lead to an inflation rise also in the developed economies. Those Council members argued that those conditions should be taken into account in the conduct of monetary policy. In particular, monetary policy should take into account that the growing demand for commodities from developing countries would support further rises in their prices in the medium and long term. Other members of the Council reasoned that the rise in the world prices would be a factor beyond the impact of the monetary policy conducted by central banks of countries regarded as small open economies.

Members of the Council pointed to a gradual acceleration of economic growth in Poland which in 2010 Q3 exceeded expectations. Yet, some Council members assessed that subsequent quarters were not likely to witness a marked increase in economic growth which was indicated by the lack of significant improvement in leading indicators of business sentiment. GDP growth might also be curbed by the announced tightening of the fiscal policy. Those Council members emphasized that there was persistent uncertainty about the sustainability of GDP growth acceleration, connected with a possible weakening of

households' consumption growth at the beginning of 2011, when factors which strengthened it on a temporary basis would fade away. Yet, other members of the Council assessed that factors weakening consumption growth would be offset by a gradual improvement in the labour market situation, including growing employment, which would have a positive impact on the consumer sentiment.

Among the factors increasing the uncertainty about the sustainability of economic growth acceleration some members of the Council mentioned the hitherto observed absence of recovery in corporate investment. They pointed out that the investment activity of enterprises might be curbed by the uncertainty about the situation in the external environment of the Polish economy, limited lending, relatively high fiscal burden, as well as by administrative and legal barriers. However, other members of the Council pointed out that the level of production capacity utilization in the economy had been growing steadily and at that time slightly exceeded the long-term average which should support the recovery in investment demand. The good liquidity situation of enterprises, especially large ones that invest more than small and medium-sized companies, may also be a factor contributing to a rise in investment.

While addressing inflation, some members of the Council emphasized that although CPI inflation declined slightly in November 2010 it was still running above the inflation target of 2.5%. Moreover, due to a rise in the majority of VAT rates and an increase in the prices of energy the coming months may be expected to bring a rise in inflation. While analyzing the risk that heightened inflation persists those members of the Council pointed out that this risk was enhanced by the gradually increasing GDP growth which, in their opinion, was likely to exceed potential output growth in the subsequent quarters. According to those members of the Council, a factor which, on the one hand, boosts demand and, on the other hand, is likely to weaken potential output growth are zloty exchange rate developments. Some Council members also pointed out that heightened inflation might be supported by adaptive inflation expectations. Other members of the Council argued that the hitherto observed rise in inflation was mainly driven by supply-side factors, that are to a large extent beyond the impact of monetary policy. In the opinion of those Council members, the absence of a clear demand pressure is indicated by the still low and stable level of core inflation net of food and energy prices. Those members also emphasized that the moderate scale of the expected inflation rise in the coming quarters would reduce the risk that heightened inflation persists.

While discussing the situation in the labour market, some members of the Council indicated that the still low wage growth and relatively high unemployment rate – driven, among other things, by a rise in economic activity – would limit the rise in wage pressure, and, in consequence, also inflationary pressure. Those members pointed out that according to the results of the NBP's survey there was a considerable decline in the number of the employed who are to benefit from wage increases in 2011 Q1. Yet, other members of the Council argued that due to the growing number of the long-term unemployed the high level of unemployment rate will curb wage growth to an ever lesser extent.

Some members of the Council also emphasized that the impact of the opening of the labour market in Germany and Austria to Polish citizens in mid-2011 remains an important uncertainty factor with respect to the size of the labour supply. Other members of the Council indicated that as the differences in wages offered in Poland and abroad shrank, incentives to economic migration became weaker and, as a result, the opening of the German and the Austrian labour markets should not result in a considerable outflow of labour from Poland; it should rather lead to the legalization of employment of Poles already working in Germany and Austria.

While addressing bank lending, some members of the Council pointed out that monthly increases in housing loans to households were close to the ones observed during the credit boom of 2007-2008, and the annual growth in those loans markedly exceeded disposable income growth considered neutral with respect to the risk of rising inflation. Moreover, in the opinion of those Council members, the acceleration in economic growth increased the risk of excessive lending growth in the future as, on the one hand, it encourages banks to ease their lending conditions and, on the other hand, it results in increasing private sector demand for credit. Other members of the Council emphasized that the increase in lending to enterprises remained very limited, and a significant increase of irregular loans in banks' portfolio might urge banks to tighten their lending policies, which would counteract the revival in lending. It was also

pointed out that the availability of foreign currency loans to households was very important for the efficiency of the domestic monetary policy.

While analyzing the situation in the public finance sector, some Council members pointed out that the scale of the planned fiscal tightening in Poland in 2011-2012 was lower than in other European countries with a similar level of the public finance deficit. In the opinion of those Council members, amidst high borrowing needs of many countries, this may have a negative impact on Poland's ability to raise funds from foreign investors to finance public debt. Other members of the Council assessed that the scale of fiscal tightening in Poland in 2011 would not be lower than in the majority of European countries. Some members of the Council emphasized that apart from a limited reduction of the fiscal imbalance in Poland, also a possible change in the rules of allocating old-age pension contributions between the repartition and the capital funded part of the pension system might contribute to deterioration in investor confidence, increasing, as a result, the volatility of the zloty exchange rate and of financial instruments prices. Yet, other Council members assessed that introducing changes to the pension system might improve the credibility of the Polish economy.

While discussing the level of interest rates in the Polish economy some Council members indicated that the risk of inflation running above the NBP inflation target in the medium term, which increases along with the gradual acceleration of economic growth, justified starting the cycle of gradual tightening of the monetary policy at the current meeting. Those Council members also argued that increasing interest rates before the expected inflation rise would support the stabilization of inflation expectations of economic agents. At the same time some members of the Council emphasized that the lower than in the past zloty exchange rate sensitivity to the interest rate differential raises the costs of a possible too late a reaction of the central bank to the inflationary pressure.

Other members of the Council pointed out that wage and demand pressures continued to be limited, there were no signs of revival in lending and the hitherto observed and expected in the short term rise in inflation resulted mainly from factors beyond the impact of monetary policy. In the opinion of those Council members those arguments justified keeping the NBP interest rates unchanged. At the same time, some of those members of the Council emphasized that a rise in economic growth increasing the risk of inflation continuing above the inflation target in the medium term might require monetary policy tightening in near future. Yet, gradual increasing of the NBP interest rates should start after some improvement in the financial market sentiment.

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 3.50%, the lombard rate at 5.00%, the deposit rate at 2.00%, the rediscount rate at 3.75% and the discount rate at 4.00%.

# Appendix 6

# Voting records of Monetary Policy Council members on motions and resolutions in 2010

• Date: 16 March 2010

#### Subject matter of motion or resolution:

Resolution No. 1/RPP/2010 on the stance of the Monetary Policy Council on Poland's participation in a temporary increase in the assets of the International Monetary Fund.

#### Voting of the MPC members:

For: S. Skrzypek Against: A. Bratkowski
E. Chojna-Duch J. Hausner
Z. Gilowska A. Rzońca
A. Glapiński J. Winiecki

A. Kaźmierczak A. Zielińska-Głębocka

• Date: 30 March 2010

#### Subject matter of motion or resolution:

Resolution No. 1/2010 changing the resolution on the principles for creating and unwinding provisions against the foreign exchange risk of the zloty against foreign currencies at the National Bank of Poland.

# Voting of the MPC members:

For: A. Bratkowski Against: S. Skrzypek
E. Chojna-Duch Z. Gilowska
J. Hausner A. Glapiński
A. Rzońca A. Kaźmierczak

J. Winiecki

A. Zielińska-Głębocka

• Date: 20 April 2010

# Subject matter of motion or resolution:

Resolution No. 2/2010 changing the resolution on the principles for creating and unwinding provisions against the foreign exchange risk of the zloty against foreign currencies at the National Bank of Poland.

# Voting of the MPC members:

For: A. Bratkowski Against: P. Wiesiołek
E. Chojna-Duch Z. Gilowska
J. Hausner A. Glapiński
A. Rzońca A. Kaźmierczak

J. Winiecki

A. Zielińska-Głębocka

• Date: 20 April 2010

# Subject matter of motion or resolution:

Stance of the Monetary Policy Council on the way of interpretation by the Management Board of the National Bank of Poland of the MPC Resolution No. 9/2006 of 19 December 2006 on the principles for creating and unwinding provisions against the foreign exchange risk of the zloty against foreign currencies at the National Bank of Poland.

#### Voting of the MPC members:

For: A. Bratkowski Against: P. Wiesiołek
E. Chojna-Duch Z. Gilowska
J. Hausner A. Glapiński
A. Rzońca A. Kaźmierczak

J. Winiecki

A. Zielińska-Głębocka

• Date: 27 April 2010

#### Subject matter of motion or resolution:

Resolution No. 3/2010 on approving the Annual Financial Report of the National Bank of Poland prepared as of 31 December 2008.

# Voting of the MPC members:

For: P. Wiesiołek Against: A. Bratkowski E. Chojna-Duch J. Hausner Z. Gilowska A. Glapiński J. Winiecki

A. Kaźmierczak A. Zielińska-Głębocka

• Date: 28 April 2010

#### Subject matter of motion or resolution:

Resolution No. 2/RPP/2010 on the stance of the Monetary Policy Council on the IMF Flexible Credit Line.

#### Voting of the MPC members:

For: A. Bratkowski Against: P. Wiesiołek
E. Chojna-Duch Z. Gilowska
J. Hausner A. Glapiński
A. Rzońca A. Kaźmierczak

J. Winiecki

A. Zielińska-Głębocka

• Date: 18 May 2010

# Subject matter of motion or resolution:

Resolution No. 4/2010 on approving the report on monetary policy implementation in 2009.

# Voting of the MPC members:

For: P. Wiesiołek Against:

E. Chojna-Duch

Z. Gilowska

A. Glapiński

J. Hausner

A. Kaźmierczak

A. Bratkowski, A. Rzońca and J. Winiecki did not participate in the voting.

A. Zielińska - Głębocka was absent.

• **Date:** 18 May 2010

#### Subject matter of motion or resolution:

Resolution No. 5/2010 on the evaluation of the activities of the NBP Management Board as regards the implementation of the monetary policy guidelines for the year 2009.

#### Voting of the MPC members:

For: P. Wiesiołek Against:

E. Chojna-Duch

Z. Gilowska

A. Glapiński

J. Hausner

A. Kaźmierczak

A. Bratkowski, A. Rzońca and J. Winiecki did not particpate in the voting.

A. Zielińska - Głębocka was absent.

• Date: 24 May 2010

#### Subject matter of motion or resolution:

Resolution No. 6/2010 on approving the report on the operations of the National Bank of Poland in 2009.

#### Voting of the MPC members:

For: P. Wiesiołek Against: J. Hausner E. Chojna-Duch A. Rzońca Z. Gilowska J. Winiecki

A. Glapiński A. Zielińska-Głębocka

A. Kaźmierczak

• Date: 30 June 2010

#### Subject matter of motion or resolution:

Motion to preserve the current formulation in the Information referring to the informal monetary policy bias, that is to keep the following wording: "The Council assesses the probability of inflation running below and above the inflation target in the medium term to be similar."

#### MPC decision:

Motion did not pass.

# Voting of the MPC members:

For: E. Chojna-Duch
Z. Gilowska
A. Glapiński
A. Kaźmierczak
A. Kaźmierczak
A. Kaźmierczak
A. Kaźmierczak
A. Rzońca
I. Winiecki

A. Zielińska-Głębocka

• Date: 30 June 2010

#### Subject matter of motion or resolution:

Motion to change the informal monetary policy bias from neutral to tightening, in line with the proposed wording: "The Council assesses the probability of inflation running above the inflation target in the medium term to be higher than the probability of its running below the target."

#### MPC decision:

Motion did not pass.

#### Voting of the MPC members:

For: A. Bratkowski
J. Hausner
E. Chojna-Duch
Z. Gilowska

Z. Gilowska A. Glapiński A. Kaźmierczak J. Winiecki

A. Zielińska-Głębocka

• Date: 30 June 2010

#### Subject matter of motion or resolution:

Proposal to rephrase the fragment concerning the informal monetary policy bias and include the following wording in the Information: "The Council assesses that the probability of inflation running above the inflation target in the medium term is rising."

#### MPC decision:

Motion did not pass.

#### Voting of the MPC members:

For: A. Bratkowski Against: M. Belka
E. Chojna-Duch Z. Gilowska
J. Hausner A. Glapiński
A. Rzońca A. Kaźmierczak
J. Winiecki

A. Zielińska-Głębocka

• Date: 30 June 2010

# Subject matter of motion or resolution:

Proposal to replace the current wording of the Information presenting the assessment of the probability of inflation running above or below the inflation target with the following sentence: "The Council discussed the factors which may be reinforcing inflationary pressures in the medium term."

#### MPC decision:

Motion was passed

# Voting of the MPC members:

For: M. Belka Against: E. Chojna-Duch
A. Bratkowski J. Hausner
Z. Gilowska A. Glapiński A. Rzońca

J. Winiecki

A. Zielińska-Głębocka

• Date: 23 August 2010

#### Subject matter of motion or resolution:

Resolution No. 3/DOR/2010 to appoint a certified auditor to audit NBP annual financial statement for business years 2010, 2011 and 2012.

#### Voting of the MPC members:

For: M. Belka Against: E. Chojna-Duch
A. Bratkowski A. Rzońca
Z. Gilowska J. Winiecki

A. Glapiński A. Zielińska-Głębocka

J. Hausner A. Kaźmierczak • **Date:** 24 August 2010

# Subject matter of motion or resolution:

Motion to raise the required reserve rate from 3% to 3.5%.

MPC decision:

Motion did not pass.

#### Voting of the MPC members:

For: Z. Gilowska Against: M. Belka
A. Glapiński A. Bratkowski
A. Kaźmierczak E. Chojna-Duch

J. Hausner A. Rzońca J. Winiecki

A. Zielińska-Głębocka

• **Date:** 24 August 2010

# Subject matter of motion or resolution:

Motion to raise the NBP interest rates by 0.50 percentage point.

MPC decision:

Motion did not pass.

# Voting of the MPC members:

For: A. Bratkowski Against: M. Belka

Z. Gilowska E. Chojna-Duch A. Glapiński J. Hausner A. Rzońca A. Kaźmierczak J. Winiecki

A. Zielińska-Głębocka

• Date: 28 September 2010

# Subject matter of motion or resolution:

Resolution No. 8/2010 on setting the ceiling for liabilities arising from loans and credits drawn by the NBP at foreign banking and financial institutions.

#### Voting of the MPC members:

For: M. Belka Against:

A. Bratkowski

E. Chojna-Duch

Z. Gilowska

A. Glapiński

J. Hausner

A. Kaźmierczak

A. Rzońca

J. Winiecki

A. Zielińska-Głębocka

• **Date:** 29 September 2010

#### Subject matter of motion or resolution:

Resolution No. 7/2010 on adopting Monetary Policy Guidelines for 2011.

# Voting of the MPC members:

For: M. Belka Against:

A. Bratkowski Z. Gilowska
E. Chojna-Duch A. Glapiński
J. Hausner A. Kaźmierczak

A. Rzońca J. Winiecki

A. Zielińska-Głębocka

• **Date:** 29 September 2010

#### Subject matter of motion or resolution:

Motion to raise the NBP interest rates by 0.50 percentage point.

#### MPC decision:

Motion did not pass.

# Voting of the MPC members:

For: A. Bratkowski Against: M. Belka

J. Hausner
 A. Rzońca
 J. Winiecki
 A. Zielińska-Głębocka
 E. Chojna-Duch
 Z. Gilowska
 A. Glapiński
 A. Kaźmierczak

• Date: 27 October 2010

# Subject matter of motion or resolution:

Motion to raise the NBP interest rates by 0.50 percentage point.

#### MPC decision:

Motion did not pass.

# Voting of the MPC members:

For: A. Bratkowski Against: M. Belka

J. Hausner
 A. Rzońca
 J. Winiecki
 A. Zielińska-Głębocka
 E. Chojna-Duch
 Z. Gilowska
 A. Glapiński
 A. Kaźmierczak

#### • Date: 27 October 2010

# Subject matter of motion or resolution:

Resolution No. 9/2010 amending the resolution on the required reserve rate and the renumaration of required reserve rate.

#### MPC decision:

The MPC raised the required reserve rate from 3.0% to 3.5%.

## Voting of the MPC members:

For: M. Belka Against: A. Bratkowski E. Chojna-Duch J. Hausner Z. Gilowska A. Rzońca A. Glapiński J. Winiecki

A. Kaźmierczak A. Zielińska-Głębocka

• **Date:** 17 November 2010

# Subject matter of motion or resolution:

Resolution No. 10/2010 on approving the Financial Plan of the National Bank of Poland for 2011.

# Voting of the MPC members:

For: M. Belka Against:

A. Bratkowski E. Chojna-Duch

Z. Gilowska A. Glapiński

J. Hausner

A. Kaźmierczak

A. Rzońca

J. Winiecki

A. Zielińska-Głębocka

• Date: 23 November 2010

#### Subject matter of motion or resolution:

Motion to raise the NBP interest rates by 0.50 percentage point.

#### MPC decision:

Motion did not pass.

# Voting of the MPC members:

For: J. Hausner
A. Rzońca
J. Winiecki
A. Zielińska-Głębocka
A. Zielińska-Głębocka
A. Zielińska-Głębocka
A. Kaźmierczak

• **Date:** 23 November 2010

# Subject matter of motion or resolution:

Motion to raise the NBP interest rates by 0.25 percentage point.

#### MPC decision:

Motion did not pass.

#### Voting of the MPC members:

For: J. Hausner Against: M. Belka
A. Rzońca A. Bratkowski
J. Winiecki E. Chojna-Duch
A. Zielińska-Głębocka Z. Gilowska
A. Glapiński

A. Glapinski A. Kaźmierczak

• **Date:** 14 December 2010

#### Subject matter of motion or resolution:

Resolution No. 11/2010 amending the resolution No. 16/2013 from 16 December 2003 on accounting principles, the layout of balance sheet assets and liabilities and profit and loss of the National Bank of Poland.

# Voting of the MPC members:

For: M. Belka Against:

A. Bratkowski

E. Chojna-Duch

Z. Gilowska

A. Glapiński

J. Hausner

A. Kaźmierczak

A. Rzońca

J. Winiecki

A. Zielińska-Głębocka

• Date: 14 December 2010

# **Subject matter of motion or resolution:**

Resolution No. 12/2010 on the principles for creating and releasing provision against the foreign exchange rate risk of the zloty at the National Bank of Poland.

#### Voting of the MPC members:

For: M. Belka Against:

A. Bratkowski

E. Chojna-Duch

Z. Gilowska

A. Glapiński

J. Hausner

A. Kaźmierczak

A. Rzońca

A. Zielińska-Głębocka

J. Winiecki did not particpate in the voting.

• Date: 22 December 2010

#### Subject matter of motion or resolution:

Motion to raise the NBP interest rates by 0.25 percentage point.

#### MPC decision:

Motion did not pass.

#### Voting of the MPC members:

For: A. Bratkowski Against: M. Belka

A. Rzońca E. Chojna-Duch J. Winiecki Z. Gilowska A. Zielińska-Głębocka A. Glapiński A. Kaźmierczak

J. Hausner was absent.

• Date: 22 December 2010

# Subject matter of motion or resolution:

Resolution No. 13/2010 amending the resolution on the level of the reference rate, lombard rate, deposit rate and rediscount rate of the National Bank of Poland.

# Voting of the MPC members:

For: M. Belka Against:

A. Bratkowski

E. Chojna-Duch

Z. Gilowska

A. Glapiński

A. Kaźmierczak

A. Rzońca

J. Winiecki

A. Zielińska-Głębocka

J. Hausner was absent.