National Bank of Poland

Monetary Policy Council

Report on monetary policy implementation in 2007

Warsaw, May 2008

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This *Report on monetary policy implementation in 2007* is a translation of the National Bank of Poland`*s Sprawozdanie z wykonania założeń polityki pieniężnej na rok 2007* in Polish. In case of discrepancies, the original prevails.

1. Monetary policy strategy in 2007

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

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

The Monetary Policy Council (MPC) bases its monetary policy on the direct inflation targeting (DIT) strategy. International experience shows that this strategy is an effective method of ensuring price stability. After having brought down inflation to a low level, starting from 2004 the MPC adopted a permanent inflation target at 2.5% with a symmetrical tolerance range for deviations of +/- 1 percentage point. This arrangement may be in force until Poland joins the ERM II. The MPC pursues this strategy under a floating exchange rate regime, which should be maintained until Poland's accession to the ERM II. Floating exchange rate regime does not rule out foreign exchange interventions, should they turn out necessary for inflation target implementation.

In *Monetary Policy Guidelines for the Year 2007*, the Council explained how it understood the inflation target and the way of its implementation:

- First, the notion of *permanent* inflation target means that it refers to inflation measured as a year-on-year change in prices of consumer goods and services in each month compared to the corresponding month of the preceding year. For a better understanding of inflation processes it is also justified to use annual and quarterly inflation indices such as those used in the NBP's inflation projection and the central budget. Core inflation indices also play an important role in the assessment of inflationary pressure.
- Second, the adopted solution means that the monetary policy is unequivocally focused on maintaining inflation as close as possible to the target of 2.5% and not only within the

tolerance range. The adopted solution provides anchoring for inflation expectations, thus facilitating the pursuit of monetary policy, which requires smaller and less frequent interest rate changes to be effected in response to shocks.

- Third, the occurrence of shocks in the economy is inevitable. The scale and duration of an inflation deviation from the adopted target differs depending on the strength of the shock and the degree of inertia of inflation expectations. The central bank does not usually respond to deviations from the inflation target which it deems temporary and which lie within the tolerance range around the target. In countries with a permanently low inflation, the central bank does not have to respond even when inflation actually leaves the tolerance band temporarily. In the case of shocks viewed as leading to a permanent deviation from the inflation target, the central bank adjusts its monetary policy accordingly.
- Fourth, monetary policy reaction to shocks depends on their causes and nature. The reaction to demand shocks is a relatively minor issue, since in this case inflation and output move in the same direction. An interest rate increase weakens economic activity and, consequently, inflationary pressure. Supply shocks are a much more difficult problem from the point of view of monetary policy, as in that case output and inflation move in opposite directions. Inappropriate monetary policy reaction may have far-reaching negative consequences for the economy. An attempt to fully neutralise the impact of a supply shock on inflation through monetary policy may lead to an unnecessary drop in output, as the supply shock itself already has a negative effect on consumption and investment. On the other hand, an attempt to fully accommodate a supply shock resulting in a price increase and output decrease – by pursuing an expansive monetary policy – usually leads to persistently higher inflation, which, in turn, requires a far more restrictive monetary policy in subsequent periods, bringing about a stronger deceleration in economic growth. Reaction of the central bank should depend on the assessment of the duration of the shock.
- Fifth, most of supply shocks are transitory and limited in scale. Thus, they do not require an immediate reaction. However, in the case of strong shocks even temporary acceleration in price growth may bring about a relatively permanent rise in inflation expectations and, consequently, an increase in inflation level due to the emerging wage pressure. In such a situation, monetary policy has to prevent secondary effects of the supply shock (the so-called second-round effects). The risk of such effects is substantial in countries with a short history of low inflation. Very useful in analysing supply shocks are core inflation

indices, which help distinguish, at least roughly, temporary effects from permanent changes in inflationary pressure.

- Sixth, because of the delayed reaction of output and inflation to the pursued monetary policy, its influence on current inflation is rather limited. Current decisions of the monetary authorities affect price developments in the future in a similar way that current inflation is influenced by interest rate changes made several quarters before. However, the length of these lags is not constant and, to a large extent, depends on structural and institutional changes ongoing in the economy. As a result of changes in the transmission mechanism of monetary impulses central banks can only approximately assess the time lag between a change in interest rate and its strongest observed impact on real variables (output, employment), and then on inflation.
- Seventh, monetary policy affects the economy not only by changing the interest rates but also by keeping them unchanged for a period of time. The decision to keep interest rates unchanged for several periods (months or quarters) also has substantial consequences for the economy because it leads to a gradual widening or narrowing of the output gap.
- Eighth, monetary policy is pursued under uncertainty. Large uncertainty is due, among others, to the fact that inflation projection models utilised by central banks may start to less adequately describe economic processes owing to the ongoing structural changes in the economy. This means that (a) while making decisions it is necessary to take into account all available information, and not only the inflation projection; (b) it is not possible to make use of 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, in pursuance of monetary policy, while assessing the inflation outlook, especially when inflation is low, central banks allow for the prices of assets because of the need of ensuring financial stability. In the conditions of liberalised financial markets and amid favourable developments on the supply side of the economy, which are supporting low inflation, it is becoming ever more essential for monetary authorities to allow for the financial stability in their decisions. If in response to low inflation central banks reduce interest rates too much, this may lead to a rapid asset price growth. This growth is accompanied with the risk of the so-called unstable boom, where higher inflation surfaces with a considerable lag. Such rapid growth in asset prices is also accompanied with the

rising risk of their violent and considerable slump, which poses the threat to the stability of the financial system and the real economy. Financial system stability ensures effective operation of the transmission mechanism, which is crucial for appropriate monetary policy implementation. In assessing the risk of the emergence of disruptions in the asset market and the inflation outlook, it may be useful in the longer run to account for the paths of monetary aggregates.

- Tenth, in assessing monetary conditions, not only the level of real interest rates should be considered, but also the level of the real exchange rate. Thus understood restrictiveness of monetary policy impacts, 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 monetary policy decision-making process is the balance of factors affecting the probabilities of future inflation running above or below target. This balance is based on the inflation projection, the assessment of the actual economic developments, which may deviate from the scenario presented in the projection, as well as the course of variables and information not accounted for directly in the projection. When assessing the factors influencing future inflation, the duration of the period of low inflation should be taken into account.

In *Monetary Policy Guidelines for the Year 2007* the Council maintained its belief that it would be most beneficial for Poland to pursue an economic strategy aimed at creating conditions for the introduction of the euro at the earliest possible date.

2. Monetary policy in 2007

While assessing the monetary policy in 2007 it has to be borne in mind that, similarly to the previous years, it was pursued under uncertainty. Decisions of the central bank are based on information and forecasts available at the time they are taken, which means that, in hindsight, they do not necessarily have to seem optimal from the point of view of the need to stabilise inflation as close to the target as possible. Due to the nature of the monetary policy, and in particular the significant lags between the central bank's decisions and their effects for the economy, decisions have to be taken in advance and their later assessment has to account for their accompanying uncertainty. Thus, to assess the past monetary policy it is necessary to account for the scope of information that was available at the moment a given decision was taken, as it was naturally smaller than the scope of information available at the time an *ex post* assessment is made.

The main source of monetary policy uncertainty is the fact that there is a several-quarter lag between the moment of an interest rate decision and the materialisation of its strongest impact on inflation. Thus, the inflationary processes in 2007 were to a large extent affected by the monetary policy pursued back in 2005-2006. In turn, the monetary policy conducted in 2007 will primarily influence inflationary processes in 2008 and 2009.

In 2007 an important impact on the monetary policy of central banks, including the policy of the National Bank of Poland, was exerted by disruptions observed in the second half of 2007 in the world economy. Those disruptions were to some extent unexpected both by the financial markets participants and by most central banks. In consequence of those disruptions, the level of uncertainty rose significantly and the assessments of future economic situation formulated in the first half of 2007 were gradually revised.

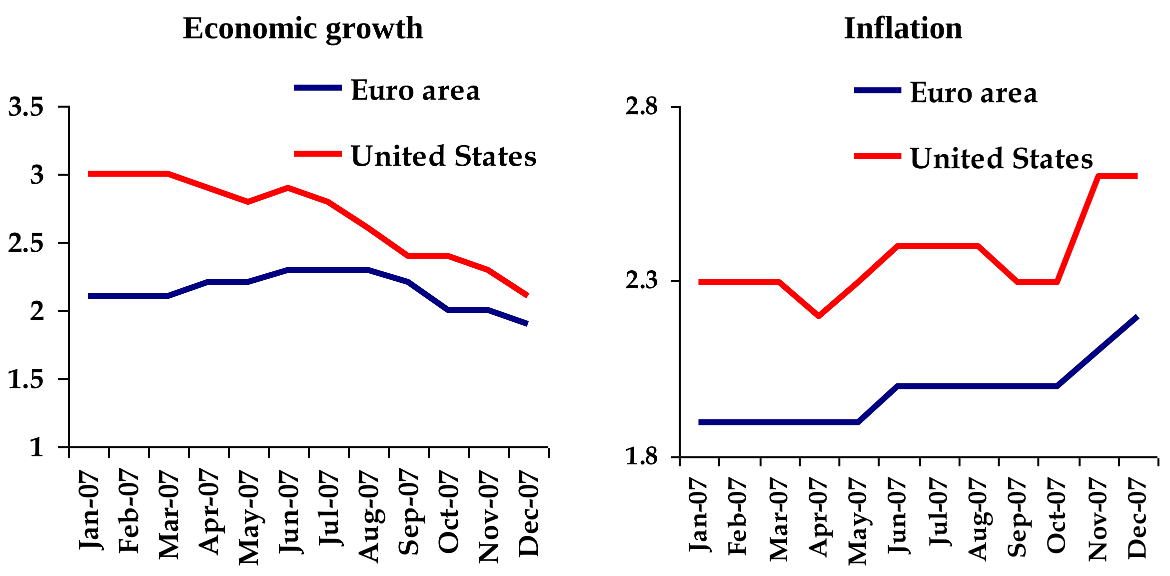
First, uncertainty in the second half of 2007 increased markedly as a result of the turmoil in international financial markets initiated in the US subprime mortgage market. As new information was flowing in, it was becoming an increasingly common conviction that those disruptions could have a significant negative impact on economic activity in the United States and other countries, including the euro-area. Growing probability of such scenario persuaded major central banks either to ease or abstain from tightening their monetary policy despite a rise in current inflation. In some countries, monetary policy easing was also connected with a rising risk to the stability of their financial systems. At the same time, significant uncertainty as to the scale and duration of the economic slowdown in the United States and its spillover to other economies was hampering the assessment of the risk for price stability in countries which were not directly affected by the crisis initiated in the subprime mortgage market.

Second, a significant increase in the prices of energy commodities, especially crude oil, and food and agricultural commodities in the world markets in 2007 Q4 was conducive to a pronounced inflation acceleration in many countries, including those of the Central and Eastern Europe. At the end of 2007 inflation was 5.4% y/y in the Czech Republic, 7.4% y/y in Hungary and 3.4% y/y in Slovakia.

Central banks' reaction to these price shocks was strongly affected by changing assessment of their expected duration. With time it was gradually concluded that both shocks were probably more permanent in nature than typical price shocks resulting from temporary supply disruptions. A relatively long growth period of the prices of those products suggested that these shocks to a large extent result from structural changes such as e.g. increased demand for commodities and food in developing countries and rising global output of bio-fuels. Under these circumstances an inappropriate monetary policy reaction to those shocks could result in excessive fluctuations in output and employment.

Figure 1

Forecasts of economic growth and inflation in euro-area and United States for 2008 (% y/y)



Source: Foreign Exchange Consensus Forecasts

Central banks had to take into account the risk of a decline in their policy credibility due to inflation increase, even though it predominantly resulted from the effect of factors outside the direct impact of their monetary policy. Moreover, banks still had to account for the risk that a strong surge in prices of relatively often purchased goods (food, fuels) may lead to increased inflation expectations and, consequently, through potential second-round effects, also to fixing inflation at its heightened level.

In 2007 Poland’s monetary policy was pursued – similarly as in other countries – in the conditions of a gradual inflation increase. The annual price index of consumer goods and services (CPI) rose from 1.6% y/y in January to 4.0% y/y in December 2007 (see Figure 2). In January-October 2007 inflation moved within the limit for deviations from the NBP’s inflation target (2.5% ±1 percentage point). In November and December 2007 inflation crossed the upper limit for deviations from the target (3.5%). Nevertheless, the average annual rate of growth of the Consumer Price Index amounted to 2.5%, which is the level of the NBP’s inflation target. Despite the NBP’s key interest rates had been raised in 2007 by the total of 1 percentage point, the significant rise in inflation at the end of 2007 meant that the real interest rates were 1.6 percentage point lower in December 2007 in *ex post* terms (deflated with the current CPI) than one year before. Real interest rates fell also in many other countries, primarily due to the significant inflation acceleration.

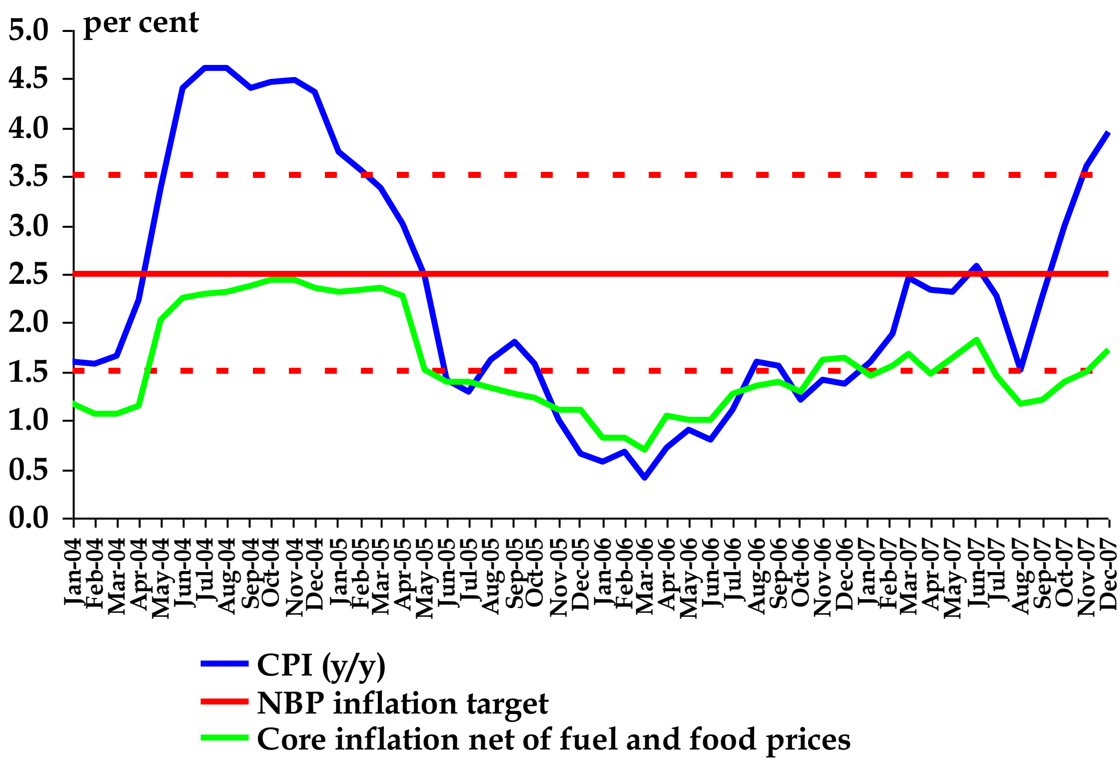
The gradual inflation increase in 2007 was mainly connected with an increased growth rate of food and fuel prices, which can be confirmed by a considerable spread between CPI inflation and the level of core inflation net of food and fuel prices. The annual change rate of food prices rose from 2.8% y/y in January to 7.9% y/y in December 2007, which was the result of several factors. Food price growth was driven by unfavourable supply conditions in Poland, including a low supply of grains in the first months of 2007 (due to the 2006 drought) and lower fruit crops than in the preceding years (due to some ground frosts occurring in May 2007). Moreover, the high growth rate of food prices in Poland to a large extent resulted from a significant price increase in international agricultural and food markets.

In the first two months of 2007 fuel price behaviour was a factor lowering the rate of inflation. In March-September 2007 fuel price growth was only slightly contributing to the rise in the overall CPI. Later in the year a strong hike in oil prices was observed in the world commodity markets, though it was partially offset by the appreciating exchange rate of the zloty against the US dollar. This oil price growth in combination with a low last year’s base resulted in a considerable surge in the annual growth rate of fuels (down from 2.5% in September up to 18.1% in December), which pushed up the annual CPI in this period. The overall level of consumer prices in 2007 in Poland was additionally raised by an increase in prices of tobacco products resulting from the rise in the excise tax rate introduced in January 2007. It should be emphasised that the discussed factors, which were largely responsible for the inflation increase in the second half of 2007, were outside the direct influence of the domestic monetary policy.

In 2007 inflation growth was also driven by the high rate of economic growth; GDP rose by 6.6%, which was the highest rate of growth in the past 10 years. The main contribution in GDP growth was made by growth in investment and individual consumption. The growth structure in 2007 was favourable from the perspective of the future inflationary pressure, as the high contribution of investment in GDP growth will support growth in potential output and labour productivity in the medium term.

Figure 2

Inflation vs. inflation target in 2004-2007



Source: GUS data, NBP data.

The economic growth in Poland in the recent period has contributed to rising the demand for labour. A growing number of working persons and a quickly decreasing unemployment rate have been accompanied by a decline in the number of the economically active. The shrinking domestic supply of labour resulted, among others, from the withdrawal of people entitled to early retirement from the labour market and the economic emigration of Polish workers to EU countries. This was reflected in faster wage growth. The accelerating rate of wage growth in the economy, in combination with a lower rise in labour productivity, pushed unit labour costs in the economy above their 2006 levels. However, the wage growth in 2007 passed through on prices only to a limited extent, among others due to a good financial standing of enterprises and a relatively low contribution of labour costs in total production costs. 2007 marked the continuation of a very low percentage of enterprises which in answering a survey question declared that wage growth was the main or only reason for price increases.

Inflation was also being limited by strong competition in the international markets and increased openness of the Polish economy, which led to a continuing decline in the prices of goods imported from countries with low production costs. Starting from 2007 Q2 the inflation decline was also favoured by dropping import prices expressed in the zloty, which was connected with the appreciation of the zloty in this period.

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While striving to keep inflation at the inflation target in the monetary policy transmission horizon, the Monetary Policy Council raised the NBP's interest rates on four occasions in 2007 – in April, June, August and November – each time by 0.25 percentage points. On each occasion in its NBP interest rate decisions the Council considered the inflation outlook, including the results of subsequent projections assessing them in the context of past, current and especially the anticipated economic situation.

In line with the central path of the January 2007 inflation projection, assuming constant interest rates, in the first half of 2007 inflation was to come back to the inflation target. It was expected that in 2008 inflation would continue to rise and in the second half of 2009 it would cross the upper limit for deviations from the NBP inflation target.[1] Macroeconomic data released in January-March 2007 suggested that the high level of economic activity in Poland continued amid a dynamically growing demand for labour and quickly rising wages. However, the Council assessed that in the short-term both CPI inflation and net core inflation would be markedly lower than it followed from the January projection. In turn, the Council believed that in the medium term an increased wage growth rate could be expected, which might lead to inflation increase. The Council believed that this increase in inflation would probably be moderate, provided that the strong productivity growth and low growth of external prices were sustained, the latter being associated with globalisation and the ensuing increased competition in the market of internationally traded goods and services.

In January and February the Council assessed that the then level of NBP interest rates should be supporting inflation in the medium term to stay close to the target of 2.5% and so

[1] Inflation projections prepared by a team of NBP economists are one of the inputs to the Monetary Policy Council's decision-making process. The projections published in 2007 have been presented in Appendix 5.

decided to leave the interest rates unchanged. At the same time, the Council signalled that stabilising inflation close to the target level so as to create conditions for sustainable long-term economic growth could require some monetary policy tightening and so the future decisions of the Council would depend on new data on developments in the Polish and world economies and also on their impact on the inflation outlook in Poland. In March 2007 the Council kept NBP interest rates unchanged and upheld its opinion that the monetary policy should be tightened adding that it might happen in the immediate future.

At the meeting in April 2007 the Council got acquainted with a subsequent inflation projection, which suggested that till mid-2008 inflation would be running below the target. However, it was anticipated that starting from the end of 2007 consumer prices will grow steadily and at the end of the projection horizon will approach the upper limit for deviations from NBP inflation target.

Considering data available in April 2007, the Council assessed that the Polish economy was in the period of strong growth which should continue for at least several quarters to come. This growth was to be supported by strong activity in the world economy, including the euro area. The Council assessed that the high growth of domestic demand, most probably outpacing the growth of potential GDP, would also be sustained in subsequent quarters, which could be conducive to a gradual building of wage and inflationary pressures. Considering the results of the April inflation projection, the Council assessed that in the second half of 2007 inflation should temporarily fall down clearly below the inflation target of 2.5%. In turn, the Council believed that in the medium term the balance of risks for future inflation had deteriorated and so the probability of inflation overshooting the inflation target was higher than the probability of inflation running below the target. Consequently, the Council decided to raise the NBP's interest rates by 0.25 percentage point.

In May-July 2007 the Council upheld its assessment of the outlook for economic growth in Poland and worldwide expressed at the April meeting and at the same time it stressed that the rate of economic growth in Poland in subsequent quarters would most probably be slightly lower than in 2007 Q1.

On the basis of the data on labour market situation available in May, the Council acknowledged the risk of a further build-up in wage pressure which could lead to inflation increase. However, inflation growth in the medium term was to be offset primarily by most likely sustained high rate of productivity growth, which should be supported by a dynamic increase in investment outlays, a very good financial standing of enterprises and a low growth rate of external prices, connected with the globalisation process. At the same time, the

Council assessed that in the medium term the probability of inflation running above the inflation target had decreased in response to the April rise of NBP interest rates, though it remained higher than the probability of inflation running below target. In May the Council kept interest rates unchanged and pointed out that a more complete assessment of the scale of the risk of inflation overshooting the inflation target would only be possible after analysing later released data.

In June the Council emphasised that the then available data on the labour market revealed a deteriorated relationship between wage growth and productivity growth. Even though the Council, as at the previous meetings, pointed to the factors which could potentially curb inflation increase in the medium term (i.e. the continuation of a high growth of productivity, very good financial standing of enterprises and low growth of external prices), it still assessed the strength of their impact to be insufficient to keep inflation at the target level in the monetary policy transmission horizon. The Council decided to raise the NBP's interest rates by 0.25 percentage point.

In July the Council got acquainted with the new inflation projection which indicated that the inflation target of 2.5% would be overshot in 2007 Q4, while throughout the projection horizon inflation might run within the limits for deviations from the target, approaching the upper limit at the end of 2009.

While stating the grounds for the July decision to keep interest rates unchanged, the Council once again emphasised the previously mentioned factors, both those conducive to rise in inflationary pressure and those conducive to easing the inflationary pressure. The low growth of external prices was quoted as an additional argument for limited inflation growth in the medium term. At the same time, attention was drawn to the monetary policy pursued by major central banks. The Council assessed that in the medium term, due to the previous monetary policy tightening, the balance of factors shaping future inflation pointed to a somewhat decreased probability of inflation running above the inflation target, even though the risk of such a scenario remained higher than the probability of inflation running below the target.

In August the international financial markets experienced disruptions. This increased the risk that the weakening in the activity in the US economy and, consequently, also in the euro area would prove greater than previously expected. Despite a heightened uncertainty about external conditions, the Council upheld its positive assessment of the outlook for Poland's economic growth while also emphasising the deeper than anticipated deterioration in the relation between wage and labour productivity growth. The Council also pointed at the risk of a deterioration of the public finance balance, which could potentially be triggered by decisions lowering the revenues and increasing the expenditures of the public finance sector taken in the period preceding the August meeting. Those factors could result in additional inflationary pressure in the medium term. The Council assessed that the evaluation of the balance of factors influencing future inflation pointed to the necessity of a monetary policy tightening and so decided to raise the NBP's interest rates by 0.25 percentage point.

At its September meeting the Council restated its previous assessment of the inflation outlook, while at the same time it emphasised the difficulties with assessing the scale of the impact the disruptions afflicting the international financial markets since August 2007 had on US and euro-area economic growth and, consequently, on the Polish economy. However, the Council pointed at a possible slowdown in world economic growth as at a factor potentially easing inflationary pressure.

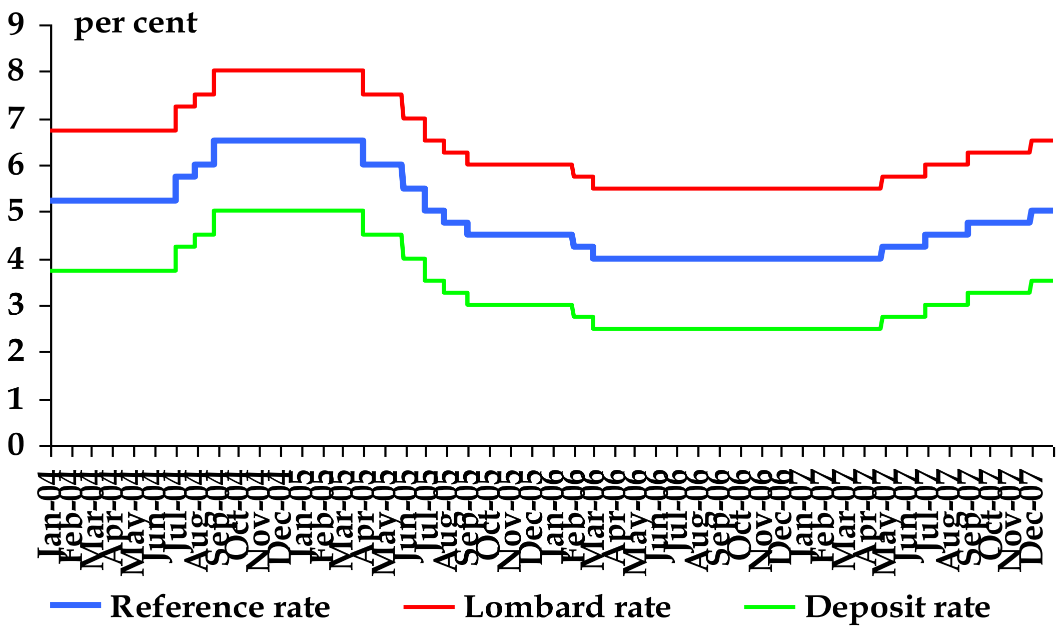
At its October meeting the Council got acquainted with the latest inflation projection. In line with the central projection, the inflation target of 2.5% was to be overshot in 2007 Q4. At the same time, it was anticipated that in the monetary policy transmission horizon inflation would be gradually accelerating (apart from a temporary deceleration in the first half of 2008) and from 2009 Q2 till the end of projection horizon it would remain above the upper limit for deviations from the target.

The Council paid attention to the fact that the forecasts of US and euro-area economic growth had been slightly lowered in connection to disruptions in the international financial markets. It was also pointed out that the macroeconomic data available in October signalled a possible weakening of Poland's economic growth. During the meeting attention was also drawn to a significant zloty exchange rate appreciation in the preceding two months. Those factors, in the Council's opinion, should be curbing future inflation. At the same time, the global process of food price growth raised the risk of inflation increase.

In stating the grounds for the September and October decisions, the Council pointed out that in the medium term, due to the previously taken decisions on monetary policy tightening, the balance of factors influencing future inflation had improved. The Council decided to keep interest rates unchanged waiting for the release of new data that would allow a more comprehensive assessment of the risk of inflation growing above the NBP's inflation target.

In November the Council stressed that there had been a rise in uncertainty about the impact of the financial market turmoil on the economic growth in the United States and the euro area. At the same time, inflation in October proved slightly higher than expected and amounted to 3.0% and so it had overshot the NBP's inflation target. On the basis of the latest macroeconomic data, the Council assessed that in the months to come inflation would be running above the October central projection. It was also emphasised that the risk of inflation increase in Poland was raised by the process of food price growth, encompassing the global economy and also affecting the domestic market, and by higher oil prices than those accounted for in the October projection. Moreover, the draft Budget Bill sent to the Parliament at that time, in the Council's opinion, pointed to a procyclical effect of fiscal policy on the economy in 2008. Considering the above factors and taking into account the risk of second-round effects of current inflation increase, the Council decided to raise the NBP interest rates by 0.25 percentage point and stressed that it would strive to lower inflation in the medium term to the level consistent with the inflation target.

Key NBP interest rates in 2004-2007



Source: NBP data.

In December the majority of the Council members believed that markedly higher inflation in November and the ensuing risk of rising inflation expectations amid tight labour market constituted a major risk factors to price stability. However, due to fact that the meeting in December was held earlier than in other months, the Council had less than usual information on the economic processes at its disposal. The Council concluded that a more comprehensive assessment of the risk of inflation remaining at a heightened level would only be possible at the Council's next meeting and that the pace of monetary policy tightening thus far was fast enough from the point of view of stabilising inflation at the target level in the medium term. Therefore, the Council decided to keep interest rates unchanged while declaring, at the same time, that it would strive to bring inflation in the medium term down to the level consistent with the inflation target.

At the end of 2007 the key NBP's interest rates were 1 percentage point higher than at the beginning of 2007 amounting to: the reference rate 5.00%, the lombard rate 6.50%, the deposit rate 3.50% and the rediscount rate 5.25%.

As in the previous years, communication with the public was an important component in the pursuit of monetary policy under the direct inflation targeting strategy. For this reason, the Council presented its assessments of the current economic situation and future economic developments. The most important instruments of communication in 2007 included: *Inflation Reports*, *Information from the meeting of the Monetary Policy Council* and press conferences organised after the Council's meetings. In an effort to enhance the transparency of the pursued monetary policy, in May the Council started to publish *Minutes of the Monetary Policy Council decision-making meeting*, following the practice of many central banks. The monthly published *Minutes* present the most important issues discussed at the Council's meetings and arguments put forward by the discussants. The main issues discussed by the Council[2] in 2007 included the medium-term inflation outlook, the outlook for economic growth in Poland and in the world economy and the developments observed in the labour market. At its meetings the Council also discussed developments of the zloty exchange rate and of food prices, the financial market disruptions, monetary policy pursued by other central banks and the public finance stance. Other discussed issues covered current inflation developments and the ensuing shifts in inflation expectations (including the risk of second-round effects), developments of monetary aggregates, the impact of globalisation on the economic processes in Poland, the prospect of Poland's compliance with the Maastricht price stability criterion and changes in the external imbalance of the Polish economy.

[2] A more comprehensive coverage of the issues discussed at the 2007 meetings of the Monetary Policy Council can be found in chapters devoted to Monetary Policy in the *Inflation Reports* of April, July and October 2007 and February 2008. Additionally, starting from May 2007, a separate document (*Minutes of the Monetary Policy Council decision-making meeting*) has been published each month. The *Minutes* published in 2007 can be found in Appendix 6.

3. Monetary policy instruments

In 2007, the NBP pursued its monetary policy influencing the inflation level via interest rates. The Monetary Policy Council set the NBP’s official interest rates which determined the yields on monetary policy instruments. To shape short-term interest rates in line with the guidelines established by the MPC, the NBP used the following instruments: open market operations, lending and deposit operations (standing facilities) and reserve requirements. By influencing the level of short-term interest rates, the Monetary Policy Council strived to achieve such a level of interest rates in the economy that would be consistent with the adopted inflation target.

3.1 Liquidity surplus in banking sector

The liquidity surplus in the banking sector edged down in 2007. Its level, measured as the average annual balance of NBP bills, amounted to PLN 19,302 million and was PLN 456 million (i.e. 2.3%) lower than the average level of 2006.

The liquidity path was connected with changes in factors independent of the NBP's decisions. The main factor increasing the liquidity surplus scale was the NBP’s net purchase of foreign currencies, which was conducive to raising liquidity surplus in average annual terms by PLN 6,254 million. Other factors conducive to growing liquidity surplus were the payments of the NBP including, among others, discount on NBP bills, the transfer of the NBP’s profit to the central budget, interest accrued on the NBP’s reserve requirements and bonds. In turn, the level of liquidity surplus was, among others, lowered by the rise of currency in circulation (of an average of PLN 11,502 million annually), increased reserve requirements of banks and higher budget deposits held at the NBP.

Additionally, the liquidity surplus of the banking sector was being absorbed by bonds issued by the NBP in 2002 in the amount of PLN 7,816 million with maturity in 2012.

In the second half of 2007, especially in December, banks limited their exposure to the purchase of NBP bills and made greater use of the deposit facility at the central bank. Banks' willingness to hold higher levels of disposable funds resulted from the situation in the world markets connected with the sub-prime mortgage loan crisis in the United States.

3.2 Monetary policy instruments

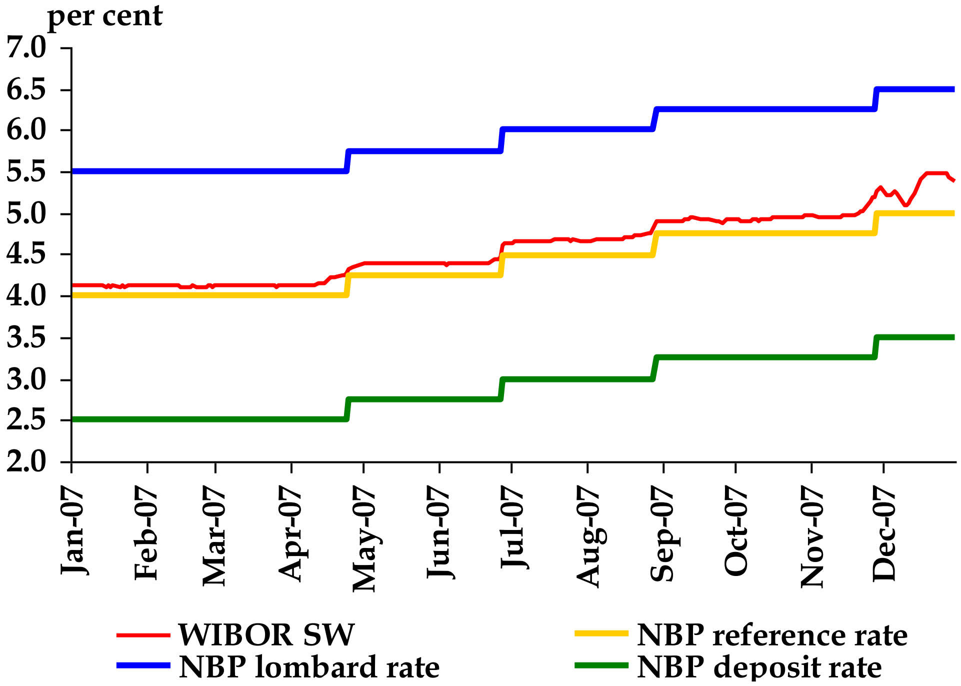
Interest rate

In 2007 the fundamental monetary policy instrument was the short-term interest rate. The Monetary Policy Council determined the level of NBP interest rates, which, in turn, influenced the interest on monetary policy instruments, i.e. open market operations, reserve requirements and standing facilities.

The main interest rate of the NBP was the reference rate. This rate influenced the level of interest rates with maturities comparable to the maturity of basic open market operations (WIBOR SW[3]). The deposit rate and the lombard rate of the NBP determined the fluctuation band of overnight interest rates in the interbank market. The rediscount rate indirectly determined the interest on required reserve funds.

Figure 3

NBP interest rates and interbank market WIBOR SW rate in 2007



Source: NBP data.

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[3] WIBOR SW (Warsaw Interbank Offered Rate Spot Week) - rate at which banks are ready to grant loans in the unsecured interbank deposit market for the period of 7 days. It is calculated as the arithmetic mean from quotations submitted by participants of the fixing conducted each business day at 11.00 AM and published on Reuters news website (WIBO). The fixing is organised by ACI Polska.

In 2007 the Monetary Policy Council raised the key NBP rates on four occasions. Overall, the reference rate was raised from 4.00% to 5.00%, the lombard rate from 5.50% to 6.50%, the deposit rate from 2.50% to 3.50% and the rediscount rate from 4.25% 5.25%. The tolerance band for deviations of short-term market rates remained unchanged at +/-1.50 percentage point around the reference rate.

The reference rate increases were followed by short-term interest rates in the interbank market. WIBOR SW rate oscillated around the NBP reference rate and remained in the corridor for deviations delineated by the lombard and deposit rates of the NBP. The average deviation[4] of this rate from the NBP reference rate in 2007 amounted to 9 basis points and was 3 basis points higher than in the preceding year. A rise in the deviation of WIBOR SW rate in relation to 2006 was observed in the second half of 2007 and particularly in 2007 Q4 and it mainly resulted from:

- increased expectations of NBP interest rate hikes and
- increased aversion to risk in the interbank market resultant from the crisis in the US mortgage loan market and the ensuing liquidity disruptions in the world markets.

Table 1

Decisions of the Monetary Policy Council regarding changes in the official interest rates in 2007.

Decision date*	Decision:
25 April 2007	- Raising of minimum yield on 7-day open market operations from 4.00% to 4.25% - Raising of the lombard rate from 5.50% to 5.75% - Raising of the rediscount rate from 4.25% to 4.50% - Raising of the deposit rate from 2.00% to 2.75%
27 June 2007	- Raising of minimum yield on 7-day open market operations from 4.25% to 4.50% - Raising of the lombard rate from 5.75% to 6.00% - Raising of the rediscount rate from 4.50% to 4.75% - Raising of the deposit rate from 2.75% to 3.00%
29 August 2007	- Raising of minimum yield on 7-day open market operations from 4.50% to 4.75% - Raising of the lombard rate from 6.00% to 6.25% - Raising of the rediscount rate from 4.75% to 5.00% - Raising of the deposit rate from 3.00% to 3.25%
28 November 2007	- Raising of minimum yield on 7-day open market operations from 4.75% to 5.00% - Raising of the lombard rate from 6.25% to 6.50% - Raising of the rediscount rate from 5.00% to 5.25% - Raising of the deposit rate from 3.25% to 3.50%

Source: NBP data.

*Decisions came into force on the following business day.

[4] The average deviation of WIBOR SW rate as well as WIBOR O/N and POLONIA rates was calculated according to a uniform base 365 days in the year.

The average deviation from the NBP reference rate in 2007 amounted to 23 basis points for POLONIA rate[5] and 19 basis points for WIBOR O/N rate (compared with 16 and 10 basis points, respectively, in 2006).

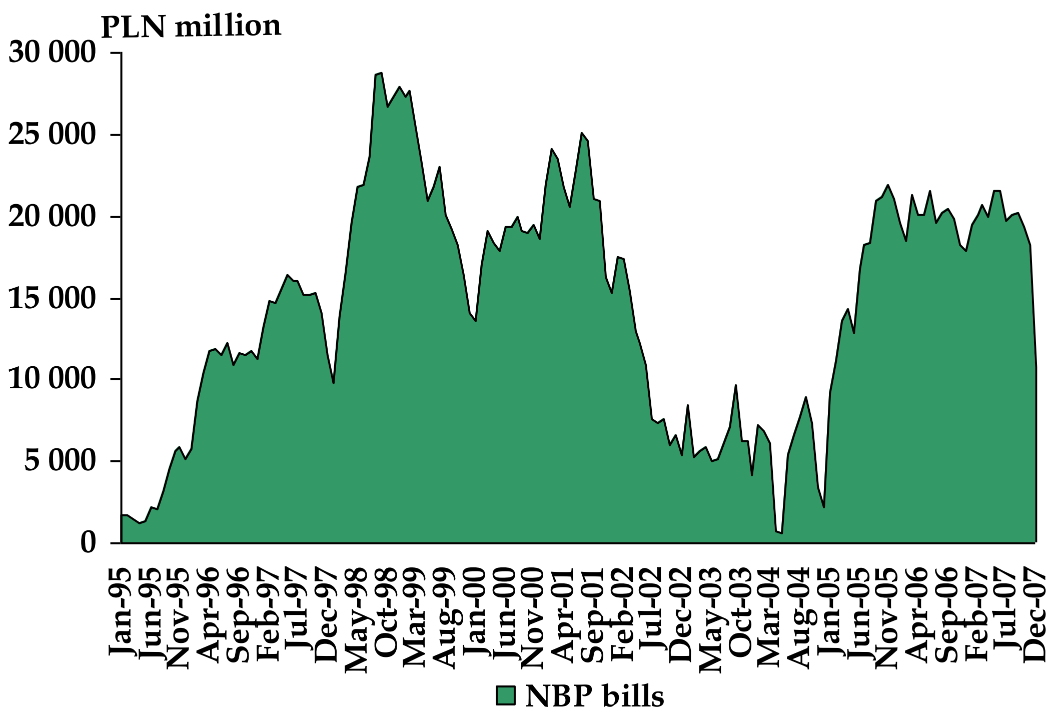
Open market operations

In 2007 open market operations were the principal instrument for maintaining short-term interest rates at a level consistent with the pursuit of the MPC-established inflation target. As regards these operations, the NBP could make use of basic, fine-tuning and structural operations.

Basic operations consisted in the issuance of the NBP bills with 7-day maturity. They were performed, similarly as in the preceding year, on a regular basis (once a week).

Figure 4

Average monthly balance of basic open market operations 1995-2007



Source: NBP data.

[5] POLONIA (Polish Overnight Index Average) – is an average overnight rate weighted with the transaction volume in the unsecured interbank deposit market. The NBP publishes this rate at NBP's page at Reuters website daily at 17.00 hrs.

Starting from 1 January 2006 the access to basic operations was granted to all the banks participating in the SORBNET system which at the same time had an account at the NBP's Securities Register and the ELBON application.

In 2007 the National Bank of Poland, apart from the basis open market operations, could also recourse to conduct fine-tuning operations. Fine-tuning operations could take the form of both liquidity-absorbing and liquidity-providing operations. These operations could be accessed by 13 banks which were most active in the money and foreign exchange markets and which signed contracts with the NBP to act as a Money Market Dealer. These operations could be performed in order to mitigate the impact of unexpected short-term movements in the liquidity of the banking sector on the level of short-term interest rates. In 2007, however, there were no grounds to conduct any operations of this kind.

2007 saw the continuation of the liquidity surplus in the banking sector, yet the forecast for subsequent years envisaged its reduction. In these conditions, it was not necessary either to modify the long-term liquidity structure of the banking sector.

Reserve requirements

In 2007 the obligation to hold reserve requirements in the accounts with the NBP applied to banks, branches of credit institutions and branches of foreign banks operating in Poland. Reserve requirements were held in the averaged system. Banks were obliged to maintain an average balance of funds in accounts with the NBP during the reserve maintenance period at the level not lower than the reserve requirements.

Required reserves were calculated on the basis of bank's collected deposits and funds received from the sale of securities. Excluded from the reserve base were funds received from another domestic bank, acquired from abroad for at least two years and deposited in credit and savings accounts at building societies and in individual pension accounts. Required reserves were calculated and held in the Polish zloty.

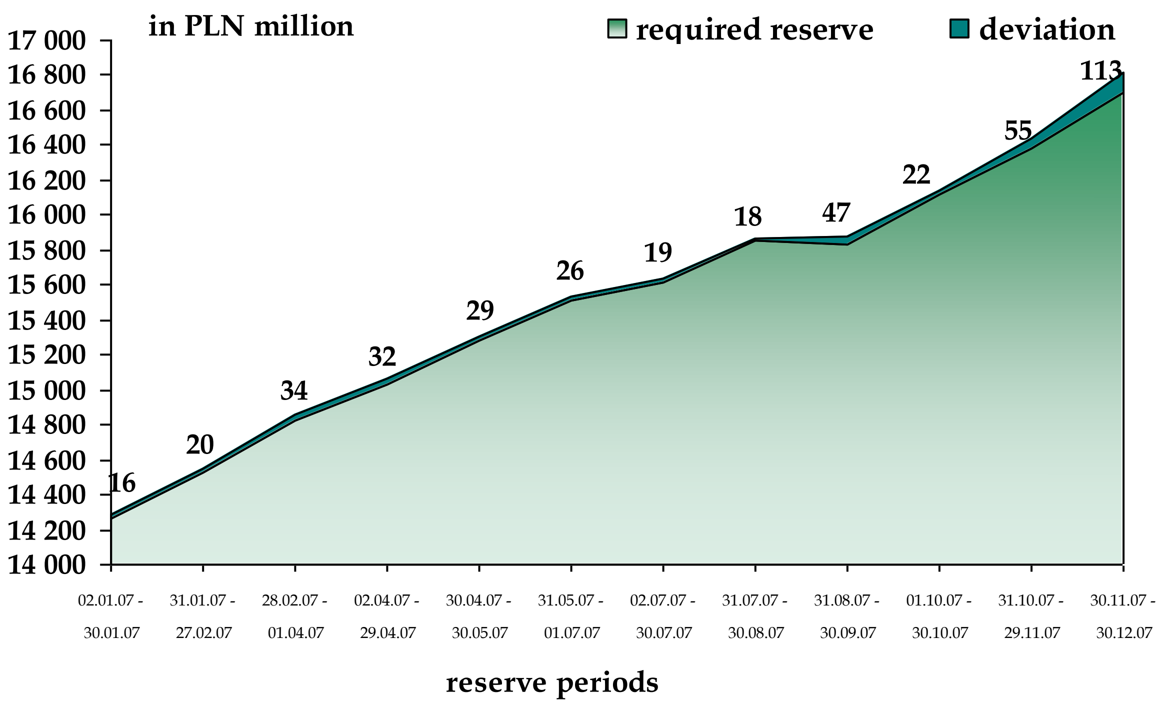
The ratios of required reserves were not changed in 2007 and amounted to 3.5% on all liabilities included in the reserve base, except for funds acquired from repo transactions, for which the required reserve rate was 0%. Banks deducted a lump-sum allowance, equivalent to EUR 500 thousand, from their reserve requirements.

The holdings of required reserves were remunerated. On 1 May 2004, the Monetary Policy Council set the interest rate at the level of 0.9 of the rediscount rate. Starting from 2007 all the remuneration has been received by banks.[6]

The amount of required reserves is PLN 16,966 million as of 31 December 2007, showing an increase of PLN 2,996 million (21.4%) as compared with 31 December 2006. This rise in the required reserve level mainly resulted from a 20.3% increase in deposits that formed the reserve base and were subject to the positive ratio of required reserves.

Figure 5

Changes of required reserve level and deviations from reserve requirements in 2007



Source: NBP data.

There was a continuation in all the reserve maintenance periods of a surplus in the average balance of funds (of PLN 36 million, i.e. 0.23%, on average) in relation to the level of the reserve requirements. Slight differences between the required and held reserves in particular periods (except for December) resulted from:

- proper asset management at banks,
- banks’ use of instruments facilitating asset management in accounts with the NBP (intraday credit, deposit and lombard facilities), and

[6] In 2004, 2005 and 2006 the NBP was obliged to transfer 80%, 60% and 50%, respectively in subsequent years, of the amount of interest accrued on required reserve assets to the EU Guarantee Fund.

- arrangement under with interest is only charged on reserve funds to the amount of the required reserve (regulation in force since May 2004).

In December the surplus in the average balance of funds in relation to the required reserve amounted to PLN 113 million (0.68%). This larger difference, in comparison to preceding months, resulted from cautious current liquidity management on the part of banks at the end of the year amid concurrent liquidity disruptions in the world markets.

Standing facilities

Standing facilities performed with the central bank were meant for banks to deposit their free funds overnight with the NBP or to supplement the banking sector's short-term liquidity. These operations, initiated by commercial banks, prevented excessive fluctuations of interbank rates. Standing facilities include lombard facility and deposit facility.

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

In 2007, the total amount of term deposits placed by banks with the NBP amounted to PLN 195.3 billion and was 3.5 times higher compared with the deposits places one year before. Between 1 January and 31 December 2007 the average daily level of overnight deposits amounted to PLN 535.1 million, compared to PLN 149.9 million in 2006. A particularly high utilisation of deposit operations was observed in December at the average level of PLN 2,964.0 million. It was connected with banks' willingness to hold more funds at the turn of the year.

The total value of overnight deposits placed by banks ranged between PLN 0.1 million and PLN 11.8 billion. The highest amounts were deposited by banks on the last days of the required reserve maintenance periods.

In 2007 banks made use of the lombard facility collateralised with Treasury securities to supplement their current liquidity, mainly towards the end of periods of maintaining required reserves in current accounts with the NBP. The total amount of credit used in 2007 was PLN 11.4 billion, compared to PLN 15.5 billion in 2006, while the average daily use of lombard facility was PLN 31.3 million as compared to PLN 42.6 million in 2006.

Other operations

Intraday credit facility is an instrument facilitating liquidity management in the banking sector during the business day and, at the same time, ensuring the interbank settlement liquidity. It is a non-interest bearing credit collateralised with Treasury securities, taken and repaid during the same business day. In 2007 the daily injection of operational liquidity for banks ranged between PLN 10.4 billion and PLN 18.7 billion. The utilisation of intraday credit facility increased by 15.2% in relation to 2006.

Intraday credit in EUR serves to ensure settlement liquidity in the SORBNET – EURO system. It is collateralised with Treasury bonds that have been previously accepted by the ECB and is subject to repayment during the same business day. In 2007 the daily injection of euro-denominated operational liquidity to banks ranged between EUR 0.5 million and EUR 2.4 million. The utilisation of the intraday credit facility in the euro increased by 7.1% in relation to 2006.

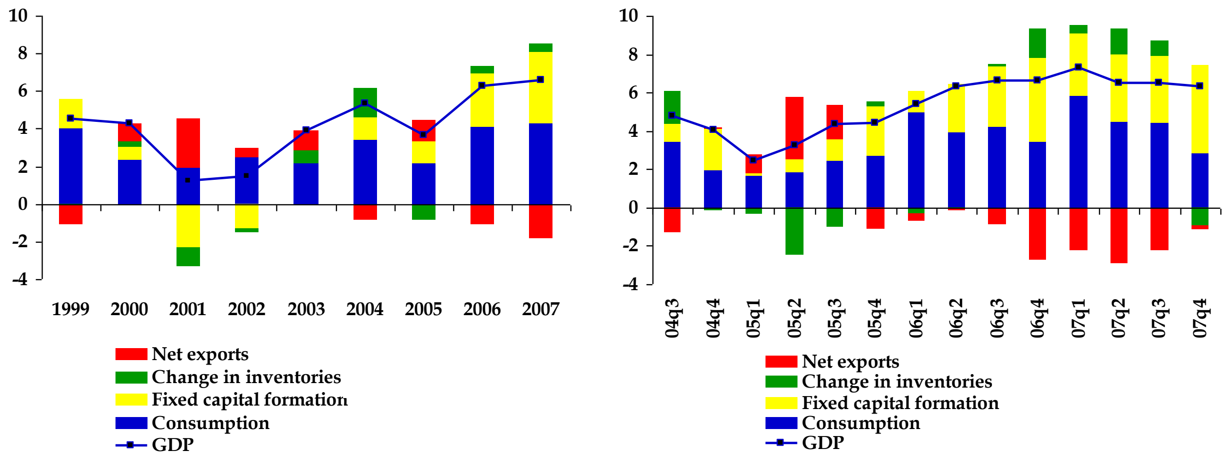
Appendix 1. GDP and final demand

In 2007 GDP rose by 6.6% (compared to 6.2% in 2006), which was the highest rate of growth in 10 years. The growth rate of domestic demand amounted to 8.3% y/y (compared to 7.3% in 2006). The significant growth in domestic demand resulted primarily from a high growth rate of private consumption (5.2% y/y compared to 4.9% y/y in 2006) and gross fixed capital formation (19.3% y/y compared to 15.6% in 2006). The growth rate of public consumption (5.8% y/y) and the contribution of inventories to GDP (0.4 percentage point) remained at their levels form 2006. Exports were rising more slowly than imports, which led to net exports being conducive to lowering GDP growth rate, similarly as in the previous year.

Gross value added[7] rose in 2007 by 6.7% y/y (compared to 6.0% y/y one year before) This surge in gross value added in 2007 primarily resulted from a recovery in market services and industry (their contributions to total value added growth amounted to 3.4 percentage points and 1.9 percentage point, respectively). A faster growth rate of gross value added was also recorded in construction (15.6% y/y as compared to 12.5% y/y one year before). The value added increase in construction was brought about, among others, by high investment outlays in housing construction and investments connected with the inflow of EU structural funds.

Figure 6

Share of final demand components in the GDP growth



Source: NBP calculations based on GUS data.

[7] GDP equals total value added increased by taxes on products (including import duties) and product subsidies.

Table 2

GDP and domestic demand 2000 – 2007

	2000	2001	2002	2003	2004	2005	2006	2007
	Growth rate							
(% of GDP)	4.3	1.2	1.4	3.9	5.3	3.6	6.2	6.6
Domestic demand (%)	3.1	-1.3	0.9	2.7	6.0	2.4	7.3	8.3
Consumption (%)	2.9	2.3	3.0	2.6	4.0	2.7	5.1	5.3
Private consumption (%)	3.0	2.3	3.4	2.0	4.4	2.0	4.9	5.2
Capital formation (%)	3.9	-13.4	-7.2	3.3	14.7	1.4	16.8	19.7
Gross fixed capital formation (%)	2.7	-9.7	-6.3	-0.1	6.4	6.5	15.6	19.3
Exports (%)	23.2	3.1	4.8	14.2	14.0	8.0	14.6	8.4
Imports (%)	15.6	-5.3	2.6	9.3	15.2	4.7	17.4	12.4
Contribution of net exports to GDP growth (percentage points)	0.9	2.6	0.5	1.1	-0.8	1.1	-1.1	-1.8
	GDP structure in current prices (GDP=100)							
Domestic demand	106.4	103.7	103.4	102.6	102.0	100.3	101.4	102.3
Consumption	81.6	82.9	84.8	83.8	81.9	81.1	80.3	78.6
Capital formation	24.8	20.8	18.6	18.7	20.1	19.3	21.1	23.7
Net exports	-6.4	-3.7	-3.4	-2.6	-2.0	-0.3	-1.4	-2.3

Source: GUS data.

The private consumption growth in 2007 was slightly higher than in 2006 and was mainly connected with a rise in disposable income of households (of approx. 8.7% y/y). The improved situation in the labour market was conducive to increased income from paid employment in 2007 (a rise of approx. 16% in current prices, data on income according to NBP estimates). In turn, old-age and disability pension transfers increased at a slower rate than in 2006 (5.5% y/y compared to 7.5% in 2006).

The fact that the growth rate of investment outlays was faster than one year before was connected with a very good financial situation of enterprises and their favourable assessments of anticipated demand and development prospects. The good financial standing of enterprises favoured greater availability of loans to these entities.

The growth rate of foreign trade turnover in 2007 was markedly lower than in the previous year, even though, similarly to 2006, it remained higher than GDP growth rate. The volume of exports rose in 2007 by 8.4%, while that of imports increased by 12.4% (see Table 2). In 2007 the contribution of net exports to GDP equalled -1.8 percentage point.

Appendix 2. Prices of consumer goods and services

In 2007 the average annual growth in the Consumer Price Index amounted to 2.5%, which is the level of the NBP's inflation target. In particular months of 2007 the annual inflation indicators showed a rising tendency – from 1.6% in January to 4.0% in December 2007 (with a temporary decline in August 2007 to 1.5% y/y[8]). The inflation rise in the course of 2007 was mainly caused by an increase in the growth rate of food and non-alcoholic beverage prices and regulated prices.

The index of **food and non-alcoholic beverage prices** went up from 2.8% y/y in January to 7.9% in December 2007. The average annual growth of these prices in 2007 was considerably higher than one year before (at 4.9% compared to 0.6% back in 2006). The high growth of these prices was primarily connected with a significant rise of non-processed food prices.[9] The main factors contributing to food price growth in 2007 included: accelerated demand for agricultural and food products on the part of developing countries amid ongoing changes in the global demand structure, adverse weather conditions diminishing agricultural output in many regions of the world and the growth of the bio-fuel market supported by the developed countries' governments.

Regulated price index[10] went up from 1.7% y/y in January to 4.8% in December 2007. The strongest contribution to the acceleration of the annual growth of regulated prices was made by the stepped up growth of the prices of fuels and tobacco products.

In January-August 2007 the annual growth in of regulated prices stayed at a relatively low level. Towards the end of the year, however, the growth of prices in this group started to accelerate. This was connected with the rises of excise tax rates on tobacco products introduced at the beginning of the year. Additionally, the acceleration in the group of regulated prices was fuelled by a marked rise in the rate of fuel prices, connected with significant oil price hikes in the world markets in 2007.

[8] The temporary drop in the annual CPI to 1.5% and in net inflation to 1.2% in August 2007 was primarily the result of a promotional price reduction by one of internet providers and of a decline in the annual growth rate of food and non-alcoholic beverage prices due to the disappearance of the statistical base effect.

[9] In this group prices of fruit and vegetables displayed high growth. In the first half of the year this was the aftermath of a drought in the summer of 2006, while in the second half of 2007 it was connected with the spring ground frosts which considerably reduced the supply of domestic fruits.

[10] Regulated prices include prices of goods and services whose developments are not fully shaped by the market. This group encompasses goods whose retail price is mainly composed of excise tax (fuels, alcoholic beverages, tobacco products) and goods and services whose prices are largely impacted by the decisions of central and local government institutions (public administration services, certain transportation services) and market regulators (electricity, gas, communications).

The index of **prices of other goods and consumer services**, i.e. inflation net of food and regulated prices, stayed at a relatively low level in 2007. Nevertheless, the growth of those prices displayed a rising tendency, which was temporarily disrupted by its decline in 2007 Q3. The rise in the growth of **other prices** were mainly driven by accelerating growth in prices of services in the first half of 2007. This growth was temporarily halted in 2007 Q3 due to the decline in the growth of internet services prices.[11] In January-December 2007 the decline in the annual growth in prices of other goods and services was driven by drops in the prices of non-food products. The main reason behind the decline in this group of goods were persistent slides in the prices of clothes, footwear and electronic equipment, i.e. goods that are in large proportion imported from low cost countries. At the same time, the decrease in the prices of non-food products was curbed by rising prices of materials used for home maintenance and repairs and of heating fuel.

[11] July 2007 marked the disappearance of the base effect connected with a price increase introduced twelve months before. In turn, in August 2007 there was a significant drop in prices of internet services.

Table 3

Changes in main groups of consumer goods and services in 2006–2007 (%) (y/y)

	CPI	**Food and non-alcoholic beverages**	**Regulated prices**	*of which: fuels*	**Other goods and services**	*of which: non-food products*	*of which: services*
	% structure of weights in CPI basket						
2006	**100.00**	**27.2**	**27.5**	*3.9*	**45.3**	*26.7*	*18.6*
2007	**100.00**	**26.2**	**27.4**	*4.0*	**46.4**	*27.4*	*19.0*
	Change in relation to the corresponding period of the previous year (%)						
Jan 2006	**0.6**	**-0.9**	**3.6**	*6.4*	**-0.4**	*-1.6*	*1.4*
Feb	**0.7**	**-0.2**	**3.3**	*4.6*	**-0.4**	*-1.6*	*1.4*
Mar	**0.4**	**-0.7**	**3.2**	*3.4*	**-0.6**	*-1.6*	*0.8*
Apr	**0.7**	**-0.6**	**4.3**	*4.4*	**-0.6**	*-1.7*	*0.9*
May	**0.9**	**-0.2**	**4.5**	*7.1*	**-0.6**	*-1.6*	*0.8*
Jun	**0.8**	**-0.5**	**4.3**	*5.9*	**-0.6**	*-1.6*	*1.0*
Jul	**1.1**	**0.2**	**3.8**	*4.6*	**0.0**	*-1.7*	*2.5*
Aug	**1.6**	**1.8**	**3.9**	*4.9*	**0.1**	*-1.7*	*2.7*
Sep	**1.6**	**2.4**	**3.0**	*-1.1*	**0.2**	*-1.5*	*2.5*
Oct	**1.2**	**2.2**	**1.9**	*-6.2*	**0.2**	*-1.3*	*2.4*
Nov	**1.4**	**2.2**	**1.8**	*-7.1*	**0.7**	*-1.2*	*3.5*
Dec	**1.4**	**1.8**	**1.9**	*-6.3*	**0.8**	*-1.1*	*3.6*
Jan 2007	**1.6**	**2.8**	**1.7**	*-3.9*	**0.9**	*-1.3*	*4.0*
Feb	**1.9**	**3.2**	**2.1**	*-1.3*	**1.0**	*-1.1*	*4.1*
Mar	**2.5**	**4.3**	**2.8**	*4.0*	**1.2**	*-0.9*	*4.3*
Apr	**2.3**	**4.6**	**1.8**	*2.6*	**1.4**	*-0.7*	*4.4*
May	**2.3**	**4.3**	**1.5**	*0.8*	**1.7**	*-0.4*	*4.6*
Jun	**2.6**	**4.4**	**2.2**	*4.1*	**1.8**	*-0.2*	*4.8*
Jul	**2.3**	**4.4**	**2.2**	*2.7*	**1.1**	*-0.1*	*2.9*
Aug	**1.5**	**2.8**	**1.9**	*-0.5*	**0.6**	*-0.1*	*1.6*
Sep	**2.3**	**5.1**	**2.4**	*2.5*	**0.6**	*-0.2*	*1.8*
Oct	**3.0**	**6.6**	**3.2**	*7.6*	**0.8**	*0.0*	*2.0*
Nov	**3.6**	**7.6**	**4.0**	*13.2*	**1.0**	*0.1*	*2.3*
Dec	**4.0**	**7.9**	**4.8**	*18.1*	**1.3**	*0.3*	*2.6*
Jan-Dec 2006	**1.0**	**0.6**	**3.3**	*1.5*	**-0.1**	-1.5	2.0
Jan-Dec 2007	**2.5**	**4.9**	**2.5**	*4.1*	**1.1**	-0.4	3.3

Source: NBP calculations based on GUS data.

Appendix 3. Balance of payments

In 2007 the current account deficit of the balance of payments amounted to EUR 11.5 billion (as compared to EUR 7.3 billion in 2006). The relation of current account deficit to GDP rose from 2.7% in 2006 to 3.7% in 2007. The deterioration in the current account balance was connected with the deepening of the deficit in goods and income. Similarly to 2006, the rising surplus in current transfers and services was conducive to the lowering of the current account deficit.

The factors that contributed to changes in the growth rate of Polish exports and imports in 2007 were on the one hand, the persistent high growth in demand in the Polish economy and, on the other hand, slight weakening in demand from major trading partners. In 2007 the value of exports increased by 15.0% y/y (compared to 23.1% y/y in the previous year), and the value of imports by 17.8% (24.2%) [12]. Due to a slightly stronger fall in the growth rate of exports than in the growth rate of imports, with a persistent negative balance in foreign trade, the latter further deepened (to EUR 17.6 billion compared with EUR 12.9 billion in 2006 according to GUS data). The relatively high level of imports was mainly driven by a strong growth in the volume of imports whereas the growth in transaction prices in imports was the lowest since 2004, which was driven by the zloty appreciation. The growth of investment and consumption demand (mainly for consumer durable goods) was higher compared with 2006, whereas the demand in the sector of export grew at a slower pace (which is reflected in a fall in the import of supply goods). On the other hand, the lower growth in exports was driven by a slower rise in the volume of exports which, compared with 2006, was two times lower, while the growth of transaction prices in exports remained at a high level. The higher growth in transaction prices in exports[13] compared with transaction prices in imports was conductive to an improvement in in the Polish *terms of trade* .[14]

Analysis of changes in the foreign trade balance broken down into Poland's major trading partners shows that the deepening deficit in 2007 was driven both by the decrease in the positive trade balance with EU Member States and a further deepening of the negative balance with third countries. The decrease in trade surplus with the European Union was mainly driven by an increase in trade deficit with the euro area (primarily with Germany). In

[12] In 2007 the volume of exports stepped up by 8.9% y/y (as compared with an increase of 16.1% y/y in 2006), whereas the volume of imports grew by 13.8% y/y (16.8%).
[13] Transaction prices in imports expressed in EUR increased in 2007 by 3.6% y/y (against 6.3% y/y in 2006) whereas export prices increased by 5.6% y/y (6.0% y/y).
[14] In 2007 r. terms of trade index was 102.1 as compared with 99.7 in the previous year.

parallel, there was an increase in trade surplus with new EU Member States. The most marked lack of equilibrium has been noted in trade with non-EU countries, in particular, with developing countries, mainly China.[15]

In 2007 the nominal zloty exchange rate continued to strengthen – the average annual exchange rate of the zloty was 2.9% stronger against the euro, and 10.8% stronger against the US dollar. In 2007 the real effective exchange rate of the zloty deflated with unit labour costs in manufacturing[16] appreciated less than the nominal rate, i.e. by 2.6% as compared with 5.3% for the nominal effective exchange rate of the zloty. The real appreciation of the effective exchange rate of the zloty deflated with CPI reached 5.8% in 2007.[17]

In 2007 most of major financial indicators reflecting the external equilibrium of the Polish economy remained at safe levels. Current account deficit was financed in 90% by the inflow of foreign capital in the form of foreign direct investment. The increased use of EU funds classified on the capital account has been restraining the growing deterioration in the ratio of current account and capital account balance to the GDP.

Table 4

Selected warning indicators

Warning indicator	2004	2005	2006	2007
Current account balance / GDP	-4.0	-1.2%	-2.7%	-3.7%
Current account balance + capital balance/GDP	-3.5	-0.9%	-2.1%	-2.5%
Trade balance / GDP	-2.2%	-0.9%	-2.0%	-3.7%
Direct investment / current account balance	119.2 %	184.9 %	110.7 %	90.8%
(Current account balance + capital balance + direct investment)/GDP	1.2%	1.4%	0.9%	0.9%
Foreign debt servicing / exports of goods and services	35.4%	32.3%	29.7%	33.9%
Foreign reserves expressed in terms of monthly imports of goods and services	4.0	4.7	3.9	4.0

Source: NBP calculations.

[15] In 2007 trade deficit with China increased to EUR 7.8 billion (by EUR 2.2 billion as compared with 2006). The growth in imports from China (significantly higher than growth in total imports) mainly contributed to the deficit. In 2007 the value of imports from China increased by 38.0%, which made China the third major supplier of goods to the Polish market (the import from China accounted for 7.2% of Poland's imports).

[16] An appropriate measure to assess changes in the competitive position of producers in international markets is an index reflecting production costs. Moreover, most of trade has so far involved the products of the manufacturing industry. For this reason, the real exchange rate deflated with unit labour costs in manufacturing is the appropriate indicator of the international competitive position of producers. Calculations are based on estimates for 2007 Q4.

[17] Change calculated against the 2006 average annual exchange rate. For the real effective rate of the zloty deflated with unit labour costs calculations were based on quarterly data; in other cases – on the basis of monthly data.

Appendix 4. Money and credit

In 2007 the rise in consumer sentiment related to the improvement in the labour market was driving the revival in the market for household loans that has persisted since 2005. A positive assessment of the expected income situation of households translated into a growth in demand for bank loans, both housing loans and loans for the purchase of consumer durables.

In 2007 there was a marked acceleration in the growth of corporate indebtedness in the banking sector. A positive assessment of the current economic situation of enterprises and favourable forecasts relating to demand were conducive to taking investment decisions. The high level of utilisation of production capacity by corporates also constituted a strong incentive to taking investment decisions.

The first three quarters of 2007 saw a continued trend, initiated in 2005, of regular reallocation of household financial assets in non-banking saving. This was mainly driven by low yields on funds deposited in bank accounts[18] as compared to other moderate-risk forms of saving, mainly participation units in stable growth funds and balanced growth funds. In the fourth quarter of 2007 the structure of financial assets of individuals changed considerably. Owing to a significant slide in Warsaw Stock Exchange indices and rising interest rates bank deposits were treated as an alternative for non-banking savings.

In 2007 a gradual decline in the growth of money supply measured with M3 aggregate was recorded. The fastest growth was recorded in the most liquid components of M1 aggregate (currency in circulation and current deposits).

Loans to households

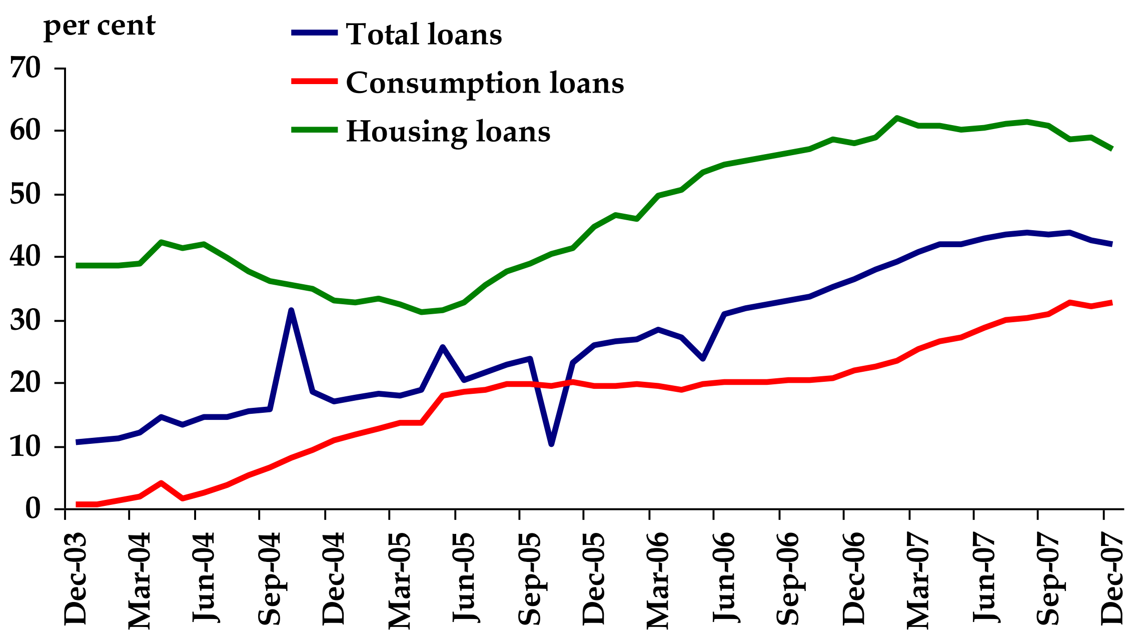
In 2007 nominal value of households' indebtedness with banks rose by PLN 70.3 billion to PLN 253.2 billion as compared to 2006 when it amounted to PLN 46.9 billion.

The fastest growth was recorded in *housing loans* where the average annual growth in 2007 stood at the level of approxiamately 60%. The quick growth in the value of housing loans was mainly driven by the improvement in income of households, strong competition in the housing loan market, the use of mortgage collateral and a rise in property prices.

[18] Bank deposits also include household deposits in Credit Unions (*Spółdzielcze Kasy Oszczędnościowo-Kredytowe – SKOK*)

Figure 7

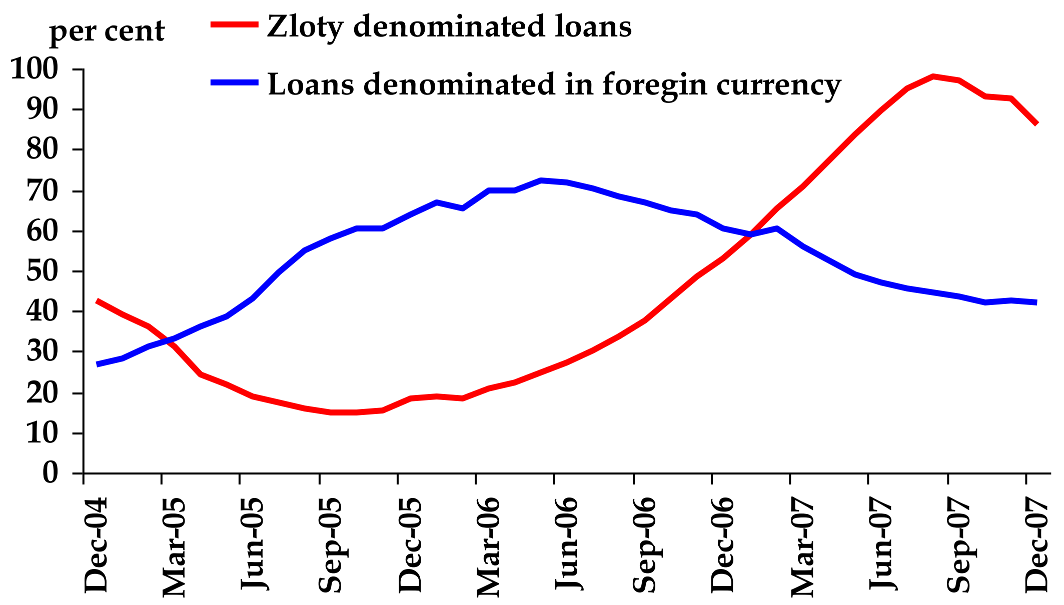
Households' indebtedness, annual growth rate



Source: NBP data.

Figure 8

Housing loans to households, annual growth rate



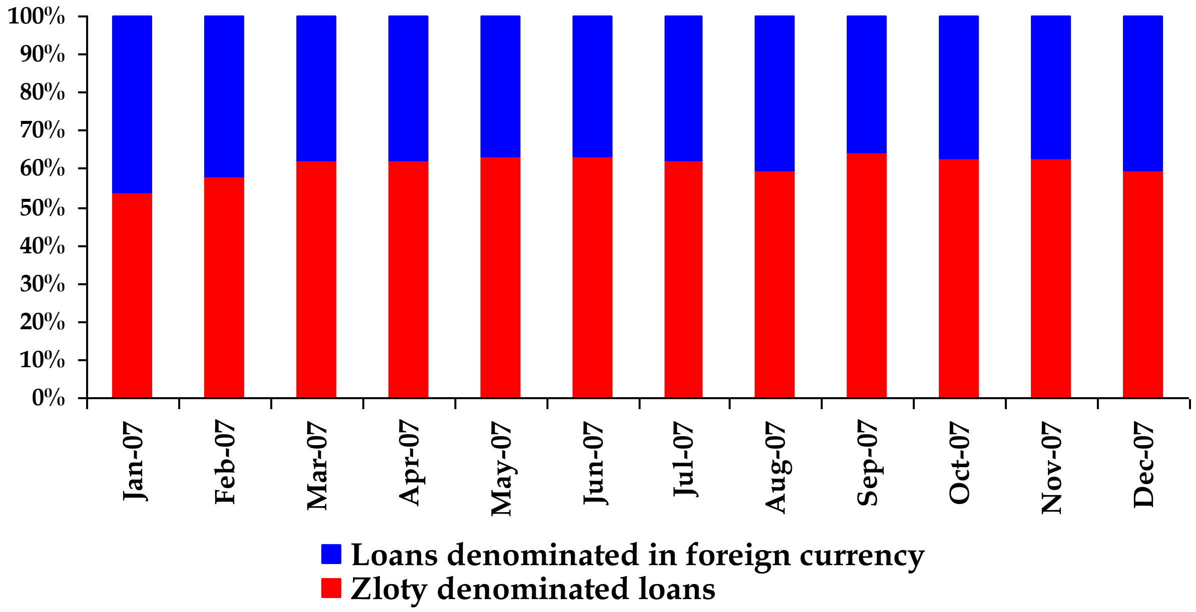
Source: NBP data.

Since mid-2006 there had been a clear shift in households' preferences towards zloty denominated loans. In parallel, the growth rate of housing loans denominated in foreign currencies declined which was driven, among others, by a rise in interest rates on the most popular loans, i.e. those denominated in the Swiss franc which was connected with an increase in LIBOR CHF rates. However, of major significance for the decline in demand for foreign currency loans was the implementation at the beginning of July of *Recommendation S*[19] aimed at limiting access to foreign currency loans. In the last quarter of 2007 the growth rate of zloty denominated loans dropped significantly which was driven by the increase in interest rate on such loans and a decline in house prices both in the primary and secondary market. Some households may have postponed their decisions related to house purchase awaiting further price declines in the property market.

The share of zloty denominated loans in housing loans rose from 36% in December 2006 to 45% in December 2007. Throughout all months of 2007 the majority of new housing loans were denominated in the zloty and their share in total new housing loans accounted for approximately 60%.

Figure 9

New housing loan agreements – currency structure



Source: NBP – structure prepared on the basis of information comprised in interest rate reports on a sample of 19 banks (from July 2007 – 20 banks) whose share in the market for loans to the non-financial sector represents approximately 75%.

[19] *Recommendation S* – a document prepared by the Commission for Banking Supervision comprising good practices for mortgage secured credit exposures.

In 2007 the growth in *consumer loans* accelerated markedly[20] and at the end of the year reached the level of almost 33% y/y.

In 2007 the value of consumer loans went up by PLN 24.9 billion in nominal terms, of which current account credits increased by PLN 2.5 billion, credits related to credit cards – by PLN 3.1 billion and other credits[21] – by PLN 19.3 million. The prolongation of the maximum crediting period by banks constituted an important factor enabling households to increase demand for consumer loans in spite of their significant housing debt servicing burden.

Loans to enterprises

In 2007 a marked rise in the growth of corporate debt in monetary financial institutions was recorded. The annual growth rate of loans to enerprises rose from 15% y/y in January to over 25% y/y in December 2007. At the end of 2007 it slightly slowed-down as a result of the rising interest on credits and uncertainty of the future economic situation assessment connected with turmoil in global financial markets and its potential impact on the national economy.

The largest demand among enterprises was for *property loans* with an annual growth in these loans exceeding 60% y/y in most months of the seconf half of 2007, whereas *investment loans* grew at a much slower pace. In December 2007 the annual growth of such loans stood at less than 10%.

Loans on current account and working capital loans displayed a clear upward trend in 2007. Their annual growth in the second half of 2007 exceeded 20% y/y and was close to the growth of total loans to this sector.

As shown by the balance of payments data, domestic sources of corporate financing were largely supplemented by *foreign debt*[22] which increased in 2007 by PLN 24,5 billion (10.9%) to PLN 249.2 billion, primarily as a result of growing share of non-trade loans (by PLN 17.3 billion, i.e. 11.8%). The value of trade loans rose by PLN 6.4 billion (10.2%) in this period and the value of debt securities held by foreign portfolio investors increased by PLN 0.9 billion (8.4%)

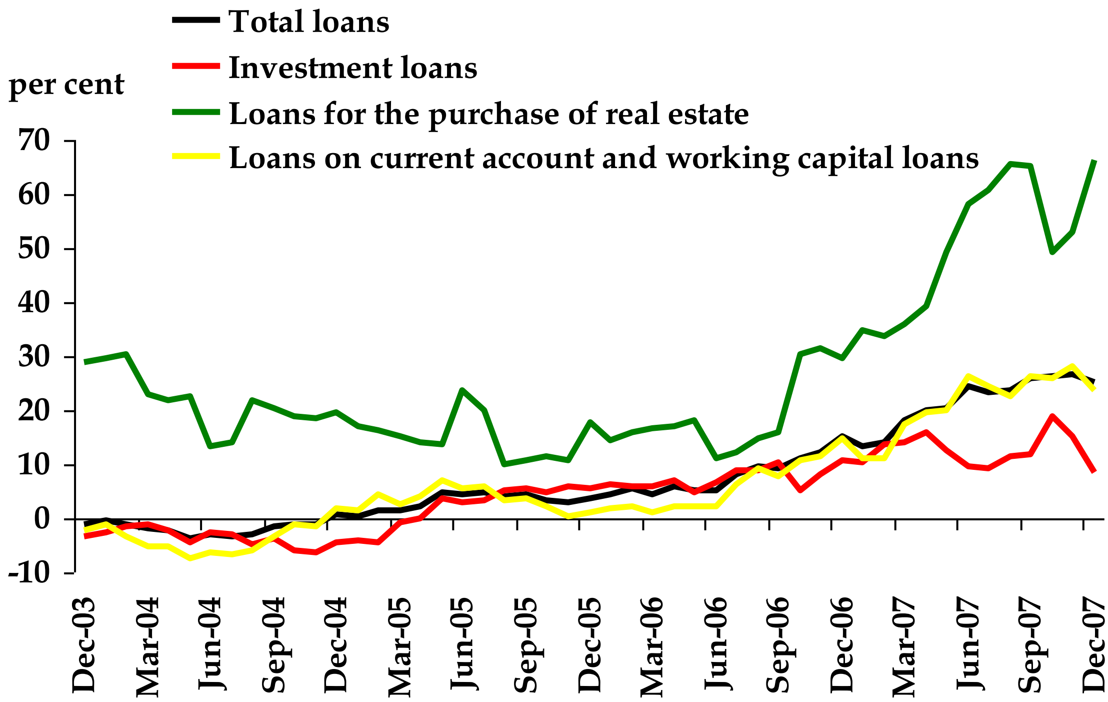
[20] This category comprises current account credits, credits related to credit cards and other credits and loans.

[21] The last group of credits accounting for around 30% of households' credits and around 75% of consumer credits comprises loans for the purchase of cars, cash and seasonal loans, loans for installment purchases and credits and loans for purposes unspecified by borrowers.

[22] Percentage changes for individual categories of foreign debt are calculated on the basis of PLN nominal values (the adjustment for the impact of foreign exchange rate changes are not taken into account).

Figure 10

Corporate indebtedness, annual growth rate



Source: NBP data.

Financial assets of households

In the first three quarters of 2007 the trend for further reallocation of households' financial assets in non-banking saving continued. The rise in investment funds' assets by approximately PLN 34 billion in 2007 was accompanied by an increase in deposits by PLN 24.5 billion.

In the fourth quarter of 2007 the structure of households' financial assets changed significantly. The value of deposits rose by a record high of PLN 16 billion. In parellel, the value of shares held by households fell by PLN 5.4% and the value of investment funds' assets by PLN 5.7 billion which was driven by significant slides in Warsaw Stock Exchange indexes. In this period bank deposits became an alternative for non-banking savings allowing investors to wait trough the period of the uncertainty in the capital market. A factor that contributed to the situation was a gradually rising interest on bank deposits – as at 2007-end average weighted interest in the largest banks was 4.2% compared to 3.3% a year before.

Table 5

Financial assets of households

	LEVEL (PLN billion)					CHANGE (PLN billion)		CHANGE (y/y) per cent		STRUCTURE per cent	
	XII 2006	III 2007	VI 2007	IX 2007	XII 2007	Q4 2007	2007	Q4 2007	2007	XII 2006	XII 2007
1. Deposits (with banks and Credit Unions)	**242.6**	247.4	243.2	251.1	**267.2**	16.0	**24.5**	6.4	**10.1**	46.1	**43.7**
2. Shares[1, 10]	**52.3**	57.9	70.3	66.7	**61.4**	-5.4	**9.0**	-8.0	**17.2**	9.9	**10.0**
3. Investment fund assets[2]	**94.0**	111.9	133.3	133.6	**127.9**	-5.7	**33.9**	-4.3	**36.0**	17.9	**20.9**
4. Life assurance undertaking [3]	**53.0**	57.6	61.6	62.1	**63.9**	1.8	**10.9**	2.9	**20.5**	10.1	**10.4**
5. Treasury bonds[4]	**12.1**	11.6	11.0	10.7	**10.4**	-0.4	**-1.7**	-3.3	**-13.9**	2.3	**1.7**
6. Treasury bills[5]	**0.8**	0.7	0.5	0.4	**0.3**	-0.1	**-0.5**	-15.8	**-60.1**	0.2	**0.1**
7. Notes and coins in cirrculation (excluding valut cash) [6]	**68.8**	70.2	73.4	75.8	**77.2**	1.4	**8.4**	1.9	**12.3**	13.1	**12.6**
8. Bank bonds [7]	**2.7**	2.9	2.8	3.3	**3.5**	0.1	**0.8**	4.3	**29.1**	0.5	**0.6**
TOTAL (items 1 - 8)	**526.3**	560.1	596.3	603.8	**611.7**	7.9	**85.3**	1.3	**16.2**	100.0	**100.0**

1. Shares and allotment certificates deposited in accounts in brokerage offices and houses and in trust companies
- for reporting periods: December 2006, June 2007, December 2007 according to GUS data and Polish Financial Supervision Authority data,
for the end of the Q1 and Q3 according to the Polish Financial Supervision Authority data, for remaining periods NBP estimates.
2. Does not account for data from funds known to be oriented at legal entities only.
3. Figures represent value of technical provisions in life assurance (including provisions where investment risk is borne by the policy holder).
4. According to data of Ministry of Finance.
5. According to data of Domestic Operations Department.
6. It was assumed that the whole cash in the market was held by households.
7. According to data of Domestic Operations Department on the basis of money market dealers' reports (banks). The reports contain the following information: bank bonds issued in complaince with the Law o
bank securiies issued in compliance with the Banking Act, other non-treasury debt securities (including corporate bonds and other short-term debt instruments)
issued in compliance with the Law on Bonds, the Bill of Exchange Law, the Civil Code), mortgage bonds, debt securities issued by local governments.
8. According to preliminary data.
9. Own estimates.
10. Data changed after revsion by the Polish Financial Supervision Authority.

Source: NBP data.

Bank deposits continue to be the main form of household savings. Yet, their share in the sector's financial assets fell in 2007 by 2.4 percentage points to 43.7%. At the same time, the share of assets of investment funds increased by 3 percentage points to 20.9%

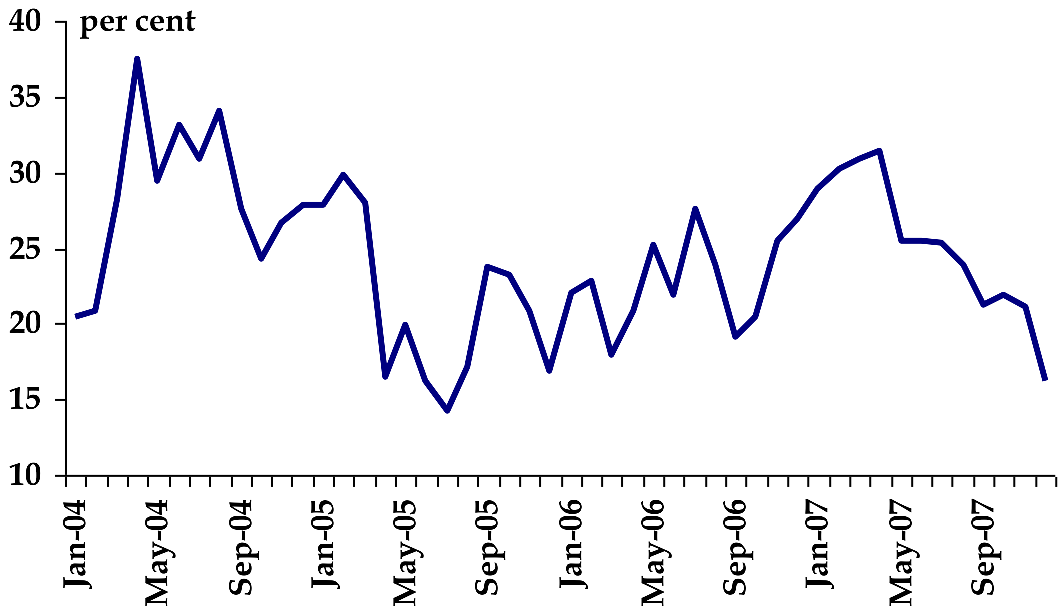
In 2007 the nominal value of households' financial assets increased by PLN 85.3 billion. Investment funds' assets accounted for almost 40% of the increase. Bank deposits also represented a significant share in the growth structure (28.7%), as well as funds of life assurance companies (12.7%), shares of listed enterprises (10.6%) and cash (9.9%).

Deposits of enterprises

In 2007 corporate sector performance and its main economic ratios improved significantly. Corporates' own funds were the main source of financing both day-to-day activities and pro-development projects. There was a marked decline in funds collected on bank accounts. The annual growth of deposits had displayed a rising trend since the middle of 2005 reaching a maximum in April 2007 (31.4% y/y). Thereafter, the growth of funds on bank accounts declined rapidly to reach slightly more than 16% y/y at the end of 2007.

Figure 11

Corporate deposits, annual growth rate



Source: NBP data.

Nominal growth in deposits was PLN 17.8 billion in 2007 against PLN 25.9 billion in the previous year. At the end of December 2007 more than PLN 144 billion was deposited on this sector's accounts which shows that economic entities have considerable potential for continuing to co-finance their investment from their own funds.

Monetary aggregates

In 2007 money supply measured with the M3 aggregate slowed down steadily. Its growth fell in December 2007 by 2.6 percentage points to 13.4% compared to the end of 2006.

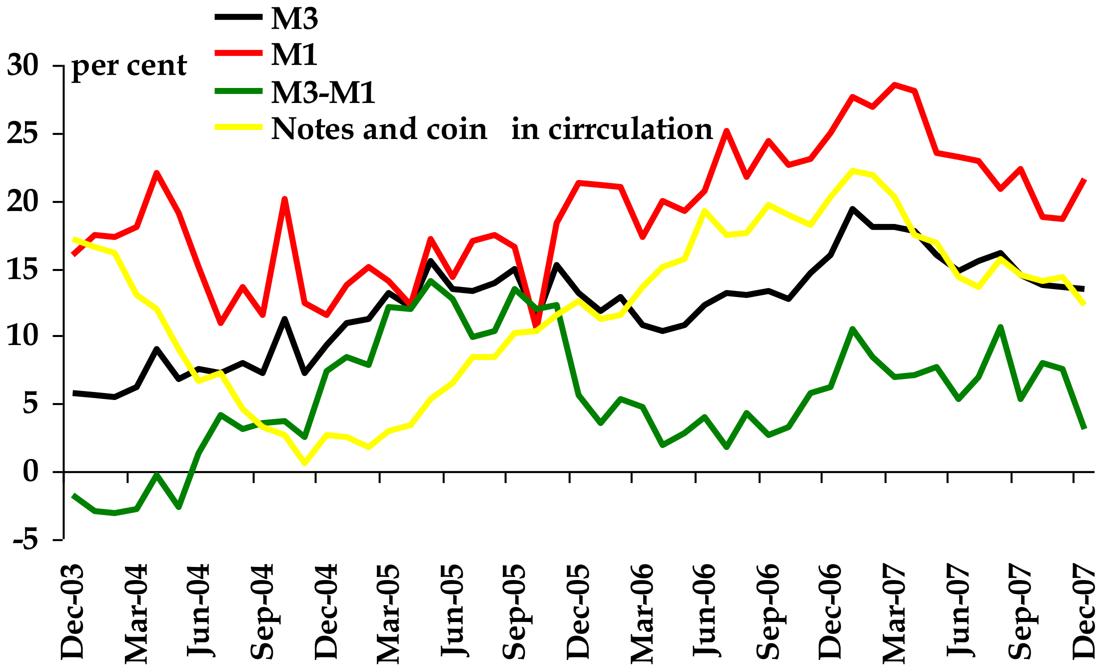
The fastest growth was recorded in the most liquid components of M1 aggregate (currency in circulation and current deposits). The annual growth in this category declined by 3.5 percentage points to 21.6% in 2007. The growth of other less liquid components of the broad money (M3-M1) – also went down – by o 3.2 percentage points to 3.1% y/y.

The relatively high growth of M1 aggregate in 2007, in particular that of current deposits, with a parallel modest interest of entities from the non-financial sector in depositing funds in term deposits was conductive to further rise in M3 liquidity (measured with the share of cash and current liabilities in money M3) by 4 percentge points to 59.7% at the end of 2007.

Among components of the narrow money M1, a nominal growth in currency in circulation was lower than in the previous year and amounted to PLN 8.4 billion as compared with an increase of PLN 11.6 billion in 2006, which may have been connected with a wider popularity of cashless payments. As a result of the above-mentioned growth the share of currency in M1 fell by 1.9 percentage points to a record low of 23%.

Figure 12

Monetary aggregates, annual growth rates



Source: NBP data.

Appendix 5. Inflation projections of the NBP

The *Inflation Report* which presents the Monetary Policy Council's assessment of the current and future macroeconomic developments influencing inflation is a very important instrument of communication with market participants.

Since August 2004 *Inflation Reports* have included the results of inflation projections which are is one of the inputs to the Monetary Policy Council's decision-making process on NPB interest rates. The inclusion of projection results and the assessment of the balance of factors influencing future inflation into *Inflation Reports* enhance the transparency of the implemented monetary policy.

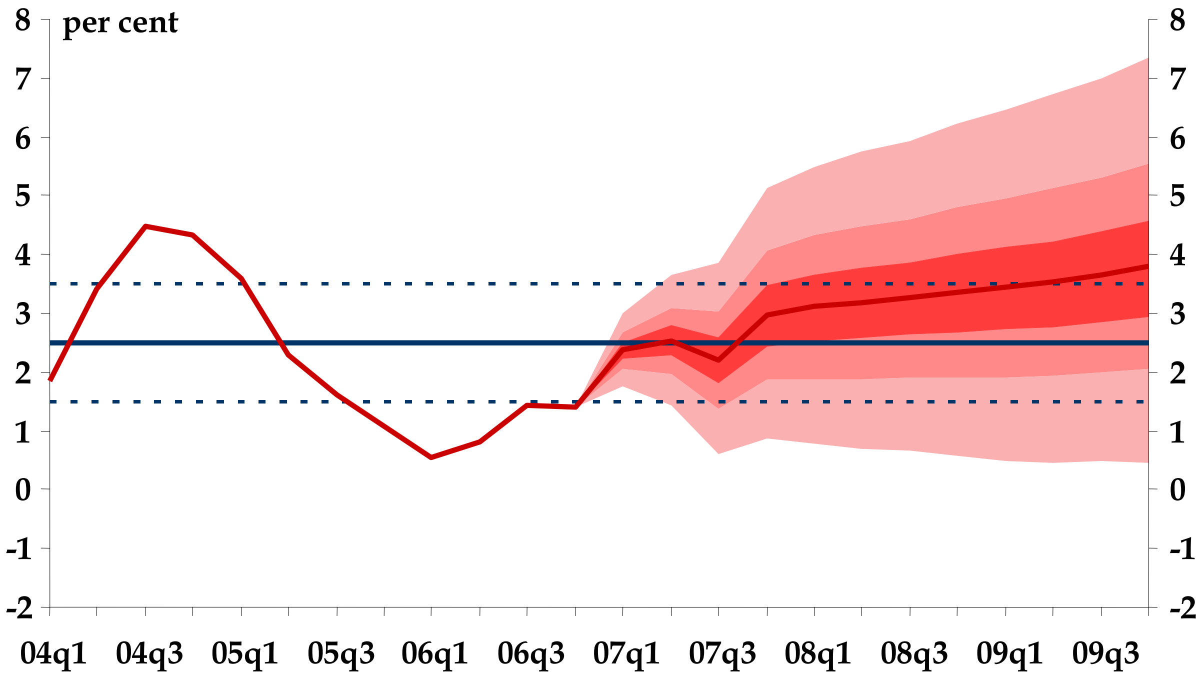
The projection presented in Chapter 4 of the *Report* is prepared with the use of an econometric model of the Polish economy, called ECMOD[23], by a team of NBP economists. The projection horizon encompasses the year of its preparation and two subsequent calendar years. The inflation projection is prepared under the assumption of unchanged interest rates.

The below presented fan charts depict the results of projections published in 2007. Fan charts reflect the main sources of uncertainty only (e.g. uncertainty connected with price food developments). The types of uncertainty not accounted for in the fan chart are discussed in detail in projection descriptions in *Inflation Reports*.

[23] Description of the model was published in: Fic T., Kolasa M., Kot A., Murawski K., Rubaszek M., Tarnicka M., "Model gospodarki polskiej ECMOD" [ECMOD – a model of the Polish economy], *Materiały i Studia*, NBP, No. 194, May 2005. Abbreviated version of the model is available at the NBP website at: http://www.nbp.pl/en/publikacje/raport_inflacja/ECMOD_April2007.pdf

Figure 13

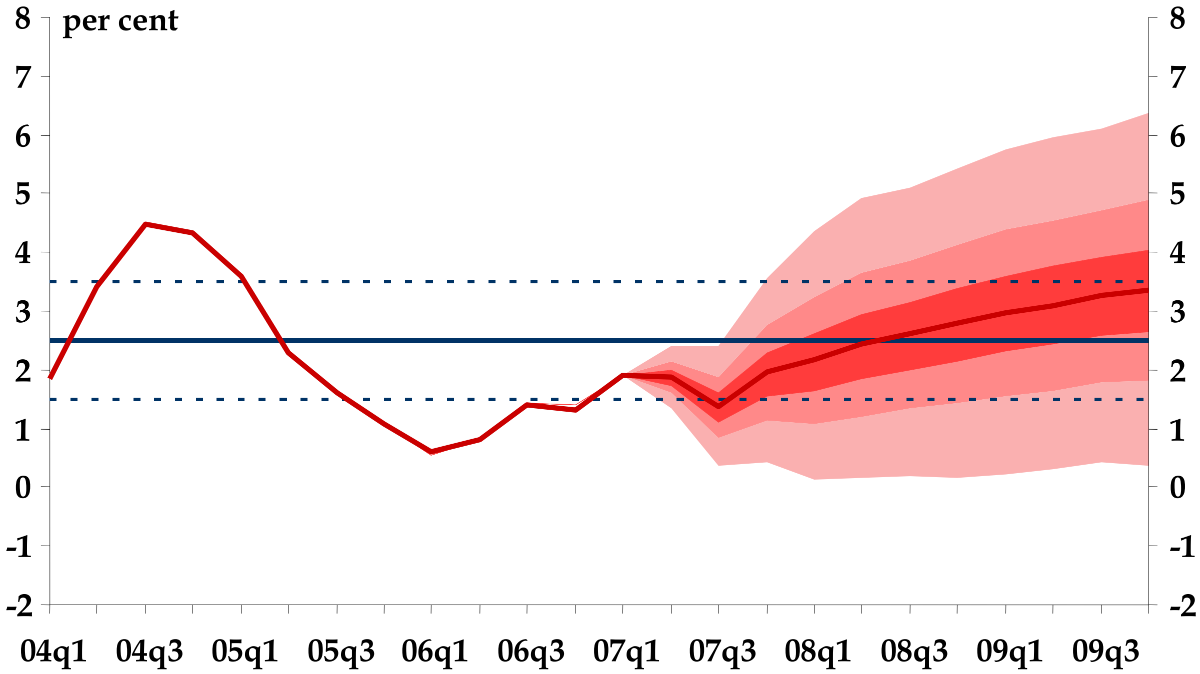
Central inflation projection, fan chart of future inflation path and inflation target of the MPC – January 2007



Source: *Inflation Report*, January 2007, NBP.

Figure 14

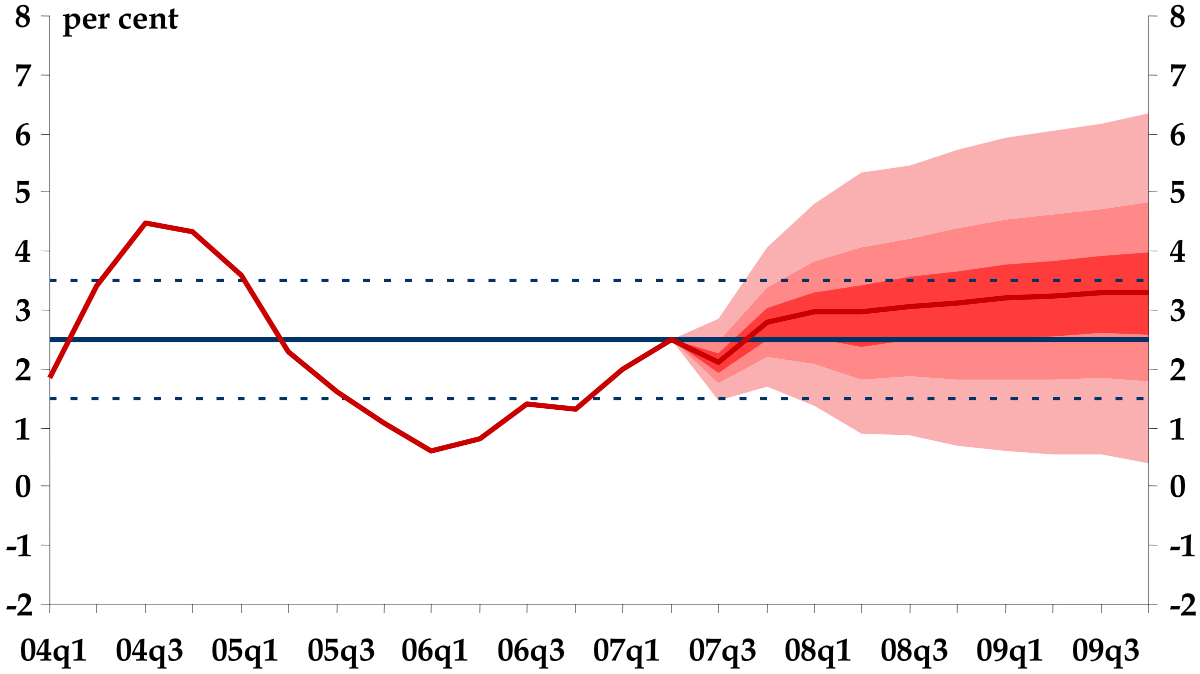
Central inflation projection, fan chart of future inflation path and inflation target of the MPC – April 2007



Source: *Inflation Report*, April 2007, NBP.

Figure 15

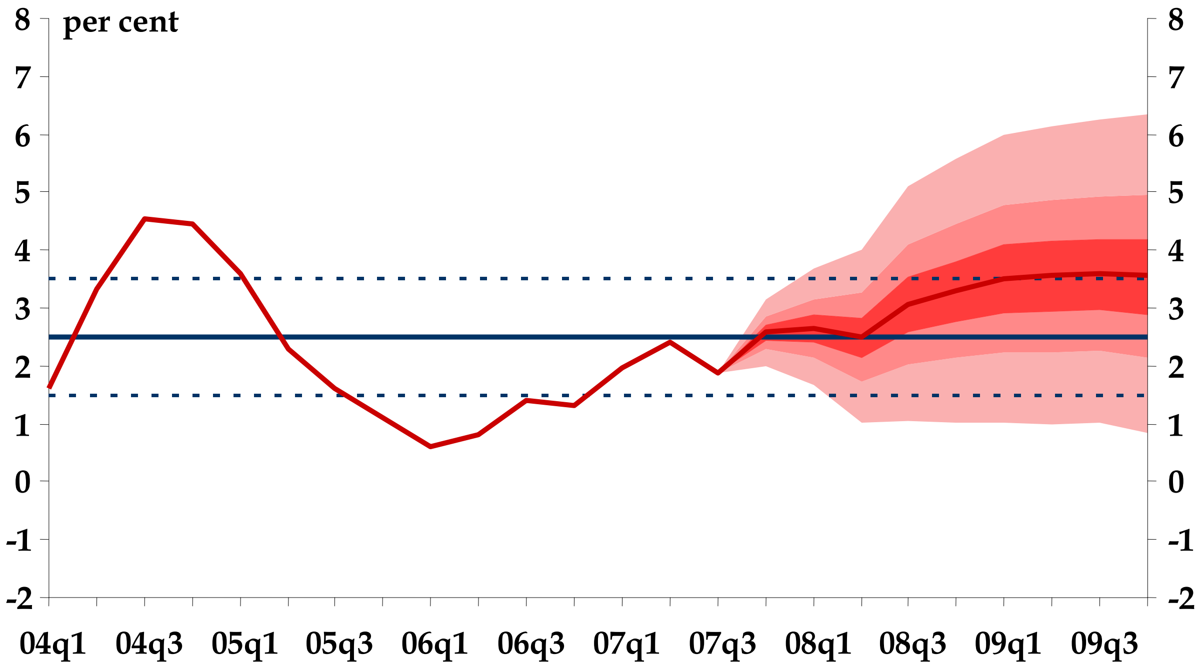
Central inflation projection, fan chart of future inflation path and inflation target of the MPC – July 2007



Source: *Inflation Report*, July 2007, NBP.

Figure 16

Central inflation projection, fan chart of future inflation path and inflation target of the MPC – October 2007



Source: *Inflation Report*, October 2007, NBP.

How should fan charts be interpreted?

Every projection of future values of economic variables is subject to uncertainty. Central banks present the size and scope of quantifiable inflation projection risk through the use of fan charts. The width of the “fan” corresponds to the overall level of risk, which usually changes from quarter to quarter. The further ahead, the wider it gets as the uncertainty of the assessments of the future usually grows proportionally to the length of the time horizon.

In inflation projections prepared by the NBP, probability distribution of their possible realisations is determined for each quarter. The most probable realisations, i.e. the mode of the distributions in particular quarters, are adopted as the central projection. At the same time, 30-percent confidence intervals are constructed around distribution medians. These constitute the central band of the fan, indicated with the darkest shade. Thus, the probability of inflation settling within this band is equal to 30%. Next, the fan is expanded on both sides so that the probability of the variable running between the extended boundaries increases by another 30 percentage points – 15 points on the above, and 15 on the below. The subsequent extensions create successive bands of the fan marked with increasingly lighter shades. The entire fan represents a 90-percent band of confidence around the medians – there is a 90-percent probability of inflation running within the fan.

For example, the chart which refers to the July inflation projection shows that the probability of inflation in 2007 Q1 staying within the tolerance band around the inflation target amounts to approx. 70%, the probability of higher inflation is equal to approx. 10%, whereas the probability of lower inflation could be assessed at approx. 20%. For 2008 Q1 these probabilities correspond to 47%, 28% and 25%, respectively. The inflation projection is characterised by slight asymmetry, which reflects approximately equal probabilities of inflation running above the central path as well as below the central path.

Fan charts depict the uncertainty associated with assumptions exogenous to the projection model and connected with inaccuracy of the model’s statistical mapping of the relations holding between macroeconomic variables. Fan charts, however, do not account for all kinds of uncertainty, such as the uncertainty related to possible changes in the structure of the Polish economy, the approximate nature of any replication of economic reality by a model or the potential instability of estimated relationships in time. A detailed discussion of the sources of uncertainty not accounted for in the fan chart can be found in *Inflation Reports*.

Appendix 6. Minutes of the MPC decision-making meetings held in 2007

Minutes of the MPC decision-making meeting held on 25 April 2007

During the meeting the Monetary Policy Council discussed the outlook for inflation in the context of the past, current and, primarily, expected economic situation.

The Council paid considerable attention to the prospects of economic growth. Council members pointed out that the Polish economy is in the stage of strong economic growth and that the high GDP growth may be expected to be sustained in the medium term, at least. The factors supporting robust economic growth should be the inflow of foreign direct investment and EU funds, as well as optimistic expectations of enterprises regarding future economic situation, additionally boosted by the prospect of Poland hosting the European Football Championships in 2012. In the opinion of some Council members, high economic growth in the coming years will be favoured by strong economic growth in EU countries.

Most Council members considered the current GDP growth to be higher than the potential output growth. However, the Council members differed in their assessment of the magnitude of the impact this factor may have on inflationary pressure.

Some members of the Council believed that there is a significant risk that a demand growth exceeding the growth of potential GDP would lead to a rise in costs and, consequently, to higher inflation and widening external imbalance. They pointed out that, in the medium term, inflation running above the inflation target would result in Polish economy gradually losing its price competitiveness.

Other members of the Council emphasised that the structure of the current economic growth is favourable for low inflation, as over the past several quarters the contribution of investment to GDP growth has been rising, which should be conducive to increasing the potential output and limiting inflationary pressure. Moreover, they assessed that the high GDP growth in 2007 Q1 was to some extent the result of favourable weather conditions, which most strongly affected the construction output. The disappearance of these one-off factors in the next quarters, they argued, may reduce the risk of inflation increase.

Another issue discussed at the meeting was the impact of the European Football Championships, which is to be co-hosted by Poland in 2012, on the outlook for economic growth and inflation. Council members assessed that the organisation of the championships should help sustain the high rate of economic growth in the years to come. Some discussants pointed out that the rise in potential output related to hosting the event will be lower than demand growth and also that it will be delayed in time, which should lead to inflation increase. Furthermore, the discussants argued that the investment connected with the championships will be to a large extent financed with public funds, thus creating the risk of a further deepening of the public finance imbalance.

The Council paid significant attention to the situation in the labour market and its impact on inflation outlook. In the opinion of the majority of Council members, a significant risk factor of inflation growth is the currently observed acceleration in wage growth in the corporate sector. They emphasised that the following factors will contribute to wage growth acceleration: significant decline in unemployment, structural mismatch in the labour market and the emigration of Polish workers to other EU countries, as well as wage convergence between Poland and EU countries. They also argued that the currently observed fast economic growth is strengthening employees' expectations for wage growth acceleration.

Some Council members pointed out that it remained uncertain to what extent the recently observed wage growth acceleration in enterprises was the result of permanent tendencies and to what extent it was fuelled by one-off factors and, therefore, should be seen as a temporary development. Thus, they were convinced that a more comprehensive assessment of the scale of wage pressure strengthening will only be possible after more labour market data are released. These Council members assessed that the rise of unit labour costs will still be constrained by a dynamic increase in investment outlays in the enterprise sector, which should be conducive to sustaining high growth of productivity in this sector. It should also be supported by the structure of employment changing towards a greater share of young workers with relatively higher productivity, yet also higher wage expectations, in relation to the persons who retire. Some discussants pointed out that the wage growth will still be curbed by globalisation processes and the ensuing increase in international competition. They argued that the wage growth acceleration does not necessarily have to lead to inflation growth due to the very good financial standing of enterprises which makes it possible for them to partially absorb wage increases without the need to raise their prices. Moreover, some Council members emphasised that the rising growth of wages may be partially related to acceleration in the process of Polish wages converging to those in other EU countries, which should be taken into account in monetary policy.

The members of the Council also discussed the impact of the zloty exchange rate on inflation. In this context, some Council members tended to pay more attention to fundamental factors, including the inflow of foreign direct investments and EU funds, while others put greater emphasis on developments in the international financial markets.

During the meeting, the Council also addressed the April projection of inflation and GDP presented by NBP analysts and based on the ECMOD model. The projection is one of the inputs to the decision-making process on NBP interest rates. The April projection indicates that, assuming constant interest rates, there will be a gradual inflation increase in the monetary policy transmission horizon. According to the central projection path, inflation, after a temporary fall in 2007 Q3, will gradually rise and, in the second half of 2009, it will approach the upper limit for deviations from the inflation target.

The discussion revealed three different assessments of the April projection. Some Council members accepted the inflation outlook outlined in the April projection as probable. Other discussants, however, assessed that inflation may prove higher than that indicated by the projection, due to the projection's possible underestimation of wage and GDP growth. Finally, other members of the Council pointed out that, in line with the April projection based on the ECMOD model and other forecasts prepared at the NBP, in the short term inflation will be running clearly below the inflation target, while in the longer term it will be lower than it is outlined in the projection.

Most Council members were of the opinion that it is necessary to tighten monetary policy, yet there were different views on the right timing of the interest rates increase.

In the opinion of some Council members, the assessment of the balance of risks for future inflation did not provide clear grounds for tightening the monetary policy at the present meeting. They pointed to the uncertainty as to the duration and scale of wage growth acceleration. They also underlined that inflation expectations have remained low, not creating risk for inflation growth. They also indicated that the recently observed acceleration in CPI inflation was primarily the result of supply-side and statistical factors. At the same time, they argued, core inflation has remained low. Additionally, they highlighted that, according to the majority of forecasts, in the short term inflation will be most probably running below the inflation target. Raising the interest rates, they maintained, may boost expectations of their further increases. Moreover, a monetary policy tightening may, in their opinion, lead to lowering economic growth and, thus, the decision to raise the interest rates should only be taken when more evident risks to achieving the inflation target arise.

The majority of Council members assessed that in order to keep inflation close to the target in the medium term, it is necessary to tighten the monetary policy at the present meeting. These members believed that increasing the interest rates would send a signal that monetary authorities are committed to achieve the inflation target, which would strengthen the credibility of the pursued monetary policy, lead to the stabilisation of inflation expectations and ease the pressure on wage growth. These members also assessed that a slight monetary policy tightening should have only slight, if any, impact on economic growth. They pointed out that postponing the decision to raise the interest rates may contribute to rising macroeconomic imbalances and inflation. In such a situation, the cost of a monetary policy tightening aimed at bringing inflation back to the target would be significantly higher than the cost of preventing inflation growth by a pre-emptive adjustment of monetary policy parameters, especially amid the globalisation-related weakening of a short-term link between output gap and inflation.

At the meeting, a motion to raise the key NBP interest rates by 25 basis points was put forward and passed. The Council raised the interest rates to the following levels: the reference rate 4.25%, the lombard rate 5.75%, the deposit rate 2.75%, the rediscount rate 4.50%.

The Council discussed the appropriate way in which this decision should be communicated to the public.

Minutes of the MPC decision-making meeting held on 30 May 2007

During the meeting, the Monetary Policy Council discussed the outlook for inflation in the context of the past, current and, primarily, expected economic situation.

The Council addressed the prospects of economic growth and their impact on inflation.

Some Council members emphasised that the structure of the current economic growth is favourable to low inflation. They pointed out that the robust growth in investment and its structure, characterised by a relatively low share of construction projects, will contribute to fast growth in potential output, thus curbing inflationary pressure. Strong growth in potential output will also be facilitated by a large inflow of foreign greenfield investment supporting increase in productivity. Furthermore, some Council members indicated that the April data concerning industrial production and retail sales as well as business indicators in manufacturing, construction and retail sales might suggest a possible minor slowdown in economic growth in 2007 Q2.

Other members of the Council emphasised that GDP is still rising faster than potential output, leading to a widening of the output gap and a rise in inflationary pressure. In their opinion, in the subsequent quarters the high economic growth will be sustained, primarily due to fast increase in domestic demand supported by rapid growth in the wage fund and lending activity. Those members emphasised that investment growth will boost potential output only in the longer term. They assessed that there is a considerable risk that in the medium term the GDP growth exceeding the growth of potential output will lead to a rise in inflation above the inflation target. Moreover, they argued that although the increase in imports and price competitiveness related to globalisation will limit the influence of domestic output gap on inflation, the scale of the impact of those factors might be insufficient to maintain inflation at the target level.

During its meeting, the Council discussed the situation in the labour market. Council members agreed that the developments in the labour market were the main risk factor for inflation increase. However, they differed in their interpretation of the inflowing data and their assessment of the impact of the current situation in the labour market on inflation.

Some Council members assessed that GUS data concerning the growth of wages in the corporate sector in April 2007 and wages in the economy as a whole in 2007 Q1 confirmed that wage growth has been accelerating. They pointed out that dynamic wage growth was observed in all major groups of enterprises. Some members of the Council signalled that strong wage growth in enterprises was accompanied by increasing wage pressure in the public sector, which is reflected in numerous industrial actions. They indicated that the rapid growth of wages was driving a considerable -- and significantly higher than suggested by the NBP April projection -- increase in unit labour costs in the economy. Moreover, some Council members pointed at a very fast -- and higher than suggested by the April projection -- decline in the unemployment rate recorded in the BAEL data, which may fuel further wage growth. Council members assessed that rapid wage growth, by raising costs and disposable income, improving consumer sentiment and increasing demand, may contribute to acceleration in price growth.

Other Council members emphasised that April saw a decline in the growth rate of wages in the corporate sector. They pointed out that for a few years the share of labour costs in the costs of large and medium enterprises has been decreasing and that in 2007 Q1 the rapid wage growth was accompanied by considerable improvement in the profitability of enterprises amidst stable inflation. Those members also observed that despite a considerable fall in unemployment, it still remains relatively high, which suggests the presence of significant 'free' labour force in the economy. Some members of the Council noted that accelerating wage growth does not necessarily have to lead to a rise in inflation due to increase in competitive pressure driven by globalisation and a very good financial standing of enterprises allowing them to partially absorb wage increases without the need to change their goods and services prices. Furthermore, they pointed out that inflationary pressure might also be constrained by rising efficiency related to high investment growth and enterprises' restructuring.

Referring to current inflation indicators, some Council members assessed that the April decline in net inflation and in the growth rate of producer prices in industry, which accompanied the decrease in CPI inflation, might signal low inflationary pressure. However, other members of the Council noted that the April decline in net inflation was mainly the result of the statistical base effect. They also emphasised that given the growing importance of global factors in determining domestic inflation developments, an important indicator of domestic inflationary pressure is the growth rate of services prices, which has been gradually rising since mid-2006 and which now significantly exceeds the growth rate of prices of consumer goods and services. Some Council members pointed out that the increase in inflation expectations is a risk factor for inflation. They observed that in April inflation forecasts of bank analysts exceeded the level of the inflation target for the first time for more than two years.

Some discussants emphasised that domestic inflation is to an increasing extent determined by global factors. They pointed out that due to high credibility of monetary policy conducted by major central banks, global inflation can be expected to remain at a low level which would be conducive to the stabilisation of domestic inflation. However, they also indicated that a possible increase in the world food prices resulting from supply factors is a new global risk factor for inflation.

One of the issues discussed at the meeting was the impact of the zloty exchange rate on inflation. In this context, the influence of fundamental factors as well as trends in the international financial markets was considered.

One of the issues addressed at the meeting was the situation in the public finance sector. Some Council members assessed that lower than expected general government deficit will partly offset rising demand in the private sector and mitigate its effect on inflation. Yet, other members of the Council argued that the observed improvement of the situation in public finances is a cyclical phenomenon and as such is not a factor which will limit price growth in the monetary policy transmission horizon.

At its meeting the Council also discussed developments in monetary and credit aggregates. Some Council members assessed that the persistently high growth in lending will support strong increase in private consumption, and consequently, in aggregate demand and inflation. They pointed out that as a result of the pro-cyclical nature of credit growth, in the coming months a further rapid increase in household and corporate indebtedness in the banking sector can be expected. Those members also indicated that for a few months the share of consumer loans in the credit structure has been rising and that those loans might be directly translated into growing demand and inflationary pressure. Other members of the Council assessed that apart from a slight, in their opinion, change in the lending structure, the monetary and credit developments are a continuation of the hitherto observed trends and should not constitute a risk for inflation growth.

During the meeting the Council also discussed the levels of real interest rates and their impact on inflation. Some Council members noted that the economic recovery observed in Poland started and has been reinforced in a situation when real interest rates were markedly higher than today. They therefore assessed that the current level of interest rates probably does not prevent widening of the output gap and rise in inflationary pressure. Moreover, those members pointed out that amidst the globalisation-related weakening of a short-term link between economic activity and inflation, the cost of a monetary policy tightening aimed at bringing inflation back to the target would be considerably higher than the cost of preventing inflation growth. However, other members of the Council pointed out that the level of real interest rates is still relatively high, especially when compared to other countries in the region. In this context, Council members exchanged their opinions concerning the future path of the NBP interest rates.

At the meeting a motion to raise the key NBP interest rates by 25 basis points was put forward and rejected. The Council kept the interest rates unchanged: the reference rate at 4.25%, the lombard rate at 5.75%, the deposit rate at 2.75% and the rediscount rate at 4.50%.

Minutes of the MPC decision-making meeting held on 27 June 2007

During its meeting, the Monetary Policy Council discussed the outlook for inflation in the context of the past, current and, primarily, expected economic situation.

The main issue discussed at the meeting was the prospects of economic growth and their impact on inflation.

Some Council members pointed out that the rate of GDP growth in Poland still exceeds the growth rate of potential output, leading to a widening of the output gap and a build-up in inflationary pressure. They assessed that in the nearest future the high rate of domestic demand growth will be sustained. Strong growth in demand will be supported by a considerable rise in nominal wages and employment, the inflow of transfers of earnings by people working abroad, strong lending growth, including accelerating rise in consumer loans, and an increase in disposable income of households due to a cut in disability pension contributions. Those members assessed that in the conditions of the currently high production capacity utilisation, the dynamic growth of domestic demand creates a significant risk of inflation growing above the inflation target in the medium term.

Other Council members emphasised that the structure of the current economic growth is still advantageous, with a growing share of investment, including greenfield foreign direct investments, which raises the economy's innovativeness. This should lead to an increase in labour productivity and production potential of the economy and therefore constrain the inflationary pressure related to swift economic growth. These members also pointed out that the growth in disposable income of households does not necessarily have to lead to consumption growth, if it will be accompanied by a rise in this sector's savings. They also assessed that a part of domestic demand growth will be absorbed by growing imports, which should limit the pressure for price growth. Moreover, those members pointed out that a drop in industrial production, construction and assembly production and retail sales, which was recorded in May, is a sign of a lower GDP growth in 2007 Q2. Some members of the Council also assessed that in the case of the expected lower rate of economic growth and a strong surge in potential output, GDP growth should not outpace the growth of potential output in the nearest future.

During its meeting the Council also discussed the labour market situation.

Some Council members pointed to a continually high rate of wage growth and to a very fast drop in unemployment, facilitating a further strong rise in wages. They indicated that strong wage growth in enterprises is accompanied by increasing wage pressure in the public sector, which is reflected in industrial actions. Those members pointed out that, despite the uncertainty concerning the unit labour costs, all available estimates of these costs obtained with the use of various calculation methods, indicate a worsening relationship between wage and labour productivity growth, which could lead to inflation increase. Those members pointed out that acceleration in price growth should also be fuelled by the rise in households' disposable income resulting from the increase in wages, which should support the growth of consumption demand. They argued that, in the coming period, the rise in households' income related to an increase in aggregate wages will be strengthened by the cut in disability pension contributions, which will additionally contribute to net wage growth, fostering a relatively higher growth in consumption.

In the course of the discussion, it was pointed out that, by leading to net wage growth, the reduction of disability pension contributions should limit the pressure for further gross wage and labour cost increases in the longer term. Some Council members pointed out that, despite a considerable decrease, the unemployment rate in Poland is still high, which should also contain wage growth. Moreover, they assessed that the growth in unit labour costs should be constrained by the continuation of high productivity growth related to increased investment outlays, enterprises' restructuring and improving quality of the labour force. According to those Council members, at the moment it is difficult to assess whether the May slowdown in labour productivity growth in industry will prove permanent. Moreover, those members emphasised that a rise in unit labour costs does not have to lead to inflation growth, as the increase in competition connected, among other things, with the globalisation processes reduces enterprises' pricing power and, thus, their ability to pass the rising costs onto customers. They also pointed out that the observed high wage growth creates incentives to work for inactive people, which may contribute to an increase in labour supply and potential output. Those members also indicated that growing labour costs, amid the persistently high demand, might encourage enterprises to undertake investments aimed at replacing labour-intensive technologies with capital-intensive ones. They assessed that owing to, among others, a very good financial situation, enterprises have a considerable ability to undertake this kind of restructuring measures.

The discussion also concerned the public finance situation.

Some Council members indicated that one of important risk factors for inflation growth is a pro-cyclical fiscal policy, which is reflected, among others, in the reduction in the disability pension contribution. They assessed that the rise of wage pressure in the public sector poses risk to sustaining the budget anchor. Those members emphasised that an overly expansive fiscal policy in the conditions of increasing inflationary pressure could lead to a policy-mix which is unfavourable from the point of view of long-term economic growth. Other Council members pointed out that the situation of the state budge is very favourable at the moment and that future fiscal policy is subject to considerable uncertainty related, among others, to the Government's response to increased wage pressure in the public sector. They pointed out that, despite a significant risk of a fiscal policy loosening, at present it is difficult to assess the impact of this policy on inflation in the medium term.

Referring to current inflation indicators, some Council members indicated that, despite the rapid economic growth, core inflation has remained low for a long time, which might be an indication of a low inflationary pressure. It was also pointed out that in the next few months inflation will most probably decrease. Other Council members, however, emphasised that there is a lag between a rise in economic activity and inflation growth. Furthermore, they pointed out that keeping CPI inflation at the inflation target might require core inflation to run at a lower level.

Another issue discussed at the meeting were monetary developments. Some Council members pointed out that a very fast credit growth may contribute to further growth in domestic demand and accumulation of inflationary pressure, among others, in the asset market. Other members of the Council assessed that the relation of credit to GDP is still low in Poland and that the observed rapid growth in lending is to a large extent the result of the process of Poland's catching up with countries at a higher level of development.

One of the topics addressed at the meeting was the impact of zloty exchange rate on inflation. In this context, the influence of fundamental factors as well as trends in the international financial markets was considered, including, among others, interest rate disparity, current account balance, outlook for economic growth, inflow of foreign direct investment, EU funds and transfers of earnings made by economic migrants as well as global liquidity and investment strategies of world financial market participants. In this context, some Council members indicated that raising NBP interest rates could give rise to appreciation pressure, which, in turn, might contribute to weakening exports and deepening the foreign trade deficit. Other members disagreed with this opinion and pointed to a low interest rates disparity in relation to the ECB rate. To substantiate this claim, they indicated that the April hike did not bring about appreciation pressure.

Some discussants pointed out that one of the factors that should favour inflation stabilisation in Poland is a bright outlook for global inflation resulting from a credible monetary policy pursued by the largest central banks. At the same time, they quoted the rise of commodity and food prices in the world markets, related to the impact of structural factors, as a risk factor for the growth of global inflation.

In the assessment of some Council members, the current interest rate of the NBP has probably been below the natural rate and thus it has not prevented the build-up of inflationary pressure. They pointed out that many central banks are raising their interest rates at the moment. Other members of the Council, however, argued that the estimates of the natural interest rates are subject to a considerable uncertainty.

Among Council members the opinion prevailed that, due to the accumulation of factors leading to inflationary pressure building up in the economy, sustaining inflation at a level consistent with the target in the medium term requires a monetary policy tightening in the nearest future. The members of the Council, however, differed in their views concerning the optimal moment for the interest rate rise. In the opinion of some Council members, the assessment of the balance of risks for future inflation did not provide clear grounds for tightening the monetary policy at the current meeting. They argued that the NBP inflation projection to be published in July 2007 could be a useful tool in assessing the inflation outlook in the monetary policy transmission horizon. It was also pointed out that an NBP interest rate hike that would come earlier than expected by the market could give rise to expectations for faster and higher interest rate rises, which could result in a stronger decrease in the rate of economic growth than necessary for stabilising inflation at the target level in the medium term. Other Council members, however, assessed that the potential costs of delaying the interest rate rise outweighed possible benefits related to postponing the decision to change monetary policy parameters. In particular, it was emphasised that in the conditions of a globalisation-related weakening of the short-term relation between domestic economic activity and domestic inflation and amid the adaptive nature of inflation expectations in Poland, the cost of a monetary policy tightening which would ensure the return of inflation to the target would be considerably higher than the cost of preventing inflation growth. Moreover, some Council members assessed that a monetary policy tightening in the face of alarming signals from the public finance sector would strengthen the credibility of the pursued monetary policy.

During the meeting, a motion to raise the key NBP interest rates by 25 basis points was put forward and passed. The Council raised the interest rates to the following levels: the reference rate to 4.50%, the lombard rate to 6.00%, the deposit rate to 3.00% and the rediscount rate to 4.75%.

Minutes of the MPC decision-making meeting held on 25 July 2007

During its meeting, the Monetary Policy Council discussed the outlook for inflation in the context of the past, current and, primarily, anticipated economic situation.

The main topics discussed at the meeting were: labour market situation, the outlook for inflation outlined in the inflation projection and the zloty exchange rate developments.

Some Council members pointed out that 2007 Q2 brought acceleration in the pace of wage growth in enterprises, which remained higher than labour productivity growth leading to growth in unit labour costs in this sector. Those members also emphasised that the share of labour costs in the costs of enterprises had been falling for a few years and that now this tendency might have reversed. In their opinion, if the rise in unit labour costs is not accompanied by a rise in the prices of products manufactured by enterprises, their financial results will worsen, which would weaken their propensity to invest to a larger extent than it would be the case if the weakening was the result of increased cost of credit in connection to interest rate increases. If, on the other hand, the rise in labour costs is passed through to prices, this will lead to higher inflation. A high wage growth in enterprises can also lead to accelerated wage growth in the public sector, where only slight productivity growth was observed, which would be conducive to increased inflation.

Other Council members argued that it was not only the growth rate of unit labour costs that should be considered but also their level. In their opinion, the level of unit labour costs in Poland was currently relatively low, which resulted in very good financial results of enterprises allowing them to absorb growing labour costs without the need to raise their prices. Those members also pointed out that the findings of corporate survey did not reveal strong build-up in wage pressure in the nearest future and that, according to these survey, only a very small share of enterprises signalled a rise in the prices of their products in response to the growing wages. The same members also emphasised that the decisions taken by the Government increasing the accessibility to the Polish labour market for workers from countries to the east of Poland, together with the increased geographical mobility of Poles, should be conducive to curbing the wage pressure in the economy.

Some Council members indicated that the currently observed strongly growing demand in the product market, amid a limited growth in domestic supply, will lead to increased inflation. In the assessment of those members, a strong demand pressure was, among others, reflected in the continuously high growth of retail sales.

Other members, however, pointed out that the observed economic growth was currently slowing down, which should ease the demand pressure in the economy. Moreover, those members emphasised that a significant contribution to GDP growth was made by investments, which increased the capital stock and thus contributed to the rise in the potential output and labour productivity. The potential output was also positively affected by a considerable inflow of foreign direct investment. They pointed out too that the observed wage build-up and the reduction in the disability pension contribution may be conducive to an increased supply of labour. Overall, the rise in the capital stock and labour supply should, in the opinion of these members, increase the potential output and thus curb the inflationary pressure. They also argued that the rapid growth in domestic demand would be partially absorbed by growth in imports, which should contain the pressure for price growth. Moreover, the same members pointed out that a fast growth in retail sales mainly applies to durable goods treated as quasi-investments (cars, furniture, radio and television equipment and household appliances), the prices of which do not rise.

Another topic raised at the meeting was the outlook for inflation outlined in inflation projection based on the ECMOD model and the results of other forecasts conducted at the NBP. Some Council members emphasised that the inflation forecasts used at the NBP pointed to a higher inflation path than it had been forecasted a quarter before. According to the central projection based on the ECMOD model, in 2009 CPI inflation would approach the upper limit for deviations from the inflation target (3.5%), while core net inflation would actually reach this level. In the assessment of those members, should there additionally occur a negative shock in the food or fuel market, CPI inflation would rise in 2009 markedly above the upper limit for deviations from the inflation target. Moreover, the discussants pointed out that, in the projection horizon, the estimated probability of inflation breaching the upper limit for deviations from the inflation target was on the rise. At the same time, they believed that the anti-inflationary impact of the already implemented and scheduled reduction of the disability pension contribution would not be as large as accounted for in the projection.

Other members argued that, in line with the central projection based on the ECMOD model, inflation remained within the band for deviations from the inflation target throughout the projection horizon. They also pointed out that the results of other forecasts conducted at the NBP pointed to a lower inflation path than the ECMOD-based projection, while one of the forecasts actually pointed to inflation decline at the end of the forecast horizon.

Council members discussed the level of interest rates and the impact of monetary policy tightening on economic growth. Some Council members concluded that increasing the interest rates in Poland to the level markedly higher than euro area level was warranted by a higher level of the neutral interest rate in Poland than in the euro area, which was due to the difference in potential output growth. Those members also claimed that interest rate increase in Poland should not be limiting the investment growth, as currently investments depended more on the optimistic expectations of entrepreneurs on the sustaining of the strong economic growth than on the level of interest rates. They also argued that a high level of stock exchange indices in Poland reduced the cost of investment in relation to the market value of enterprises, which favoured enterprises' decisions to invest. According to those members, a slight increase in interest rate should not dampen economic growth. In their opinion, this view is confirmed, among others, by the fact that, despite a rise in the key NBP interest rates in April 2007, the growth of corporate credit continued to step up in June 2007.

The members of the Council paid a lot of attention to the zloty exchange rate. In this context, attention was drawn both to the impact of fundamental factors and developments in international financial markets, such as the interest rate disparity, developments of the current account balance, changes in net foreign assets of the banking sector, purchases of investment funds abroad, inflow of foreign direct investment, EU funds and transfers from Poles working abroad. Some Council members pointed out that raising NBP interest rates would lead to appreciation pressure. Other members, however, did not share this opinion. Council members could not agree as to the impact of the April and June interest rate increases on the exchange rate of the zloty.

The members of the Council also discussed the outlook for inflation in the context of developments of the real effective exchange rate of the zloty and its impact on the competitiveness of the Polish economy. Some members quoted the examples of some EU countries which experienced wage growths exceeding the growth of labour productivity amid a stable nominal exchange rate, which led to a strong appreciation of the real effective exchange rate of their currencies and the loss of competitiveness of these countries. In the opinion of those Council members, if wage growth was allowed to outpace the growth of productivity, the competitiveness of Polish economy might suffer as a result. In consequence, the rate of economic growth would fall, diminishing the investment attractiveness of the Polish economy and leading to a decrease in the inflow of foreign direct investment.

Council members emphasised the favourable performance of the central government budget in 2007 Q2. Some Council members also pointed out that the reduction in the disability pension contribution would mean transferring some funds from the public to the private sector, the latter having higher propensity to save than the former, which should be conducive to reducing demand and, consequently, to curbing the inflationary pressure. Council members also pointed out that inflation was still offset by the drop in the prices of goods from low costs countries. The Council also discussed the outlook for food and energy prices. Council members emphasised that the inflation expectations of households declined for another consecutive month.

Some members were convinced that both the outlook for inflation outlined in the inflation projection and the macroeconomic data indicated that the probability of inflation running above target was still significantly higher than the probability of its running below target, which - in their opinion - warranted the interest rate increase. Additionally, the same members suggested that it was probable that Poland would join the ERM II in 2010. If inflation overshot the inflation target at that point, this could hinder the stabilisation of the exchange rate within the ERM II.

The Council also discussed the right time for a possible further tightening of monetary policy. Some Council members were of the opinion that the decision to raise interest rate should be taken at the July meeting, as this would follow from the results of the inflation projection based on the ECMOD model published in July. It was also suggested that a better assessment of the risk of inflation overshooting the inflation target in the monetary policy transmission horizon would require macroeconomic data that were to be released before the next meeting. Thus, it was suggested to suspend the decision to raise the interest rates.

Considering the results of the other forecasts conducted at the NBP, which did not point to a risk of inflation overshooting the inflation target, other Council members came to the conclusion that there were no grounds for a further monetary policy tightening. They also pointed out that it was not yet clear when Poland would join the ERM II and so the considerations connected with ERM II membership should not be taken into account in current interest rate decisions. Additionally, they emphasised that a monetary policy tightening may lead to zloty appreciation, increase expectations for further interest rate increases and, consequently, dampen economic growth.

At the meeting a motion to raise the key NBP interest rates by 25 basis points was put forward. The motion did not pass. The Council kept the interest rates unchanged: the reference rate at 4.50%, the lombard rate at 6.00%, the deposit rate at 3.00% and the rediscount rate at 4.75%.

Minutes of the MPC decision-making meeting held on 29 August 2007

During the meeting the Monetary Policy Council discussed the outlook for inflation in the context of the past, current and, primarily, anticipated economic situation.

The main topics raised at the meeting were the turbulences in international financial markets and their impact on the outlook for economic growth, the labour market situation in Poland and the public finance situation. The Council discussed the influence of these factors on the future inflation in Poland.

Some Council members pointed out that both the current and forecast inflation were close to the inflation target, while core net inflation had remained for a longer period close to the lower limit for deviations from the inflation target. Such developments of core inflation warranted caution in monetary policy and abstaining from a decision to change the interest rates. Other members emphasised that the year-on-year drop in core inflation in July was connected with a significant increase in telecommunication services prices one year before. Apart from that, they argued that the rising growth of prices of services was an indication of an intensifying Balassa-Samuelson effect. They also pointed out that oil prices in the world markets remained above the levels assumed in the July projection.

The members of the Council discussed the turmoil in international financial market observed in August 2007 and its impact on the outlook for global and Polish economies. Some members pointed out that the turbulences in financial markets resulted in lowering forecasts of economic growth in the United States and Europe. Though, at the moment, it is difficult to assess the scale of impact those problems will have on the US economy, it can be expected that the forecasts of economic growth in the external environment of the Polish economy will be further decreased. It was argued that if economic growth in the United States and Europe fell short of previous expectations, then smaller exports of Poland should be expected, resulting in lower economic growth and lower inflationary pressure. In view of the above factors, it was recommended to remain cautious, abstain from the decision to change interest rates at the August meeting and adopt a "wait and see" approach, following the example of some other central banks. It was pointed out that delaying the decision to raise the interest rate would not have any significant impact on monetary policy effect on inflation.

On the other hand, other Council members emphasised that the financial disturbances have a strong influence on the global economy when they are accompanied by a significant and long-lasting decline of stock prices. Such a situation occurred in 2000, when stock exchange indices slumped, among others, due to decreased confidence in the reliability of companies' financial reporting. In the opinion of those members, the turbulences observed in August were similar to those which occurred back in 1998, when they were rooted in the financial markets themselves. Those upheavals had not had any significant impact on the situation of the enterprise sector nor had they dampened significantly economic growth in the United States. Moreover, the August turmoil in the global financial market did not affect the financial market in Poland. It was emphasised that some central banks decided to raise their interest rates in the face of financial market turmoil. In the opinion of these members, a halt in monetary policy tightening in Poland, due to disruptions in international financial markets, might suggest that the National Bank of Poland would in future ease monetary policy in the event of problems resulting from financial institutions incurring excessive risk, which could increase moral hazard. It was also argued that currently the economic growth in Poland is primarily driven by domestic demand and thus the impact of economic growth in the external environment of the Polish economy on GDP growth is currently lower than it used to be.

While addressing the developments in the labour market, some Council members pointed out that in 2007 Q2 the growth of unit labour costs in the economy was significantly higher than forecast in the July projection. Those members pointed also out that a rapid growth of wages in the enterprise sector had been sustained in 2007 July, which signalled that wage growth in the economy would remain high in 2007 Q3. Those members also argued that the acceleration in wage growth was spreading to a growing number of industries and sectors of the economy. It was emphasised that the higher than previously expected increase in the minimum wage which was announced by the government would be a factor conducive to higher wage growth. It was also pointed out that the high wage growth would be supported by the fast and higher than forecast drop in the unemployment rate, which fell - in the assessment of those members - below the NAWRU. Those members believed that the persistence of the excessively rapid wage growth in the economy would after a lag lead to higher inflation. As a result, this may diminish the competitiveness of Polish exports and, consequently, dampen economic growth in the longer period. This would also be conducive to rising imbalance in the balance of payments, which would raise the macroeconomic risk of Poland.

Other members of the Council pointed out that, despite the rapid growth of wages in enterprises, July brought a significant drop in the growth of unit labour costs in industry and so the deterioration in the relation between wages and productivity was not perpetuated in this sector. Moreover, the same members emphasised that over the past few years wage growth in industry had been lower than productivity growth. These tendencies had to be reversed at some point and thus at the moment wage growth outpaced productivity growth. It was argued that the wage growth outpacing productivity growth would be limited in time, as at some point it is bound to negatively affect the financial results of companies. It was emphasised that in the first half of 2007 enterprises reported record high financial results, with the contribution of wage costs in total costs remaining stable and low, which indicated that enterprises did not have to increase their prices in response to wage growth acceleration. The same members also emphasised that in 2006 and at the beginning of 2007 the growth of unit labour costs in the economy outpaced inflation, yet inflation increased only moderately. Additionally, those members pointed out that in comparison to the similarly developed neighbouring countries the accumulated wage increase in manufacturing since 2002 had been significantly lower in Poland and the corresponding productivity growth considerably higher than in those countries. It was argued that the productivity growth in Poland will be fuelled by the dynamically rising investment. It was also pointed out that, in line with the NBP's analyses, the growth of unit labour coast in the economy as calculated on the basis of LFS (BAEL) data may in fact be overestimated due to the problems with the BAEL accounting for the effects of increased foreign migration of Polish workers.

During the discussion on economic growth in Poland, some Council members pointed out that the GDP growth in Poland was slowing down, which was confirmed by macroeconomic data and business survey results. They also emphasised that the high growth in investments and restructuring taking place in enterprises were contributing to the growth of potential GDP, which would be easing inflationary pressure. They also argued that, in line with the July projection, at the beginning of 2009 the growth of potential GDP may outpace the growth of actual GDP, which would weaken the inflationary impact of strong economic growth.

Other members pointed out that domestic demand was growing faster than GDP leading to a widening current account deficit. They believed that this deficit remained moderate for the time being, but its increase will make it an important factor affecting the inflation outlook. It was argued that the statistical data for July 2007 indicated that the strong growth of domestic demand and growing current account deficit would most probably continue in Q3. In the assessment of those members, a factor supporting the continuation of a rapid growth in consumption demand was - apart from the dynamically rising aggregate wages - a rapid build-up in consumer credit, which kept on stepping up despite two interest rate increases.

The members of the Council also discussed the developments of food prices. It was pointed out that, despite good crop harvest in Poland, there was an increase in the prices of cereals, which have a considerable impact on the overall food prices. It was also stressed that there was an unexpected rise in the prices of other food products and a heightened risk of faster food price growth in the world markets.

The members of the Council also devoted a lot of attention to public finance situation. It was pointed out that the current standing of this sector was favourable. Still, it was underlined that the announced changes in the way of indexing old-age and disability pensions additionally linking the indexation to wage growth would result in increased public expenditure and higher consumption demand. It was also argued that the prolongation of old regulations on early retirement may be still conducive to deactivating some part of the labour force and, thus, negatively affect the potential output and step up the wage growth at the same time. Moreover, in the opinion of some Council members also the reduction in the disability pension contribution under no reduction of public spending would raise the aggregate demand. It was assessed that the announced changes in the public finance - if implemented - would be leading to a rise in the deficit of the public finance sector and an increase in domestic demand and inflation.

The members of the Council also discussed the exchange rate developments of the zloty. In this context, both the impact of fundamental factors was emphasised and also of the tendencies in international financial markets, including the current account balance, portfolio capital and direct investment flows, as well as increased uncertainty connected with probable parliamentary elections in Poland.

In the Council's assessment, in the conditions of increased uncertainty associated with the turmoil in international financial markets, the balance of risks for future inflation pointed to the necessity of a monetary policy tightening. This was supported by the assessment of inflation outlook carried out on the basis of macroeconomic data and the July inflation projection. Another important argument for raising the interest rates were the recent decisions leading to a decrease in revenues and an increase in expenditures of the public finance sector, which may lead to a deterioration of the public finance balance and create additional inflationary pressure in the medium term.

A motion to raise the key NBP interest rates by 25 percentage points was put forward at the meeting. The motion passed. The Council raised the interest rates to the following levels: the reference rate to 4.75%, the lombard rate to 6.25%, the deposit rate to 3.25% and the rediscount rate to 5.00%.

Minutes of the MPC decision-making meeting held on 26 September 2007

During the meeting the Monetary Policy Council discussed the outlook for inflation in the context of the past, current and, primarily, anticipated economic situation.

The discussion at the meeting focused on: the impact of the turmoil in the international financial markets on the outlook for economic growth, labour market situation in Poland, external imbalance and public finance situation. The Council discussed the influence of these factors on the future inflation in Poland.

The members of the Council devoted a lot of attention to the situation in international financial markets and discussed the impact of increased uncertainty on the outlook of economic growth in the global and Polish economies. Some discussants pointed out that the Polish financial sector is safe from turmoil similar to that which occurred in the United States and Western Europe in August and September 2007. They argued that in Poland, in contrast to the United States, mortgage loans are only granted by institutions remaining under the banking supervision and that the domestic market does not offer as complex financial instruments as those available in the markets which experienced the turbulences.

Other discussants pointed out that the turmoil in international financial markets did spread beyond the US subprime loan market, which can be evidenced by problems in the German and British financial markets. They also pointed out that if the problems in the US housing market exacerbate, this situation combined with the appreciation of the euro may dampen euro area growth. They also assessed that the heightened uncertainty may persist for the next few months, as the necessary adjustment in the structure of assets and liabilities of international financial institutions would proceed gradually. It was also emphasised that in the face of turmoil some central banks decided to ease or restrain further monetary policy tightening and adopt a wait-and-see strategy observing the developments in the financial markets and in the real economy.

While discussing the outlook for economic growth, it was underlined that due to the financial market turbulences the forecasts of economic growth were lowered for the United States, while in Europe there was a decline in business confidence indicators. It was argued that if the economic growth in the external environment of the Polish economy fell short of previous expectations, then lower growth of Polish exports should be expected and, consequently, also lower economic growth and lower inflationary pressure. It was also pointed out that GDP growth was approaching the growth of potential output, while the structure of economic growth was still very favourable from the point of view of the inflation outlook due to the increased investment of enterprises.

Other Council members pointed out that deceleration of economic activity in Europe would not have to translate into lowering of the Polish exports growth, since in the past, in a period of low economic growth, the Western European countries - especially Germany, which absorbed a major part of Polish exports - had increased demand for relatively cheap products from Poland. In the assessment of those members, the current data indicated that the Polish economy remained in the period of strong growth and that the output gap was positive, which was conducive to raising the inflationary pressure.

While discussing the stability of the financial sector, some discussants emphasised that the funding of the Polish economy was based to a larger extent on the banking market than on the capital market and that the property structure of banks was dominated by foreign capital. It was pointed out that it could not be ruled out that potential problems of international financial institutions with capital links to Polish banks might affect the condition of the Polish financial sector. In this context, the issue of separating the banking supervision from the central bank was raised, which in case of turmoil in the financial market may impede the coordination of the measures taken by the central bank and the banking supervision.

Moreover, some discussants pointed to a high growth in loans to households and to the increased share of consumption loans in total households' loans. In the assessment of those discussants, the rapid credit expansion combined with the liberalisation of loan granting criteria may be conducive to deterioration of the credit portfolio of banks, which may prove - along with risks originating in international financial markets - an additional threat to the stability of the Polish financial system. Furthermore, the high growth of loans indicated that the growth of domestic demand may be faster than the growth of potential GDP, which could increase the inflationary pressure. In the opinion of those discussants, the pursued monetary policy should counteract the excessive lending growth. Other members of the Council argued, however, that high growth of loans did not have to mean a deterioration of the quality of banks' credit portfolios, as it resulted from the improved creditworthiness of households related to their increased disposable income, higher employment and lower unemployment rate.

During the meeting it was pointed out that the year-on-year inflation in August clearly undershot the target. Some members emphasised that the inflation decrease in August was deeper than it had been forecasted. Other members pointed out the decrease in inflation was connected with the reduction of prices of internet services that month and that the effects of this reduction would fade out at the beginning of 2008. The rising growth of food prices was also emphasised. Another point under discussion was the possible impact of the annual adjustment of the CPI basket on inflation, which is scheduled for early 2008.

While discussing the situation in the labour market it was pointed out that the relation between the growth of wages and the growth of labour productivity was worsening. Some Council members pointed out that the rise in unit labour costs, and thus also in the costs of enterprises, might lead to worsening their profitability and a decline in the international competitiveness of the economy. Those members claimed that wage growth in Poland was very high in comparison to the majority of Central and Eastern European countries. In the opinion of those Council members, in the nearest future a deceleration of the wage growth should not be expected, as despite a relatively high unemployment rate in Poland, enterprises experienced increasing difficulties in finding new employees. Those members assessed that labour market data signalled building-up inflationary pressure in the Polish economy. They also argued that even in case of deceleration of the economic growth, the wage growth in Poland may remain at a high level contributing to the rise in inflation.

Other Council members were of the opinion that wage growth exceeding growth of labour productivity should not prove permanent, as at some point it is bound to negatively affect the financial results of companies. It was emphasised that the share of wage costs in total costs remained at a low and stable level, which meant that enterprises would not have to increase their prices in response to wage growth acceleration. It was pointed out that enterprises had been undergoing intensive restructuring over the past few years, which had contributed to the observed improvement in the financial results and financial liquidity of this sector. Moreover, it was also pointed out that the accumulated wage growth in Poland over the past few years was markedly lower compared to the neighbouring countries at a similar level of development. It was also emphasised that the fast growth in unit labour costs in the economy had not as yet led to a significant inflation increase. It was claimed that this situation resulted from good financial results of enterprises, which allowed them to absorb the rising wage costs, fierce price competition related to the globalisation and increased flexibility of supply stemming from lower costs of increasing production capacities. It was pointed out that the inflationary pressure was also curbed by increased domestic savings (as evidenced by the inflow of assets to investment funds), higher imports contributing to the rise of the current account deficit and zloty appreciation.

The members of the Council also discussed Poland's balance of payments. It was emphasised that the Forecast of the Balance of Payments of the Republic of Poland for the year 2008, which was adopted during the meeting, pointed to a building-up of the external imbalance of Poland. It was highlighted that though a moderate current account deficit was typical of the economies in the period of real convergence, it was a cause for concern that the forecasted ratio of this deficit to GDP was rising fast. It was pointed out that if the relation between wage growth and productivity growth continued to deteriorate, the international competitiveness of the Polish economy would worsen, which would be conducive to raising the external imbalance. Other Council members assessed that in the nearest future a build-up in the current account deficit should not be significantly increasing the macroeconomic risk of the Polish economy, as in the globalised economy it was possible to finance larger current account deficits than in the past. Moreover, Poland's membership in the European Union contributed to a significant reduction of the country's macroeconomic risk.

The Council also discussed the situation of public finance. Some Council members pointed out that despite the early parliamentary elections and the ensuing increase in some of the state budget expenditures in 2008, the so-called budget anchor had been preserved. Other members, however, assessed that the spending of the public finance sector as a whole had increased significantly in 2007 and their structure had become more rigid. It was also argued that the recently introduced changes to the public finance would be deteriorating this sector's situation not only in 2008 but primarily in the following years. Additionally, it was emphasised that the public finance situation could worsen significantly in the event of economic slowdown.

The members of the Council agreed that it was difficult at the moment to assess the duration of the increased uncertainty in the international financial markets or its impact on the global and, consequently, Polish real economy. They also concluded that the data to be published in the nearest future, both those concerning the domestic economy and those coming from the international markets should be very carefully analysed. In the Council's assessment, in the medium term the probability of inflation running above the inflation target had decreased to a certain degree due to the previously implemented monetary policy tightening and thus it was not necessary to change the interest rates at that meeting.

The Council kept the interest rates unchanged: the reference rate at 4.75%, the lombard rate at 6.25%, the deposit rate at 3.25% and the rediscount rate at 5.00%.

Minutes of the MPC decision-making meeting held on 31 October 2007

During the meeting, the Monetary Policy Council discussed the outlook for inflation in the context of the past, current and, primarily, anticipated economic situation.

The discussion at the meeting focused on: changes in the environment of the Polish economy, exchange rate and food prices developments and the outlook for economic growth. The Council discussed the influence of these factors on the future inflation in Poland in view of the October inflation projection.

While discussing the changes in the environment of the Polish economy, it was pointed out that considerable uncertainty persisted as to the assessment what effects the turmoil in international financial markets would have on the outlook for growth and inflation in the global and Polish economies. It was emphasised that there had been a downward revision of the forecast of economic growth in the United States and, to a lesser degree, in the euro area, and that the sentiment of euro-area consumers and producers was less optimistic. It was pointed out that in the past, in the period of low economic growth, Western European countries had reported increased demand for relatively cheap products from Poland. However, the recently observed appreciation of the zloty might result in a decrease of exports due to the deteriorated competitiveness of Polish products. As a consequence, economic slowdown of Poland's main trade partners would translate into a weakened economic activity in Poland. It was also pointed out that in the face of turmoil in international financial markets some central banks decided to ease or restrain further monetary policy tightening despite mounting inflationary pressure.

Some Council members argued that the impact of the disruptions in the US real estate market on economic growth may prove weaker than expected, due to the continuously stable net value of the assets held by US households. Moreover, the discussants pointed out that the situation in international financial markets had stabilised to some extent. It was emphasised that, despite persistent uncertainty as to the impact of turmoil on global economic growth, some central banks had raised interest rates over the recent period, which was related to rising inflationary pressure observed in those economies. It was also argued that one of the factors that contributed to the recently observed turmoil in international financial markets, was lax monetary policy previously pursued by major central banks.

The members of the Council devoted a lot of attention to the zloty exchange rate. In this context, the influence of fundamental factors as well as tendencies in the international financial markets were considered. Some Council members also pointed to the possible impact of the parliamentary election outcome in Poland on exchange rate developments. It was emphasised that the zloty had appreciated since the previous meeting of the Council. Some Council members argued that the zloty appreciation would limit price growth. Those members pointed out that in Poland, just like in other small open economies, foreign exchange movements are an important factor influencing economic situation and inflation. Other Council members, however, indicated that, at the moment, it was difficult to assess the sustainability of the factors that had been conducive to zloty appreciation.

While commenting on the current inflation, some Council members pointed out that the average 12-month HICP for Poland, which is considered in the assessment of the compliance with the inflation Maastricht criterion, had been steadily rising since the end of 2006. At the same time, it was argued that there was a considerable risk that in the next few quarters

Poland might cease to comply with the Maastricht inflation criterion. Other members emphasised that net inflation continued at a low and stable level and that the rise in CPI inflation in September 2007 resulted primarily from a rise in food prices, which was independent from the monetary policy.

At the meeting, the Council also discussed food price developments. Growth of these prices may continue in the longer term as it stems, to a large extent, from structural factors connected with increased demand for food in developing countries. At the same time it was pointed out that in Poland food still accounted for a considerable part of the consumption basket of households. As a result, a significant price increase in this group of products may be conducive to increasing inflation expectations and, consequently, to further build-up of wage pressure. Some Council members, however, claimed that the risk of second-round effects connected with food price growth was not high, as further acceleration of wage growth was rather unlikely considering the appearing symptoms of weakening economic growth.

While discussing the influence of global factors on the inflation outlook, some Council members concluded that inflation was still being curbed by a decline in prices of goods imported from countries of low production costs. However, an ever increasing pressure on growth of prices should be expected due to rising demand of those countries, which is already visible in the food and commodity markets. This means that the impact of globalisation factors on inflation may be reverted. Other members pointed out that in the face of rising demand an increase in food output might occur, which would mitigate the pressure on price growth. The same members indicated that, at the moment, it was difficult to assess the joint effect of globalisation factors on future inflation.

The members of the Council also discussed labour market developments. Some Council members pointed out that the currently observed fast wage growth was connected with permanent factors such as the shortage of qualified workers and the ongoing process of Polish wages converging to the level of more developed EU countries. It was emphasised that the wage pressure may be additionally increased by possible second-round effects connected with the rising food prices. Discussants underlined that wage growth was still being fuelled by increased emigration of Polish workforce to EU countries. In turn, some Council members assessed that, most likely, the main emigration wave had already passed and that enterprises were beginning to adjust to labour market developments. The same members argued that the results of survey studies of enterprises indicated that a relatively small group of enterprises intended to raise wages, while in September 2007 the wage growth in the enterprise sector had recorded some deceleration. It was also emphasised that wage growth exceeding the rise in labour productivity would be limited in time, as the decelerating growth of the output and sales of enterprises would limit the possibility of pay rises. Additionally, it was argued that the growth of unit labour costs in the economy calculated on the basis of BAEL (LFS) data may be overestimated.

While discussing the issue of economic growth in Poland, it was noticed that in October 2007 GUS data on GDP growth in the first half of 2007 had been revised downwards. Moreover, it was emphasised that the macroeconomic data for September 2007 suggested a slowdown in economic growth (there was a decline in the growth of industrial production, retail sales and wages in the enterprise sector and also in money supply and loans to households). Nevertheless, some Council members argued that the latest data did not indicate the substantial economic slowdown which would reduce inflationary pressure, as there had not been any significant change of trends of those macroeconomic variables. Moreover, it was noticed that the lowering of economic growth had been anticipated and was accounted for in the October inflation projection.

The Council also discussed the outlook for inflation as outlined in the inflation projection based on the ECMOD model. Some members of the Council pointed out that, in line with the central projection, in 2009, CPI inflation and core net inflation will breach the upper limit for deviations from the inflation target. They also emphasised that the projection did not fully cover the risk of inflation overshooting the target. It was argued that the forecasted lowering of wage growth was rather unlikely amid continuing surge in demand and decreasing rate of unemployment, which, in their assessments, was running below the NAWRU. At the same time, those members pointed out that, due to the procyclicality of labour productivity, it was hard to expect it to accelerate amid the forecasted lowering of GDP growth. In consequence, they argued, the growth of unit labour costs may prove higher than forecast in the projection. It was also pointed out that the projection forecast a considerable acceleration of potential GDP growth, which was faster than suggested by experiences of other countries. Moreover, it was emphasised that the projection did not fully account for the risk of a permanent rise of food price dynamics and the risk of second-round effects. Other Council members, on the other hand, pointed out that the level of the zloty exchange rate accounted for at the starting point of the projection was weaker than that observed; at the same time a nominal exchange rate depreciation was forecasted in the projection horizon. It was argued that if the exchange rate of the zloty sustained at an unchanged level, inflation might be significantly lower than in the projection.

While addressing the situation of the public finance, some Council members emphasised the fact that the state budget deficit in 2007 should be considerably lower than envisaged and at the same time, its ratio to GDP would decreased in relation to the previous year. It was pointed out that in 2008 the ratio of the deficit to GDP should not increase and might even decrease. Some discussants, however, claimed that 2008 would bring a rise in the structural deficit of the public finance sector, which meant that the fiscal policy would have a procyclical impact on the economy.

As a result of the discussion some members concluded that the assessment of the inflation outlook based of the ECMOD-based October inflation projection and considering factors not accounted for in the projection indicated that the probability of inflation overshooting the target in the projection horizon was significant and warrant raising interest rates at the October meeting. Other Council members, however, were convinced that the recently observed appreciation of the zloty exchange rate limited the rise of inflation and that the inflation outlook would be affected by future developments in the foreign exchange market. They also pointed to the symptoms of an economic weakening.

A motion to raise the key NBP interest rates by 25 percentage points was put forward at the meeting. The motion did not pass. The Council kept the interest rates unchanged: the reference rate at 4.75%, the lombard rate at 6.25%, the deposit rate at 3.25% and the rediscount rate at 5.00%.

Minutes of the MPC decision-making meeting held on 28 November 2007

During the meeting, the Monetary Policy Council discussed the outlook for inflation developments in the context of the past, current and, primarily, anticipated economic situation.

The discussion at the meeting focused on: changes in the environment of the Polish economy, current inflation developments, the outlook for economic growth and the prospects of public finance in 2008 and in subsequent years. The Council discussed the influence of these factors on the future inflation in Poland.

While discussing the changes in the environment of the Polish economy, it was pointed out that there were downward revisions of the forecasts of economic growth in the United States and the European Union and that there was a risk of a deceleration in worldwide economic growth, which may slow the growth of Polish exports and the inflow of direct investments and, consequently, reduce the rate of economic growth in Poland. Nevertheless, it was argued that in the past, in the period of low economic growth, some Western European countries had reported increased demand for relatively cheap products from Poland, which complicated the assessment of the actual impact of the world economic slowdown on Poland's economic growth. Moreover, it was pointed out that the current GDP growth was primarily driven by rising domestic demand (i.e. consumption and investment).

Some Council members emphasised that, in the face of the deteriorating situation in international financial markets and the dampening prospect of economic growth, major central banks were expected to ease their monetary policy. Other Council members pointed out that those central banks which did not raise their interest rates or lowered them despite rising inflation are precisely the banks of the countries directly affected by the financial market turmoil.

In this context, it was pointed out that the low interest rates that had been observed until recently had led to the creation of excessive global liquidity, which was not reflected in the inflation of consumer prices, but caused a significant rise in asset prices instead. For two years now, the prices in the world markets of some assets have been falling, and so it is currently hard to assess the direction in which the liquidity surplus will be moving.

While discussing the economic growth in Poland in the years to come, some Council members emphasised that GDP growth should gradually decrease in the next years, which would be easing the demand pressure. Moreover, a fast growth in investments of enterprises, which is indicated by the data for the first three quarters of 2007, should be favouring the growth in potential output. Both these factors will be conducive to limiting the inflationary pressure. Other members of the Council pointed out that the October data on industrial production and retail sales did not signal a weakening of economic activity in Poland. It was emphasised that the high growth of domestic demand was supported by rapid increase of wages and very good financial results of enterprises. Moreover, those members also believed that even though the GDP growth would probably slow down in the coming years, it would remain at a relatively high level.

While addressing the situation in the labour market, it was pointed out that the high wage growth led to a considerable increase in unit labour costs in the economy. It was argued that the wage growth in the economy in 2007 Q3 was higher than expected in the October projection. The continuation of the high growth of wages is also suggested by record-high data on corporate wages in October and the continuously falling rate of unemployment. Some Council members pointed out that the wage differentials between the private and the public sector may be rising, which would lead to the outflow of skilled public sector workers to private companies and thus increase the wage pressure in the public sector. Some discussants indicated that, due to the high wage growth in 2007 Q3, the rise in remuneration costs outpaced the growth of enterprises' revenues for the first time in a long time, which may be an indication that the falling trend of the relation of labour costs to revenues had been reversed.

In the opinion of other Council members, however, the rise in unit labour costs had not so far translated into rising inflationary pressure due to high profits of enterprises. Moreover, the growth of unit labour costs may be expected to go down in the monetary policy transmission horizon due to the expected acceleration in labour productivity resulting from fast growth in investments. It was also emphasised that a potential deceleration in the global economy, including Western European economies, might lead to lower emigration of Polish workers, which would limit the wage pressure.

While addressing the current inflation, it was pointed out that following a long period of inflation running below the inflation target, in October the annual growth of consumer price exceeded the inflation target of 2.5%. Some Council Members emphasised that the rise in CPI inflation in October was to a large extent the result of a surge in food and fuel prices, while the core inflation net of those prices remained at a relatively low level. The same members pointed out that it was difficult to assess at the moment whether the factors responsible for inflation rise would prove permanent. Other Council members, however, pointed out that all measures of core inflation had risen since the previous month and the increase in core inflation net of food and fuel prices was significant as compared to the changes of this indicator over the past year. They believed this suggested that the inflationary pressure that had been building for some time was beginning to be reflected in the growth of prices.

The Council discussed the usefulness of the indicator of core inflation net of food and fuel prices as a measure for assessing inflationary pressure. Some Council members were of the opinion that in the light of empirical studies for the United States core inflation is a good gauge of the price level trend. Other Council members, however, pointed out that the net core inflation in the United States in the past ten year had been lower on average than CPI inflation and so it failed to fully reflect the movements of consumer prices. It was also emphasised that net core inflation accounted for the supply-side globalisation effects of disinflationary nature (decline in the prices of goods imported from low production costs countries), but only to a limited degree - for the demand-side globalisation effects of inflationary nature (growing prices of energy commodities and food).

While discussing future inflation, some members of the Council pointed out that the price growth in the coming quarters was already determined to some extent. Those members believed that inflation would be temporarily increased, which would primarily be the result - just like in many other countries - of increased food and fuels prices, i.e. factors beyond the control of monetary policy. Other Council members emphasised that the October inflation projection pointed to the continuation of high inflationary pressure throughout the projection horizon, among others due to the growth in domestic demand above GDP growth rate as well as wage growth outpacing the rise in labour productivity.

The discussants pointed out that an increase in inflation, particularly when it is triggered by a surge in food and fuel prices, which significantly affect the perception of inflation by consumers, may lead to increased inflation expectations and thus pump up the pressure for the growth of wages. The risk of second-round effects is higher than in 2004 due to the tight labour market, including a markedly lower unemployment. On the other hand, it was argued that the current risk of second-round effects was significantly lower than at the time of oil shocks in the 1970s.

At the meeting, the Council also discussed the growth of food prices in the world markets, which is currently stepping up inflation both in Poland and in the majority of other countries. Some discussants assessed that the increased growth of food prices may continue in the longer term. At the same time, it was argued that the food price increase would mean changing the relative prices and a rise in the food expenditures of households. As a result, there may be a lowered demand for other goods, which would limit the rise of the overall price level. Other Council members pointed out that the increase in food prices in international markets could be transitory and result from negative supply shocks. In the context of the food price developments, the question was raised of a possible increase of VAT rates on unprocessed food and catering services in 2008 and of its impact on inflation.

The Council devoted a lot of attention to the outlook for the public finance. It was emphasised that due to the low actual state budget deficit till the end of October 2007 and, at the same time, the restated announcement that this year's deficit would be implemented at the expected level, there was a risk of a considerable accumulation of public expenditure in the last two months of 2007, which would be conducive to raising inflationary pressure. Moreover, it was pointed out that, on the one hand, there appeared announcements of tax cuts and, on the other, the wage growth in the budget sector would be most probably higher than accounted for in the draft Budget Act for 2008. It was also emphasised that some acts passed by the previous Parliament before its dissolution could increase the public finance imbalance for many years to come.

While discussing the issues related to the exchange rate, it was pointed out that since September 2007 the zloty had significantly appreciated. On the one hand, appreciation of the zloty limits the impact of high oil prices on inflation in Poland, on the other, however, it dampens the competitiveness of the Polish economy, contributing to rising external imbalance. Still, it was emphasised that the export enterprises to a large extent use imported goods in their production, which limits the negative impact of the appreciation of the zloty on their financial situation. It was also argued that the zloty appreciation was decreasing the zloty-denominated value of EU subsidies to the Polish agriculture and the value of Polish emigrants' remittances, which is conducive to lower domestic demand. Similarly, it was indicated that at the moment it was difficult to assess the sustainability of the factors that had been conducive to the recent zloty appreciation.

In conclusion of the discussion it was agreed that the sustained fast growth of demand, the tight labour market, the significant increase in current inflation and the risk of the related second-round effects, as well as the expected considerable surge in demand of the public finance sector until the end of 2008, all warranted the assessment that the probability of inflation overshooting the inflation target over the monetary policy transmission horizon was significant and this necessitated an interest rate increase at the November meeting.

A motion to raise the key NBP interest rates by 25 basis points was put forward and passed. The Council raised the interest rates to the following levels: the reference rate at 5.00%, the lombard rate at 6.50%, the deposit rate at 3.50% and the rediscount rate at 5.25%.

Minutes of the MPC decision-making meeting held on 19 December 2007

During the meeting, the Monetary Policy Council discussed the outlook for inflation developments in the context of the past, current and, primarily, anticipated economic situation.

The discussion at the meeting focused on: current inflation developments, including food price changes, situation in the labour market, the outlook for economic growth and the level of interest rates in Poland and abroad. The Council discussed the influence of these factors on the future inflation in Poland.

While discussing current inflation, the Council analysed the causes of the annual growth of consumer prices in November running above the NBP inflation target of 2.5% and exceeding the upper limit for deviations from the target set at 3.5%. It was pointed out that CPI growth in November was primarily driven by the accelerated growth of food and fuel prices; while net core inflation recorded just a minor rise and remained at a relatively low level. In the opinion of some Council members, low level of net core inflation indicated low inflationary pressure driven by demand. At the same time, it was emphasised that high growth of food and fuel prices and the ensuing growth in CPI inflation were related to global developments which are beyond the scope of the domestic monetary policy. In turn, some discussants, pointed out at the continuing price increases of some services and at falling disinflationary impact of declining prices of goods imported from low-cost countries.

While addressing food price developments, the Council discussed the sustainability of their increased growth. Some members of the Council believed that high growth of food prices was a temporary phenomenon as it was, to a large extent, driven by supply shocks in the global markets. It was also pointed out that high prices of certain agricultural commodities might be partly related to speculation of financial institutions in the futures markets and that there had already been signals of a decline in the prices of some of commodities. Other discussants assessed that high growth of food prices may be sustained over a longer period, as it is largely determined by the persistently growing world's demand for food, while the supply shortages on the global scale may be more frequent than before, among other things, due to climate changes. The possible impact of abandoning the Russian embargo on Polish food exports on the growth of food prices in Poland was also discussed.

Some discussants assessed that the forecasted rise in net core inflation and the continuing high growth of food and fuel prices might result in CPI inflation remaining above the inflation target at the end of 2008. At the same time they emphasised that, due to the specific nature of shocks leading to price increases, CPI inflation was likely to stay above net core inflation over a longer period. It was also pointed out that considerable uncertainty persisted about the scale of the declared increases in gas and energy prices in 2008. Other members of the Council argued that future inflation might be lower than in the October projection due to higher level of zloty exchange rate than accounted for in the projection.

It was pointed out that even though Poland continued to meet the Maastricht price stability criterion in November 2007 the rise in inflation might pose risk of inflation exceeding the reference value in the coming future.

Some members of the Council indicated that the rise in current CPI inflation was likely to boost inflation expectations. They emphasised that the risk of rising inflation expectations is particularly high when inflation increase is driven by a strong growth in the prices of food, i.e. frequently purchased goods having high share in the CPI basket. It was pointed out that rising inflation expectations might add to wage pressure. Moreover, some discussants argued that the rise in current inflation - unlike in 2004 - took place amidst strong economic growth and tight labour market which increased the likelihood of rising inflation expectations and of the so-called second-round effects. Other Council members, however, believed that the risk of second-round effects was moderate due to institutional changes that had taken place in the labour markets in Poland and in other countries.

While discussing the labour market situation, it was pointed out that wage growth in the economy in 2007 Q3 had exceeded the level accounted for in the October projection, wage growth in the corporate sector in November had been very high and the pressure on significant wage increases in the public sector persisted. It was indicated that wage growth continued to exceed labour productivity growth, which was conducive to growing inflationary pressure. Some discussants argued that high wage growth was likely to be sustained also in the months to come due to labour shortage in the domestic market, and that wages would grow faster than assumed in the October inflation projection. Those discussants assessed this would further boost unit labour costs which would, in turn, lead to worsening the financial results of enterprises and to reducing investment in the economy. In the opinion of those discussants, tensions in the labour market reflected in the plunge of unemployment rate and the rising current inflation resulted in the risk of second-round effects being higher than in 2004. They also argued that the scale of economic migration would not decrease significantly in the years to come due to persisting high differences in income levels between Poland and Western European countries.

Other members of the Council argued that there might arise factors that would be curbing wage and unit labour cost growth. They believed that wage growth in the corporate sector might be restrained by concerns about deteriorating financial results of enterprises. These members pointed out that significant pay rises in the public finance sector were rather unlikely as they had not been provided for in the draft Budget Act for 2008. Attention was drawn to the fact that the growth of unit labour costs in the economy outside private farming in 2007 Q3 was lower than assumed in the October projection. It was also pointed out that the unemployment rate in Poland continued to exceed levels recorded in other countries and that tensions in the labour market might soon diminish as wage growth in Poland and zloty appreciation should reduce the scale of Polish labour migration.

While discussing the outlook for economic growth in Poland, some members of the Council pointed out that GDP growth in 2007 Q3 had been higher than assumed in the October projection and that economic growth in 2007 Q4 had probably continued at a high level. It was also indicated that a continued growth in demand would be supported by the fast growth in lending. Other members of the Council pointed to the expected decline in world economic growth, which might impede the growth of Polish exports and the inflow of foreign direct investment and, as a result, weaken the economic growth of Poland. Moreover, some members of the Council argued that despite high GDP and wage growth the structure of GDP did not suggest increased demand pressure: growth in total consumption, private consumption and imports in 2007 Q3 were slower than assumed in the projection, whereas exports were rising faster. It was emphasised that stronger than projected investment growth in 2007 Q3 suggested the possibility of faster growth in potential output and weakening inflationary pressure in the medium term.

The Council paid a lot of attention to assessing the monetary policy conditions in Poland. Some members of the Council pointed out that NBP interest rate increases in 2007 combined with the appreciation of zloty exchange rate contributed to maintaining high level of monetary policy restrictiveness. Those members also indicated that the level of the real interest rate in Poland was relatively high as compared to other countries of the region. Other discussants pointed out that the level of the real interest rate had fallen in 2007 as a result of CPI inflation rising stronger than the nominal interest rates. They argued that the differences in the level of real interest rates between countries resulted, among other things, from the differences in the level of their natural interest rate. Those discussants also pointed out that the assessment of changes in the level of monetary policy restrictiveness should take into account the appreciation of the equilibrium exchange rate related to the convergence process. They also indicated that it was difficult to assess the sustainability of factors behind the recent appreciation of the zloty.

Some members of the Council argued that certain central banks had decided to lower their interest rates in the recent period. Other members, however, pointed out that interest rate cuts had taken place mainly in countries directly affected by the financial market turmoil and that some banks had tightened their monetary policy at that time.

The majority of the Council members argued that high level of current inflation and the ensuing risk of rising inflation expectations, as well as tight labour market, constituted a major risk to price stability. Some members of the Council believed that counteracting inflation risk within the monetary policy horizon would require interest rates to be raised at the Council meeting in December. Those members argued that globalisation processes in the past few years had led to weakening the impact of monetary policy on domestic inflation, thus requiring stronger response of central banks to the growing inflationary pressure. They assessed that rises of interest rates should not lead to any significant slowdown of economic growth in Poland, yet it would help to stabilise it at a level consistent with the potential growth.

Other members of the Council pointed out that it was difficult to assess inflationary inertia. They also argued that a monetary policy tightening would increase interest rate disparity between Poland and the euro area and the United States. This could encourage the inflow of short-term capital to Poland and contribute to the appreciation of zloty exchange rate, which would, in turn, weaken the competitiveness of the Polish economy and led to further increase of external imbalance. Moreover, those members pointed out that the pace of monetary policy tightening so far was sufficient from the point of view of stabilising inflation at the target level in the medium term. It was indicated that at its December meeting the Council had at its disposal less information on economic developments than usual and that a more comprehensive assessment of the risk of inflation remaining at a high level would be possible at the Council's next meeting.

A motion to raise the key NBP interest rates by 25 basis points was put forward. The motion did not pass. The Council kept the interest rates unchanged: the reference rate at 5.00%, the lombard rate at 6.50%, the deposit rate at 3.50% and the rediscount rate at 5.25%.

Appendix 7. Voting records of Monetary Policy Council members on motions and resolutions in 2007

Date	Subject matter of motion or resolution	MPC decision	Voting of MPC members
28 February 2007	Motion to raise interest rates by 0.25 percentage point	Motion did not receive a majority vote	**For:** D. Filar M. Noga H. Wasilewska-Trenkner **Against:** S. Skrzypek J. Czekaj S. Nieckarz S. Owsiak M. Pietrewicz A. Sławiński A. Wojtyna
28 March 2007	Motion to raise interest rates by 0.25 percentage point	The motion was not passed (due to tie vote, the Chairman's casting vote was decisive)	**For:** D. Filar M. Noga A. Sławiński H. Wasilewska-Trenkner A. Wojtyna **Against:** S. Skrzypek J. Czekaj S. Nieckarz S. Owsiak M. Pietrewicz
24 April 2007	Resolution on approving *the Annual Financial Report of the National Bank of Poland* prepared as of 31 December 2006		**For:** S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna

25 April 2007	Resolution on the level of the reference rate, lombard rate, deposit rate and rediscount rate of the National Bank of Poland	The MPC increased the level of all interest rates by 0.25 percentage point	**For:** J. Czekaj D. Filar M. Noga A. Sławiński H. Wasilewska-Trenkner A. Wojtyna **Against:** S. Skrzypek S. Nieckarz S. Owsiak M. Pietrewicz
16 May 2007	Resolution on approving the *Report on Monetary Policy Implementation in 2006*		**For:** S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna
16 May 2007	Resolution on the assessment of the activities of the NBP Management Board as regards the monetary policy implementation in 2006		**For:** S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna

16 May 2007	Resolution on approving the *Report on the Operations of the National Bank of Poland in 2006*		**For:** S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna
30 May 2007	Motion to raise interest rates by 0.25 percentage point	Motion did not receive a majority vote	**For:** D. Filar M. Noga H. Wasilewska-Trenkner A. Wojtyna **Against:** S. Skrzypek J. Czekaj S. Nieckarz S. Owsiak M. Pietrewicz A. Sławiński
27 June 2007	Resolution on the level of the reference rate, lombard rate, deposit rate and rediscount rate of the National Bank of Poland	The MPC increased the level of all interest rates by 0.25 percentage point	**For:** J. Czekaj D. Filar M. Noga A. Sławiński H. Wasilewska-Trenkner A. Wojtyna **Against:** S. Skrzypek S. Nieckarz S. Owsiak M. Pietrewicz

24 July 2007	Resolution to appoint a certified auditor to audit NBP annual financial statements for business years 2007, 2008 and 2009		**For:** S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna
25 July 2007	Motion to raise interest rates by 0.25 percentage point	Motion did not receive a majority vote	**For:** A. Wojtyna **Against:** S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner
29 August 2007	Resolution on the level of the reference rate, lombard rate, deposit rate and rediscount rate of the National Bank of Poland	The MPC increased the level of all interest rates by 0.25 percentage point	**For:** J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna **Against:** S. Skrzypek

25 September 2007	Resolution on establishing the upper limit for liabilities incurred by the National Bank of Poland by way of loans from foreign banking and financial institutions		**For:** S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna
26 September 2007	Resolution on establishing the *Monetary Policy Guidelines for 2008*		**For:** S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna
31 October 2007	Motion to raise interest rates by 0.25 percentage point	Motion did not receive a majority vote	**For:** D. Filar M. Noga H. Wasilewska-Trenkner A. Wojtyna **Against:** S. Skrzypek J. Czekaj S. Nieckarz S. Owsiak M. Pietrewicz A. Sławiński

27 November 2007	Resolution amending the resolution on the principles of conducting open market operations		**For:** S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna
28 November 2007	Resolution on the level of the reference rate, lombard rate, deposit rate and rediscount rate of the National Bank of Poland	The MPC increased the level of all interest rates by 0.25 percentage point	**For:** S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna
18 December 2007	Resolution to approve the Financial Plan of the National Bank of Poland for the Year 2008		**For:** S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna

19 December 2007	Motion to raise interest rates by 0.25 percentage point	Motion did not receive a majority vote	**For:** D. Filar M. Noga H. Wasilewska-Trenkner A. Wojtyna **Against:** S. Skrzypek J. Czekaj S. Nieckarz S. Owsiak M. Pietrewicz A. Sławiński