

Inflation Report

June 2009

National Bank of Poland
Monetary Policy Council

Warsaw, June 2009

The *Inflation Report* presents the Monetary Policy Council's assessment of the current and future macroeconomic developments influencing inflation. The projection of inflation and GDP presented in Chapter 4 was prepared at the Economic Institute of the National Bank of Poland. The projection was prepared with the use of the NECMOD macroeconomic model. Content-related supervision over the works on the projection was entrusted to a member of the NBP's Management Board, Mr. Zbigniew Hockuba. The NBP Management Board approved the submission of the projection to the Monetary Policy Council. The inflation projection is one of the inputs to the Monetary Policy Council's decision-making process.

This Inflation Report is a translation of the National Bank of Poland's *Raport o inflacji* in Polish. In case of discrepancies, the original prevails.

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Summary

Since the publication of the *February Report* the recession in the world economy has deepened and the forecasts of economic growth for 2009 has been further lowered. At the same time, some macroeconomic data and economic climate indicators currently point to the possibility of the activity decline in the world economy decelerating over the next few quarters, including the weakening of recession in the United States and – to a lesser extent – in the euro area in 2009 Q2. The reduction of current and forecast economic growth, apart from the developed economies, also affected the developing countries, including CEE countries. The weakening of the aggregate demand and an earlier drop in commodity prices connected with the deterioration of the global economic climate contributed to decline in inflation in most of the countries.

The latest information on the Polish economy confirms that economic activity has been continuing at a low level. Slowing growth is driven by the recession abroad, deteriorating situation in the labour market and worse financial standing of enterprises, as well as limited credit availability. Demand is additionally dampened by the relatively weak sentiment of economic agents, although recently there has been some improvement in confidence indicators.

Following a significant drop in 2008 Q4, the annual growth of prices of consumer goods and services in Poland gradually increased over the first four months of 2009 – from 2.8% y/y in January to 4.0% y/y in April, and in May it slowed to 3.6% y/y, yet remaining above the upper limit for deviations from the NBP inflation target. The elevated level of inflation was supported by growth in food prices, regulated prices and the prices of excise goods. In line with expectations formulated in the previous *Report*, another important factor conducive to higher inflation was a strong weakening of the zloty in the second half of 2008 and at the beginning of 2009. Higher inflation was also driven by the inertial character of inflationary processes and relatively high price hikes in 2008.

In the period January–April 2009 all core inflation measures increased, which shows that CPI rise in those months resulted not only from changes of its components particularly sensitive to shocks. May 2009 brought further rise in core inflation net of food and energy prices driven by a rise in excise tax rates and the consequences of the previously observed zloty depreciation.

Since the *February Report* to May 2009 inflation expectations of bank analysts gradually declined and in June increased to 2.4%. In turn, the objectified measure of inflation expectations of individuals, following the decline in the period March–April, picked up again in May and June 2009 (to 3.8%), which was mainly connected with higher rate of current inflation.

In 2008 Q4, import prices expressed in PLN rose strongly further (by 5.3% y/y compared with 6.0% y/y in 2008 Q3) reflecting the strong depreciation of the zloty nominal exchange rate. However, the decline in commodity prices, including prices of oil on global markets, observed in the second half of 2008 had mitigated this rise. At the same time, as a result of further drop in export prices (albeit smaller than in the preceding quarters) the *terms of trade* continued to deteriorate.

Following a strong decline in 2008 Q4, at the beginning of 2009 oil prices were relatively stable due to further drop in demand for fuels accompanied by ongoing output reduction by the OPEC countries. However, as from mid-March 2009 oil prices have been on the increase, amidst better sentiments in the financial markets and economic recovery expected to occur in the US economy already in 2009. In June Brent crude oil price again exceeded 70 USD/b – the highest level since October 2008.

In 2009 Q1 PPI rose and reached 5.0% y/y. Due to the depreciation of zloty exchange rate and the ensuing higher growth of producer prices of exported goods, the PPI in the domestic market ranged below the total PPI (at 4.3% y/y in 2009 Q1). Looking at monthly data it should be emphasised that since February 2009 both total PPI and PPI in the domestic market have been declining.

According to GUS estimates, in 2009 Q1 Poland's GDP rose by 0.8% y/y (compared with 2.9% y/y in 2008 Q4), i.e. below the expectations of the previous *Report*. Private consumption remained the main factor in GDP growth with a slightly positive contribution of investment. Due to the recession abroad Polish exports decreased markedly, but the concurrent significant drop in imports connected, among others, with the deteriorating economic climate in Poland and the earlier depreciation of the zloty resulted in a positive contribution of net exports to GDP growth. The significant weakening of the zloty in the second half of 2008 and at the beginning of 2009 favoured improvement in competitiveness of Polish products and thus was a factor supporting GDP growth. In turn, economic growth was curbed by a significant fall in inventories.

In 2009 Q1 private consumption growth amounted to 3.3% y/y (compared with 5.3% y/y in 2008 Q4) and was in line with the expectations presented in the previous *Report*. According to GUS data, public consumption in 2009 Q1 increased by 6.1% y/y (compared with 14.1% y/y in 2008 Q4), whereas in the February *Report* this category was expected to rise only slightly. GUS data indicate that consumption demand remained at a relatively high level both in 2008 Q4 and 2009 Q1. In the second half of 2008 and in 2009 Q1 the growth of gross fixed capital formation declined significantly. In 2009 Q1 the growth of gross fixed capital formation amounted to 1.2% y/y.

The quickly deepening recession in the euro area in 2009 Q1 contributed to a strong weakening of the Polish exports, however, deeper decline in imports than exports resulted in a significant shrinking of the negative trade balance in January–March 2009.

In quarter-on-quarter terms, following a rise in 2008 Q4, the current account deficit in 2009 Q1 decreased significantly – and in relation to GDP (in terms of four quarters) fell down to 4.2% at the end of 2009 Q1 (compared with 5.5% at the end of 2008 Q4). In turn, the combined current and capital account deficit in relation to GDP decreased to 3.2% at the end of 2009 Q1 (from 4.4% at the end of 2008 Q4).

At the end of 2008 Q4 Poland's foreign debt amounted to approx. EUR 172 billion, which is 56% of GDP (compared to 48% at the end of 2007). Approx. 37% of this amount is due

for repayment in 2009 (i.e. EUR 64 billion), however the structure of the debt indicates a low risk of problems with foreign debt servicing this year.

According to the Ministry of Finance's preliminary estimates, in the period January–May 2009 the state budget recorded a deficit of PLN 16.4 billion, i.e. 90.2% of the annual plan. Situation of the budget primarily reflects lower than planned actual budget revenues. Even though the government announced austerity measures in February 2009 these will probably prove insufficient to maintain the budgetary balance on the level assumed in the Budget Act, in view of the low level of tax revenues anticipated in 2009. At the same time, it should be emphasised that under current circumstances any excessive expenditure cuts may have a cyclical effect and contribute to deepening the economic downturn, especially if such cuts would threaten the efficient utilisation of EU funds.

In 2009 Q1 demand for labour weakened significantly. Although the number of working persons according to BAEL (Labour Force Survey) continued to grow in annual terms, the growth declined, whereas in quarterly terms (seasonally adjusted) it fell down to zero. Since the end 2008 the employment in the corporate sector dropped by 61 thousand persons and in May 2009 it was lower by 1.7% y/y than in the corresponding period of the previous year. On the other hand, the number of persons working in the economy (in entities employing more than 9 employees) declined by 1.0% y/y in 2009 Q1. Despite negative changes in the labour market in 2009 Q1 labour supply continued to rise. The number of economically active persons rose by 1.5% y/y to 17 128 thousand. A considerable decline in demand for labour accompanied by an increase in labour supply translated into a rise in the unemployment rate, both BAEL-based (to 8.3% in 2009 Q1) and registered unemployment (to 11.0% in April 2009).

A significant decline in demand for labour translates into developments of wages, however, due to some nominal rigidities the growth of wages responds to changes in labour demand with some lag. Following the decline in 2008 Q3 and Q4, the growth of nominal wages in the economy in 2009 Q1 remained at the level recorded in the previous quarter and stood at 6.8% y/y. On the other hand, the wage growth in the corporate sector was decreasing relatively fast (to 4.8% y/y and 3.8% y/y in April and May 2009 as compared with 6.3% y/y in 2009 Q1 and 7.2% y/y in 2008 Q4). A relatively slow adjustment of the labour market situation to the strong weakening of activity in the Polish economy was reflected in – characteristic for this stage of business cycle – labour productivity drop and an increase in growth of unit labour costs.

Since the publication of the previous *Report* the Fed has kept its key interest rate unchanged at 0.00–0.25%, the European Central Bank (ECB) has cut its key interest rate by 100 basis points to 1.00% and the Swiss National Bank (SNB) has lowered the target range for the three-month LIBOR by 25 basis points, narrowing it to 0.00–0.75%, and pledged to bring the LIBOR down to the level of 0.25%. In line with current forward market quotations it is currently expected that the federal funds rate together with the SNB interest rate will remain unchanged over the horizon of the next six months and the ECB reference rate will decline further to 0.75% and remaining at this level till the end of 2009. In addition to the foregoing interest-rate decisions the Fed, the ECB and the SNB have taken unconventional measures consisting in these banks' direct interventions in the credit markets.

In Poland in February and March the Monetary Policy Council reduced the reference rate by 50 basis points to 3.75%. As the NBP interest rates were kept unchanged in April

and May, the expectations concerning the future value of the reference rate changed – currently the majority expects the NBP rates to remain above 3.00%, whereas in the survey of 10 February 2009 75% of respondents anticipated rates of between 2.50 and 3.00%. Initially, following interest rates cuts, WIBOR 3M interbank rates decreased, however, subsequently it began to rise again and between the end of May and 17 June it stood at 4.61–4.64%. Since WIBOR rates are not transactional they do not necessarily reflect the level of actual market rates. The elevated level of WIBOR rates may be driven by banks' attempts to increase their revenues from loans in a situation of high costs of attracting new deposits.

Between March and June 2009 yields on US and euro area Treasury bonds have risen, which was primarily due to the decline in risk aversion in the global financial markets and in investors' lower demand for government securities issued by developed countries. The yields on Polish bonds have changed to a small degree.

The situation in the domestic equity market reflected the overall sentiment prevailing in international markets. January witnessed a steep decline in indexes, which was continued into February when WIG20 sank to its lowest level since July 2003. At the end of February, however, share-price declines, together with zloty depreciation, came to a halt, preceding similar developments in international markets where the stock-market sell-off ended only in March. In March and in April rebounded strongly, in May share prices moved within a horizontal price range but in June the indexes soared again. In the period 18 February–17 June 2009 WIG20 rose by 34%.

The situation in the housing market has remained broadly unchanged since the beginning of 2009. In line with earlier forecast, in 2009 Q1 the major property market saw deepening imbalance between rising new flats supply and demand. In the context of restricted availability of housing loans, purchasers' expectations of further fall in the prices of flats and deteriorating economic outlook, a slight decline in flat prices could not significantly stimulate the growth in demand. In 2009 Q1, similarly to the second half of 2008, asking prices of flats continued a moderate decline. According to data available for the seven biggest city markets, in 2009 Q1 also transactional prices in the secondary market continued to decline, at the average rate surpassing that of 2008 Q4.

The second half of February 2009 brought a reversal of the depreciation trend of the zloty nominal exchange rate vis-a-vis the euro, the US dollar and the Swiss franc. The zloty had been strengthening till mid-April but it weakened subsequently. Between 18 February and 17 June the zloty appreciated against the US dollar, the euro, and the Swiss franc by approx. 17%, 8% and 10%, respectively.

Due to the continuing downturn, a negative assessment of enterprises of their sales perspectives and further tightening of the credit policies of banks, the increase in the value of loans granted to enterprises in 2009 was halted – in January–April 2009 loans rose by only PLN 0.5 billion. As regards loans to households, their growth in 2009 decelerated as well, which was primarily connected with a significant reduction of lending in the housing loan segment (in January–April 2009 its increase amounted to PLN 4.7 billion, compared to PLN 13.6 billion recorded in the corresponding period of the previous year). The increase of consumer loans also decelerated, though to a smaller extent than of housing loans (in January–April 2009 the level of household indebtedness in this segment of loan market rose by PLN 5.4 billion, compared with a rise of PLN 8.3 billion in the corresponding period of the previous year).

During meetings in February and March 2009 the Monetary Policy Council lowered the interest rates by 0.25 percentage points on each occasion. In April and May 2009 the Council decided to keep the NBP interest rates unchanged. At the May meeting the MPC decided to reduce the reserve requirement by 0.5 percentage points from 3.5% to 3.0%. In June 2009 the Council decided to lower NBP interest rates by 0.25 percentage points: reference rate to 3.50% on an annual basis; lombard rate to 5.00% on an annual basis; deposit rate to 2.00% on an annual basis; rediscount rate to 3.75% on an annual basis.

Minutes of the MPC decision-making meetings held in February, March, April and May 2009 together with the *Information from the meeting of the Monetary Policy Council* in June 2009 are presented in chapter Monetary policy in February – June 2009. *Minutes* from the MPC meeting held in June will be published on 23 July 2009 and so will be included in the next *Report*.

Chapter 4 of the *Report* presents the projection of inflation and GDP prepared by the NBP staff and based on the NECMOD model, which is one of the inputs into the Council's decision-making process on the NBP interest rates. Under assumption of constant interest rates there is a 50-percent probability of inflation lying within the range of 2.8–3.5% in 2009 (as compared to 2.5–3.9% in the February projection), 1.1–3.2% in 2010 (as compared to 0.5–3.2%) and 0.8–3.4% in 2011 (as compared to -0.9–2.6%). In line with the June projection, there is a 50-percent probability of the annual GDP growth lying within the range of -0.4–1.1% in 2009 (as compared to 0.3–1.9% in the February projection), 0.2–2.5% in 2010 (as compared to 1.2–3.3%) and 2.4–4.5% in 2011 (as compared to 2.5–4.8%).

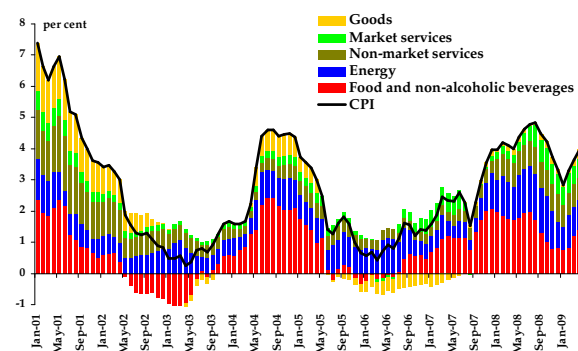
Inflationary processes

1.1 Inflation indicators

Following a significant drop in 2008 Q4, the annual growth of prices of consumer goods and services in Poland gradually increased over the first four months of 2009 – from 2.8% y/y in January to 4.0% y/y in April, and in May it slowed to 3.6% y/y, yet remaining above the upper limit for deviations from the NBP inflation target (Figure 1.1)¹. The elevated level of inflation was supported by growth in food prices, regulated prices and the prices of excise goods. In line with expectations formulated in the previous *Report*, another important factor conducive to higher inflation was a strong weakening of the zloty in the second half of 2008 and at the beginning of 2009. Higher inflation was also driven by the inertial character of inflationary processes and relatively high price hikes in 2008.

The main factor increasing inflation in January–April 2009 was the growth of food and non-alcoholic beverage prices, which may be linked to the limited domestic supply of some agricultural and food products and to the more expensive, due to zloty depreciation, imports of food products. Inflation was kept at a heightened level by high growth of the prices of some non-food products (cars, home appliances) triggered by zloty depreciation, significant increase of regulated prices, including, in particular, the prices of energy and services related to maintenance of dwelling as well as – although to a lesser extent – by the

□ **Figure 1.1:**
CPI and main categories of prices (y/y).



Source: GUS data, NBP calculations.

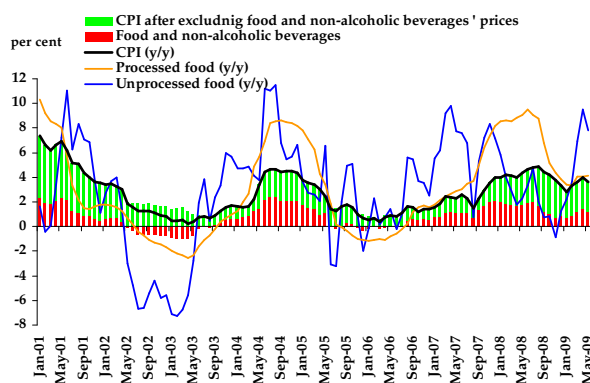
¹In March 2009 the Central Statistical Office (GUS) announced its annual revision of the CPI in line with the new weight structure. As a result, the annual growth of consumer prices in January 2009 was revised downwards from 3.1% y/y to 2.8% y/y, i.e. by 0.3 percentage point as compared to preliminary data published in February 2009.

prices of excise goods, such as tobacco products and alcoholic beverages, which was the effect of earlier excise tax rises. On the other hand, the main factor decreasing inflation in the analysed period was a decline in fuel prices in annual terms, connected with a strong fall of oil prices in the world markets in the second half of 2008. The disinflationary impact of decreases in the prices of goods strongly influenced by globalisation, the considerable proportion of which are imported from low cost countries, also persisted. In turn, the inflation decline in May was primarily the result of a drop in the annual growth of energy prices, connected with the negative base effect², and a decline in the growth of food prices.

In January–May 2009 inflation abroad decreased, which was related to an earlier drop in commodity prices and further deterioration in the global economic climate, including the deepening of recession in many economies.

In the coming months inflation in Poland is expected to decrease. This will be driven by the economic slowdown in Poland and the global recession which will translate into lower demand and easing of the pressure for price growth both in the domestic and world markets. At the same time, however, inflation decline will be curbed by the effects of the previously observed: rises in regulated prices, including energy prices, and zloty depreciation, as well as by the increase in oil prices observed in the recent period.

□ **Figure 1.2:**
CPI and main categories of prices – food and non-alcoholic beverages (y/y).



Source: GUS data, NBP calculations.

Prices of food and non-alcoholic beverages

The annual growth of food and non-alcoholic beverage prices, following a drop in the second half of 2008, started to rise again at the beginning of 2009 (Figure 1.2). Food prices in January–April 2009 were growing much faster than usually – in seasonally adjusted terms their monthly growth reached levels last observed in the autumn of 2007, i.e. in the period of very strong increases in the prices of agricultural commodities in the

²See: *Box Base effects and their impact on changes in the annual inflation index in 2009* included in the February 2009 Report, p. 17–20.

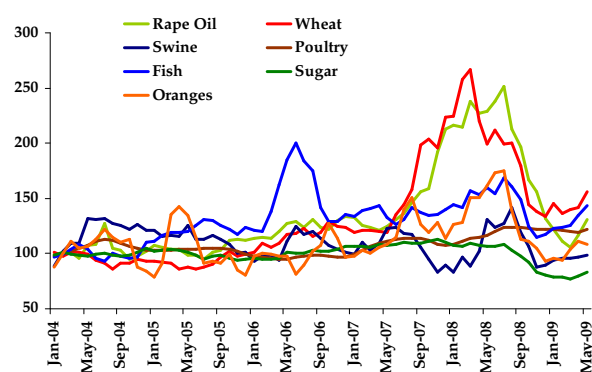
world markets. In May 2009 the annual growth of food prices decreased slightly.

Food price growth in the analysed period was, to a large extent, the effect of domestic factors. The prices of agricultural products in the world markets in this period, despite some increase observed in the recent months, remained relatively low (Figure 1.3). This was reflected in the path of food prices in most other EU countries, where the annual growth of food and non-alcoholic beverage prices in the first five months of 2009 was steadily falling³. In May 2009, despite some decline as compared to April, the annual growth of food prices in Poland was one of the highest among European Union countries.

The pronounced increase in food price growth since the beginning of 2009 was primarily the outcome of a surge in non-processed food and, to a lesser extent, also in processed food prices. An important factor fuelling food price growth was the decreasing domestic supply of agricultural and food goods, in particular, meat, sugar and some vegetables⁴. The domestic demand was supplemented with imported goods, the prices of which were growing due to the earlier zloty exchange rate depreciation. On the other hand, the growth of food prices might have been mitigated by weakening consumption demand.

It can be expected that in the coming months the annual growth of food prices will stabilise or

□ **Figure 1.3:**
Prices of agricultural commodities in the global markets (2004 Q1 = 100).



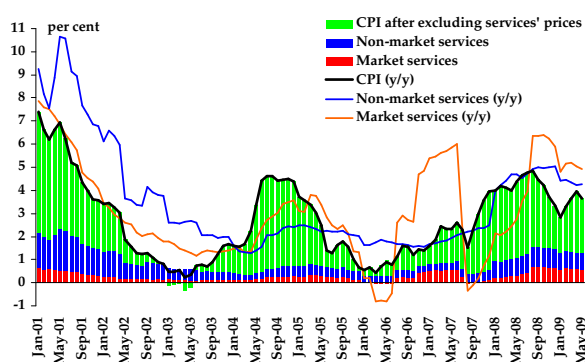
Source: IMF data, NBP calculations.

³The comparison of inflation indices among European Union countries is based on Eurostat data, i.e. harmonised data.

⁴Strong decline in the domestic supply of meat is connected with the deepest slump in pig stock since the beginning of transformation of the Polish economy. The output of slaughter hogs in 2008 Q2 was 13.4% y/y lower than in the corresponding period of the previous year, and according to the estimates of the Institute of Agricultural and Food Economics it may fall by as much as 18% y/y in the first half of 2009. At the same time the growth of poultry meat output decreased as well. The supply of field vegetables and potatoes from the 2008 harvest was over 11% y/y lower, which was connected with both the contraction of sown area and adverse agrometeorological conditions. In turn, the drop in the supply of sugar was related to the market reform introduced in the European Union, which resulted in lowering the output of sugar in most member countries. In Poland the output of sugar dropped by over 30% y/y and starting from the 2008/2009 season Poland, which had previously been a significant net sugar exporter, became a net sugar importer.

Figure 1.4:

CPI and main categories of prices – services (y/y).



Source: GUS data, NBP calculations.

will continue to fall. This should be favoured, among others, by the expected stabilisation of agricultural commodity prices in the world markets at a low level and further deteriorating financial standing of households.

Services prices

In the analysed period the growth in prices of services remained high, despite some deceleration as compared to 2008 Q4 both in the growth of prices of market services and, to a lesser extent, also of non-market services (Figure 1.4).

The fall in the annual growth of prices of market services, which nevertheless remains high, was driven by a weaker annual growth of prices in category *restaurant and hotel services* and prices of services connected with transport (including, in particular, those related to maintenance and exploitation of means of transport). The decline in the annual growth of prices of market services was most probably also connected with the easing of the domestic demand pressure. At the same time, the prices of services in categories *culture, sports and recreation* and *tourism* were still growing, contributing to a sustained relatively high growth in prices of market services.

The sustained growth in prices of non-market services was primarily the result of further rise in prices of services related to maintenance of dwelling.

Goods prices

In January–May 2009 the annual growth of prices of goods⁵ accelerated, though it remained relatively low (Figure 1.5).

A factor supporting decline in the annual growth of goods prices was further price decrease in the group of goods strongly influenced by globalisation⁶, the considerable part of which is imported

⁵In accordance with the definition adopted in the *Report*, the category of *goods* does not include food, non-alcoholic beverages and energy.

⁶This group of goods includes: clothing, footwear, audio and television equipment, photographic and IT equipment,

Table 1.1: CPI and core inflation indices.

Change y/y (per cent)	2008							2009				
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
CPI	4.6	4.8	4.8	4.5	4.2	3.7	3.3	2.8	3.3	3.6	4.0	3.6
Core inflation indices excluding:												
Administered prices	4.1	4.2	4.3	3.8	3.5	2.8	2.4	1.7	2.3	2.7	3.0	2.9
Most volatile prices	4.2	4.2	4.3	4.4	4.4	4.3	4.2	3.3	3.5	3.7	3.9	3.9
Food and energy prices	2.2	2.2	2.7	2.9	2.9	2.9	2.8	2.2	2.4	2.5	2.6	2.8
15% trimmed mean	4.9	4.8	4.8	4.5	4.1	3.7	3.7	3.4	3.6	3.9	4.1	3.9
Change m/m (per cent)	2008							2009				
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
CPI	0.2	0.0	-0.4	0.3	0.4	0.2	-0.1	0.5	0.9	0.7	0.7	0.5
Core inflation indices excluding:												
Administered prices	0.2	-0.1	-0.5	0.3	0.4	0.1	-0.1	0.2	0.6	0.8	0.8	0.5
Most volatile prices	0.0	0.3	0.2	0.5	0.5	0.7	0.6	0.2	0.6	0.7	0.1	0.2
Food and energy prices	0.3	0.2	0.1	0.3	0.2	0.1	0.1	0.2	0.2	0.4	0.4	0.3
15% trimmed mean	0.4	0.3	0.1	0.2	0.2	0.2	0.1	0.4	0.3	0.4	0.4	0.3
Core inflation indices – seasonally adjusted (TRAMO/SEATS):												
CPI	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
Core inflation excluding food and energy prices	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3

Source: GUS data, NBP calculations.

Since March 2009 the NBP has been calculating and publishing four core inflation measures:

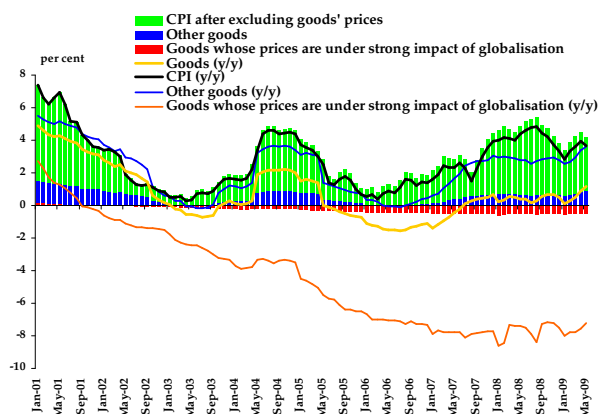
- **Core inflation net of administered prices;** the index is calculated by eliminating prices that are not shaped by market mechanisms but fully or largely depend on the decisions of central or local government institutions or regulators. Administered prices (in contrast to the previously used category of regulated prices) do not include the prices of goods and services indirectly controlled, e.g. by changes in the rates of indirect taxes or ecological taxes and fees. The index of core inflation net of administered prices replaced the index of core inflation net of regulated prices, which had been published till the end of 2008;
- **Core inflation net of most volatile prices;** the index is calculated by excluding the most disturbed prices, i.e. the prices of those goods and services which are particularly sensitive to different kind of supply and demand shocks and/or display significant seasonality that evolves over time. This indicator replaced the previously used index of core inflation net of most volatile prices and the index excluding most volatile and fuel prices published till the end of 2008;
- **Core inflation net of food and energy prices;**
- **15% trimmed mean.**

from low cost countries. However, the increased growth in the prices of audiovisual, photographic and computer equipment observed in February–April 2009 connected with the earlier zloty depreciation, was diminishing the decline in prices of this group of goods.

musical instruments, games and toys, sports and camping equipment for outdoor recreation, electric appliances for personal hygiene.

Figure 1.5:

CPI and main categories of prices – goods (y/y).



Source: GUS data, NBP calculations.

The rise in the annual growth of goods prices was primarily fuelled by increasing prices of other goods, including, in particular, alcoholic beverages and tobacco products, due to the introduction of a higher excise tax rate on these goods at the beginning of 2009. Also conducive to price growth acceleration was a significant increase in the prices of means of transport (passenger cars) and home furnishing goods, which may be linked to the earlier weakening of zloty exchange rate.

Energy prices

In the analysed period, following a strong rise in the annual growth of energy prices⁷, May 2009 brought its decline triggered by the negative base effect of gas prices (strong growth in gas prices observed in May 2008). The persisting high growth of energy prices was driven by rising prices of electricity and heat for households. On the other hand, falling prices of fuels for private means of transport connected with a strong decline in crude oil prices in the global markets observed from August to December 2008 were conducive to declining price growth in this group. At the same time, as a result of the zloty weakening, in particular, against the American dollar, the scale of falls of oil prices denominated in PLN was lower than in the case of prices denominated in USD which favoured high energy prices growth persisting in the domestic market.

The coming months may be expected to see the annual growth of energy prices to be close to the current level. This will be driven, on the one hand, by the expected lower than in 2008 prices of fuel and, on the other hand, by possible further and already implemented rises in regulated prices of heat and electricity. The previous zloty exchange rate depreciation and the currently observed growth in crude oil prices will be conducive to higher growth of energy prices.

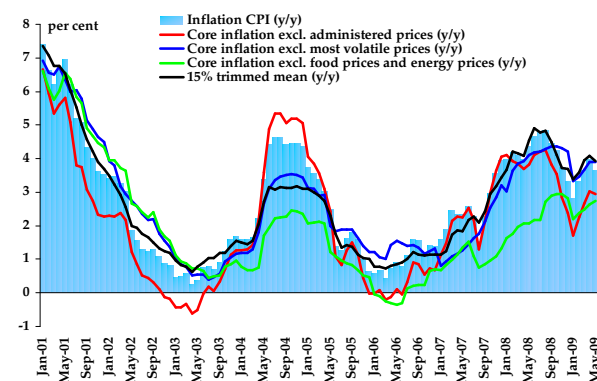
⁷The category of *energy* includes energy products (electricity, gas, heating, fuel) and engine fuels (for private means of transport).

Core inflation

In the period January–April 2009 all core inflation measures increased (Figure 1.6), which shows that CPI rise in those months resulted not only from changes of its components particularly sensitive to shocks.

May 2009 brought further rise in core inflation net of food and energy prices (from 2.2% y/y in January to 2.8% y/y in May 2009) and a decline or stabilization of the remaining core inflation measures. The increase of core inflation net of food and energy prices was driven by a rise in excise tax rates and the consequences of the previously observed zloty depreciation. In May 2009 two measures (core inflation net of most volatile prices and 15% trimmed mean) remained above the upper limit for deviations from the NBP inflation target (3.5%).

Figure 1.6:
CPI and core inflation measures.

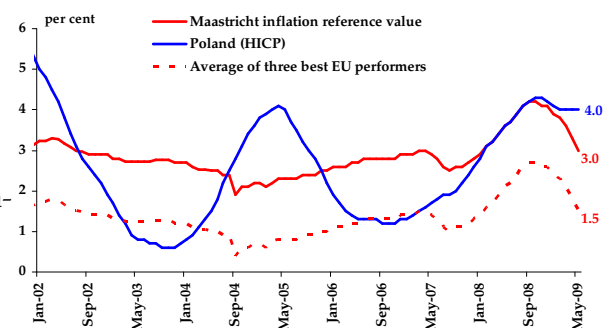


Source: GUS Data, NBP calculations.

Inflation and Maastricht criterion

In January–April 2009 the annual HICP inflation in Poland was on a rising path and in May 2009 it declined slightly. Yet, its 12-month moving average, taken into account in the assessment of compliance with the Maastricht inflation criterion, was declining until February 2009 and then stabilized at 4.0%. In turn, the reference value for the inflation criterion gradually decreased throughout the analysed period from 3.9% in January to 3.0% in May. As a result of those changes, the 12-month moving average HICP inflation in Poland in the period January–May 2009 exceeded the reference value.

Figure 1.7:
HICP inflation in Poland (12-month moving average) and the Maastricht criterion (y/y).



Source: Eurostat data, NBP calculations.

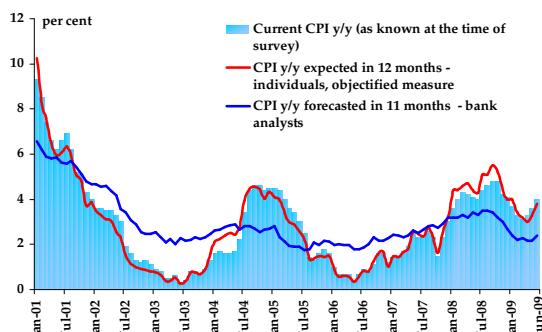
1.2 Inflation expectations

Since the February *Report* to May 2009 inflation expectations of bank analysts gradually declined. Inflation forecasts of bank analysts over the 11-month horizon fell from 2.3% in March to 2.1% in May 2009. In June inflation expectations of bank analysts increased to 2.4% (Figure 1.8).

In turn, the objectified measure of inflation expectations of individuals, following the decline in the period March–April, picked up again in May

□ **Figure 1.8:**

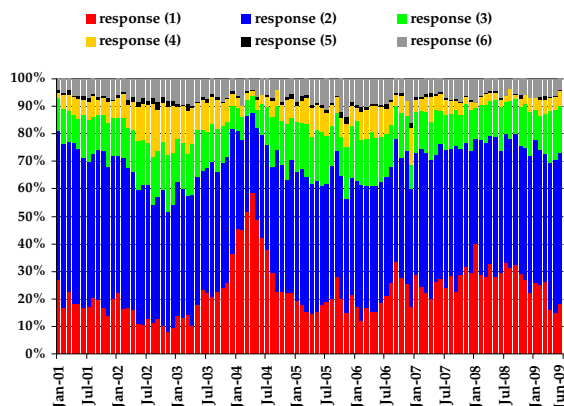
Inflation expectations of individuals and inflation forecasts of bank analysts.



Source: Ipsos, Reuters, GUS, NBP calculations.

□ **Figure 1.9:**

Inflation expectations of individuals – responses to the question asked by Ipsos.



Source: Ipsos data.

Ipsos survey question: "Considering the present situation, do you think that prices during the next 12 months: (1) will grow faster than they do now; (2) will rise at the same rate; (3) will grow at a slower rate; (4) will stay the same; (5) will decrease; (6) it is hard to say?"

and June 2009 (to 3.8%), which was mainly connected with higher rate of current inflation. As compared with the beginning of the year, the structure of responses in the survey of inflation expectations of individuals (Figure 1.9) improved – the percentage of respondents expecting the price growth to pick up or to continue at the same rate in the months to come as compared with inflation observed at the moment of the survey, in the period March–June 2009 remained on average at approx. 72%, as compared with 76% in the first two months of 2009.

Determinants of inflation

Since the publication of the February *Report* the recession in the world economy has deepened and the forecasts of economic growth for 2009 has been further lowered. At the same time, some macroeconomic data and economic climate indicators currently point to the possibility of the activity decline in the world economy decelerating over the next few quarters, including the weakening of recession in the United States and – to a lesser extent – in the euro area in 2009 Q2. The reduction of current and forecast economic growth, apart from the developed economies, also affected the developing countries, including CEE countries. The weakening of the aggregate demand and an earlier drop in commodity prices connected with the deterioration of the global economic climate contributed to decline in inflation in most of the countries.

The latest information on the Polish economy confirms that economic activity has been continuing at a low level. Slowing growth is driven by the recession abroad, deteriorating situation in the labour market and worse financial standing of enterprises, as well as limited credit availability. Demand is additionally dampened by the relatively weak sentiment of economic agents, although recently there has been some improvement in confidence indicators.

According to GUS estimates, in 2009 Q1 Poland's GDP rose by 0.8% y/y (compared with 2.9% y/y in 2008 Q4), i.e. below the expectations of the previous *Report*. Private consumption remained the main factor in GDP growth with a slightly positive contribution of investment. Due to the recession abroad Polish exports decreased markedly, but the concurrent significant drop in imports connected, among others, with the deteriorating economic climate in Poland and the earlier depreciation of the zloty resulted in a positive contribution of net exports to GDP growth. The significant weakening of the zloty in the second half of 2008 and at the beginning of 2009 favoured improvement in competitiveness of Polish products and thus was a factor supporting GDP growth. In turn, economic growth was curbed by a significant fall in inventories. The slowdown in economic activity was accompanied by further reduction of labour demand indicated by falling employment and rising unemployment. Despite some nominal rigidities, the growth of wages is gradually adjusting to changes in labour demand, though the wage growth and, consequently, the growth of unit labour costs in the economy remains at a relatively high level. At the beginning of 2009 the adjustment processes in the Polish economy were accompanied by: reduced current account deficit, significant volatility of the zloty exchange rate and increased core inflation excluding food and energy prices. Despite easing demand pressure in the economy, inflation remains above the upper tolerance limit for deviations from the NBP target set at 3.5%, which is driven by growth of food prices, administered prices and the prices of excised goods. The significant weakening of the zloty exchange rate in the second half of 2008 and at the beginning of 2009 was an important factor conducive to higher inflation.

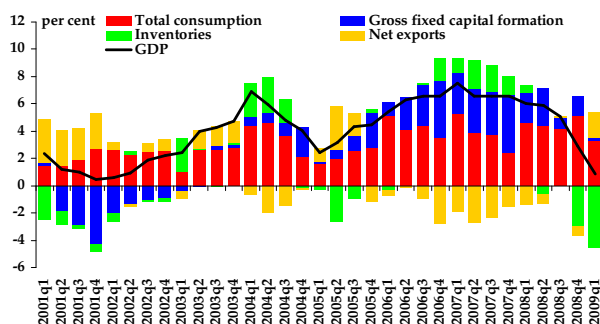
2.1 Demand

In 2009 Q1 the growth of real GDP amounted to 0.8% y/y (compared with 2.9% y/y in 2008 Q4) and was lower than expected in the previous Report (Figure 2.1).

In line with the expectations of the previous Report, private consumption remained the main factor in GDP growth. The growth of investments continued at a positive level and ran slightly above the expectations. In turn, there was a considerable adjustment of inventories, whose contribution to growth was strongly negative. As a result, domestic demand in 2009 Q1 dropped by 1.0% y/y. The economic slowdown in Poland combined with the depreciation of the zloty in the second half of 2008 and at the beginning of 2009 contributed to a significant fall in imports in 2009 Q1. As the same time a considerable plunge in exports occurred, which was related to a strong deterioration of economic climate abroad, though contribution of net exports to GDP growth was positive.

In the NBP's assessment, GDP growth may be expected to slow down in the quarters to come. Due to adverse outlook for economic growth in Poland and abroad, investment activity will be still limited. In turn, private consumption will remain an important factor conducive to GDP growth, though its growth will also be slowing down. Net exports may also have a positive contribution to GDP growth, which will be supported by a marked reduction of imports. The weakening of the demand for imported goods will be primarily connected with a considerable drop in the growth of domestic demand, including slowing investment of enterprises and demand for supply goods, which will be additionally reinforced by the earlier significant depreciation of the exchange rate. At the same time, the deteriorating economic situation in Poland's main trade partners will translate into further reduction of Polish exports.

Figure 2.1:
Contribution of aggregate demand components to GDP growth.



Source: GUS data.

2.1.1 Consumption demand

In 2009 Q1 private consumption growth amounted to 3.3% y/y (compared with 5.3% y/y in 2008 Q4)

and was in line with the expectations presented in the previous *Report*. According to GUS data, public consumption in 2009 Q1 increased by 6.1% y/y (compared with 14.1% y/y in 2008 Q4), whereas in the February *Report* this category was expected to rise only slightly. GUS data indicate that consumption demand remained at a relatively high level both in 2008 Q4 and 2009 Q1.

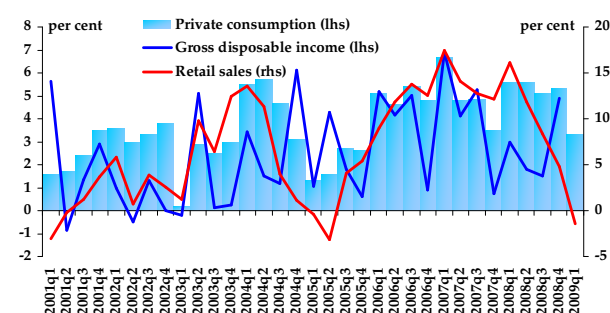
2008 Q4 saw high growth of aggregate wages and income from social benefits. Yet, the nominal aggregate wage growth lowered as compared with 2008 Q3 (to 11.8% y/y against 15.2% y/y in 2008 Q3), which was driven by both decline in employment growth and gradually slowing wage growth (see Chapter 2.3.1 Wages and productivity). On the other hand, the growth of income from social benefits remained at an unchanged level. As a result of old-age and disability pension indexation in 2008 the nominal growth of average old-age and disability pension from non-agricultural social security system amounted in 2008 Q4 to 10.8% y/y (compared with 10.9% y/y in 2008 Q3), and the growth of average agricultural pension to 6.5% y/y (compared with 6.5% y/y in 2008 Q3).

In 2009 Q1 wage growth in the enterprise sector declined further to 6.3% y/y, while wage growth in the economy remained at an unchanged level of 6.8% y/y. The growth of average non-agricultural and agricultural pensions was similar to those recorded in 2008 Q4 (10.4% y/y and 6.6% y/y respectively). The real income growth was significantly lower than the nominal income growth which was driven by elevated inflation, including high growth of regulated prices which decrease purchasing power of households' disposable income.

In 2008 Q4 purchasing power of households was supplemented with consumption loans, albeit their growth was lower than in 2008 Q3 (PLN 7.9 billion as compared with PLN 9.9 billion respectively). In 2009 Q1 growth in consumer loans declined further (to PLN 5.7 billion), yet consumer loans remained an additional source of financing consumption demand (see Chapter 2.5.3 Credit and money⁸).

Figure 2.2:

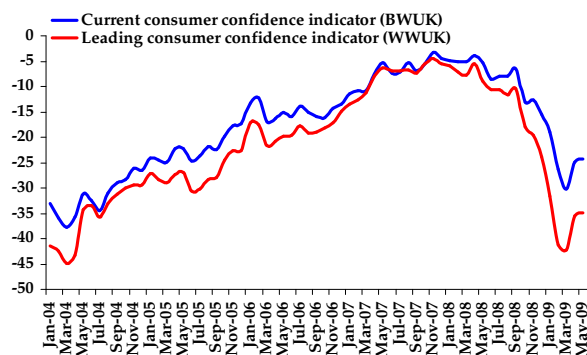
Growth of private consumption, gross disposable income and retail sales (y/y, constant prices).



Source: GUS data.

⁸It should be emphasized that the data discussed in

□ **Figure 2.3:**
Consumer confidence indicators.



Source: GUS, NBP data.

Since January 2004 surveys have been conducted on a monthly basis (previously quarterly).

2008 Q4 saw a decline in retail sales growth in real terms to 4.8% y/y (from 8.4% y/y in 2008 Q3) and 2009 Q1 saw a fall in this category by 1.4% y/y (Figure 2.2). Decline in sales growth was recorded mainly in the category of consumer durables (cars, furniture, radio and television equipment and household appliances).

In 2009 Q1 consumer sentiment further deteriorated. Household surveys point primarily to increased concerns about growing unemployment and more pessimistic assessment of the future situation of the domestic economy. Yet, the results of the surveys covering the period April - May 2009 indicate a change in the previously observed downward trends in consumer confidence and gradual revival in household sentiment, though, it is difficult to assess whether this change will be lasting. In particular, rising consumer concerns about growing unemployment have been contained. At the same time, there has been an improvement in the expectations about future changes in the general economic situation of the country and own household as well as in the assessment of households' saving possibilities in the coming year. In 2009 Q2, despite better evaluation of future economic climate, assessment of intended major purchases in the coming year deteriorated. Amidst considerable weakening in retail sales growth in 2009 this might point to consolidating downward trend in private consumption growth.

2.1.2 General government demand

According to the Ministry of Finance's preliminary estimates, in the period January-May 2009 the state budget recorded a deficit of PLN 16.4 billion, i.e. 90.2% of the annual plan⁹. Situation of the budget primarily reflects lower than planned

Chapter 2.5.3 Credit and money concern changes in the volume of loans adjusted for the impact of the zloty exchange rate fluctuations against major currencies, while the data presented in this chapter refer to published monetary data (not adjusted for the impact of exchange rate fluctuations). In case of consumption loans exchange rate changes have only a limited impact on the developments of households' indebtedness because share of foreign currency loans in this category is small.

⁹The deficit planned in *The Budget Act for 2009* stood at PLN 18.2 billion.

actual budget revenues. Between January and May 2009 both tax and non-tax revenues fell by 4.0% y/y¹⁰. Central budget expenditure, on the other hand, rose in that period by 15.1% y/y. High growth of expenditures was driven by rising costs of servicing foreign and domestic debt, higher transfers to FUS (Social Security Fund)¹¹ and KRUS (Agricultural Social Insurance Fund) as well as by settlements of MON (Ministry of National Defence) liabilities incurred in 2008. Even though the government announced austerity measures in February 2009¹² these will probably prove insufficient to maintain the budgetary balance on the level assumed in the Budget Act, in view of the low level of tax revenues anticipated in 2009.

Whereas 2009 Q1 brought a marked slowdown in the growth of the own revenues of local government units¹³, the revenue situation of special purpose funds remained favourable. Coming months of 2009, however, may see the reduction in the growth of revenues from social and health security contributions, in view of falling wage growth and increasing number of the unemployed. The deteriorating revenue situation of special purpose funds and local government units may actually result in their higher than anticipated deficits.

Under low economic activity anticipated for 2009, the deficit of the general government sector may deepen further, which is also indicated by the forecast of the sector balance in 2009 presented by the Ministry of Finance in its April fiscal notification (-4.6% of GDP). The rise in deficit will

¹⁰All categories of taxes except for excise duty dropped over the first five months of 2009: VAT by 9.6% y/y, PIT by 5.0% y/y and CIT by 10.8% y/y, primarily due to deteriorating economic situation and systemic changes introduced to the system (among others shortening of VAT return periods from 180 to 60 days and replacement of three PIT rates with just two of 18 and 32%).

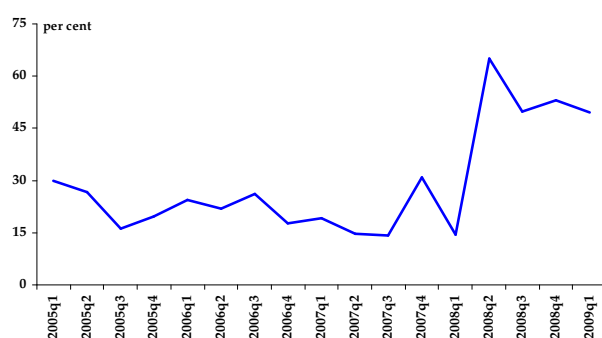
¹¹This increase stemmed, among others, from the base effect – FUS demand for subsidies was low in the first months of 2008, in view of very good revenue conditions of the fund.

¹²The government announced expenditure reduction of PLN 10.0 billion and transfer of PLN 9.7 billion to the National Road Fund for infrastructural expenditure.

¹³Local governments reported a surplus of PLN 8.6 billion in 2009 Q1, which is a seasonal phenomenon, even though their revenues grew at a slower rate than a year before.

□ **Figure 2.4:**

Share of bills in total bond issuance.



Source: Ministry of Finance data.

be driven by automatic stabilisers, amidst limited possibilities of current reductions of state budget expenditure in response to the revenues shortage. At the same time, it should be emphasised that under current circumstances any excessive expenditure cuts may have a cyclical effect and contribute to deepening the economic downturn, especially if such cuts would threaten the efficient utilisation of EU funds.

In view of the deepening fiscal imbalance, the gross borrowing needs of the state budget are likely to increase above the planned level of PLN 155.0 billion¹⁴ (of which PLN 108.1 billion is the debt repayment). In the period January–May 2009 borrowing needs were primarily financed from the sale of government securities in the domestic market, supplemented by funds raised abroad (the issue of eurobonds amounting to 1.75 billion euro)¹⁵, with very low receipts from privatisation. In most tenders held in the analysed period the demand for the government securities offered by the Ministry of Finance exceeded the supply¹⁶. It should be, however, emphasised that in the context of heightened risk aversion on the part of investors, the structure of the issued securities showed a marked change – since 2008 Q2 the share of bills in the issues of government securities have risen markedly (Figure 2.4).

¹⁴The amount indicated in *The Budget Act for 2009* (PLN 150.5 billion) was adjusted by the Ministry of Finance at the beginning of 2009 for the updated forecast of the zloty exchange rate and a changed value of receipts from privatisation.

¹⁵A credit agreement for EUR 1.8 billion with European Investment Bank is to be signed in June 2009.

¹⁶With the exception of the issue of 5-years bonds in February and March 2009, when the demand proved lower than the supply of government securities.

Deterioration of general government balance in 2008

2008 brought a significant deepening of general government sector imbalance. According to GUS notification of April 2009, the general government sector deficit in ESA95 terms amounted to 3.9% of the GDP in 2008 (compared with 1.9% of the GDP in 2007), thus exceeding the reference value defined in the Maastricht Treaty (3.0% GDP). In view of the increase in deficit in 2008 and forecast deterioration of the balance over the next two years¹, in May 2009 the European Commission undertook measures to include Poland in the excessive deficit procedure². The rise in deficit in 2008 was driven, among others, by the implementation of systemic changes (further reduction of tax wedge and introduction of family tax relief), continuation of robust expenditure growth and the occurrence of one-off factors (capital injection to PKP – Polish Railways and higher delivery of military equipment). Estimates of the European Commission point also to an increase of structural deficit: from 3.2% of the GDP in 2007 to 5.3% of the GDP in 2008. At the same time, it should be emphasized that the rising imbalance of the general government sector and higher structural deficit are currently a common phenomenon in most EU member states (Figure R.1.1).

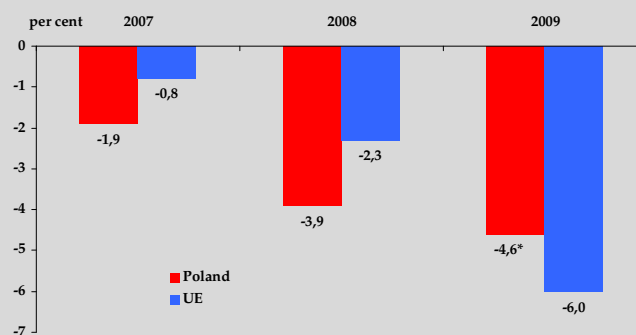


Figure R.1.1: General government sector balance (ESA95) in relation to GDP.

Source: Eurostat data, European Commission forecasts.

* Data for Poland for 2009 taken from the Ministry of Finance's fiscal notification of April 2009

¹ European Commission, Economic Forecast, Spring 2009.

² Poland was subject to the procedure of excessive deficit between July 2004 and July 2007.

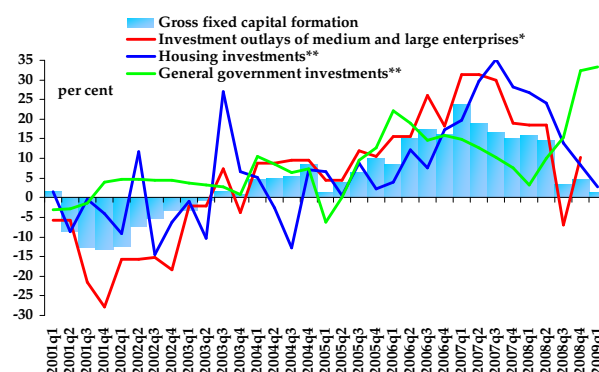
2.1.3 Investment demand

In the second half of 2008 and in 2009 Q1 the growth of gross fixed capital formation declined significantly (Figure 2.5). In 2009 Q1 the growth of gross fixed capital formation amounted to 1.2% y/y, and investment rate (the ratio of investment to GDP) stabilised at the level of approx. 22%¹⁷ (Figure 2.6).

Following a fall in 2008 Q3, in 2008 Q4 investment activity in the non-financial corporate sector in nominal terms picked up, yet its growth was relatively low (6.0% y/y). In 2009 Q1 invest-

Figure 2.5:

Investment in the economy (y/y).



Source: GUS data, Ministry of Finance data, NBP calculations.

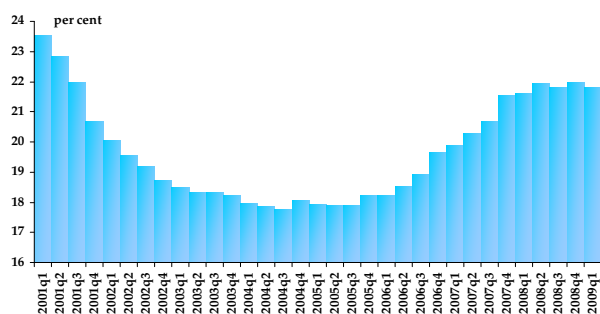
* Due to lack of data on investment outlays of enterprises in Q1 and Q2 of each year, the chart presents the growth for the first half of a year.

** NBP estimates for the NECMOD model; seasonally adjusted data.

¹⁷ Investment rate is calculated on the basis of data for the past four quarters.

□ **Figure 2.6:**

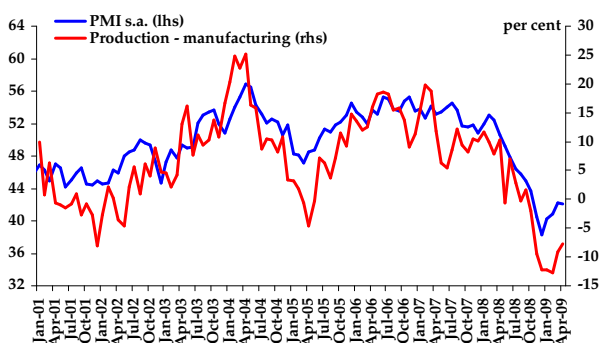
Investment to GDP ratio (gross fixed capital formation to GDP in nominal terms; quarterly data, cumulated over last 4 quarters.)



Source: GUS data, NBP calculations.

□ **Figure 2.7:**

PMI and production growth (y/y) in manufacturing.

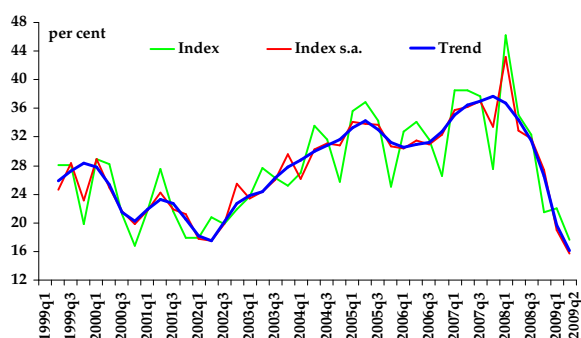


Source: GUS, Eurostat data.

Data on production adjusted by working days.

□ **Figure 2.8:**

Index of new investments (the percentage of enterprises planning to start new investments within the coming quarter).



Source: NBP business tendency survey.

ment growth in the corporate sector remained positive, though it declined significantly – to 0.6% y/y. The rise in investment expenditures both in 2008 Q4 and in 2009 Q1 was to a large extent driven by higher nominal expenses on imported fixed capital, in particular on imported metal products and machinery, due to zloty depreciation. Increased outlays on new buildings and structures supported investment growth. On the other hand, decline in the outlays on means of transport accelerated. 2009 Q1 saw also lower expenses on domestic metal products and machinery.

In 2008 Q4 and in 2009 Q1 the growth of housing investment decreased. At the same time a marked improvement in investment outlays of the public finance sector was recorded.

According to business condition surveys of the NBP, 2009 Q2 may bring further decline in investment growth (Figure 2.8). Percentage of respondents intending to start new investment projects fell as compared with the preceding quarter (to 17.7% against 22.1% in 2009 Q1)¹⁸. Moreover, percentage of enterprises planning to continue and finalise, as scheduled, their investment projects started in preceding quarters fell further considerably. Decline in investment activity results from further deterioration in the outlook for demand and lower needs of enterprises to develop their production potential, which is signalled by a further marked decline in production capacity utilization (Figure 2.9). Lower than in the preceding quarter decline in the number of newly planned investment projects as well as the improvement of some business condition indicators (Figure 2.7) should be considered a positive phenomenon.

Apart from falling domestic demand, the factors negatively affecting investment decisions of enterprises include: unfavourable outlook for economic growth in Poland's major trading partners and declining capacity to finance investment resulting from falling profitability of business activity and limited access to sources of financing, including, in particular, bank loans.

¹⁸See: *The condition of the non-financial enterprises in 2009 Q1 and expectations for 2009 Q2*, the NBP.

Table 2.1: Decomposition of gross fixed capital formation in Poland (per cent).

	2007				2008				2009
	q1	q2	q3	q4	q1	q2	q3	q4	q1
Products of agriculture, forestry and fisheries	0.2	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.2
Metal products and machinery	33.3	29.1	29.2	27.8	32.3	29.0	28.3	26.7	31.1
Transport equipment	10.9	11.1	11.0	9.2	11.8	11.1	10.0	9.0	9.8
Construction work: housing	15.5	15.5	15.6	10.9	15.9	16.5	15.8	10.4	17.4
Construction work: other constructions	37.0	40.5	40.2	48.0	35.6	40.0	41.4	49.6	38.6
Other products	3.0	3.7	3.8	4.0	4.1	3.3	4.3	4.1	3.0

Source: Eurostat data.

Due to the growing inflow of EU funds, the outlook for investment activity in the central and local government sector in the coming quarters remains favourable. Yet, significant deterioration in the situation of the public finance sector may make it more difficult to raise funds to co-finance investment.

2.1.4 External demand and current account balance of payments¹⁹

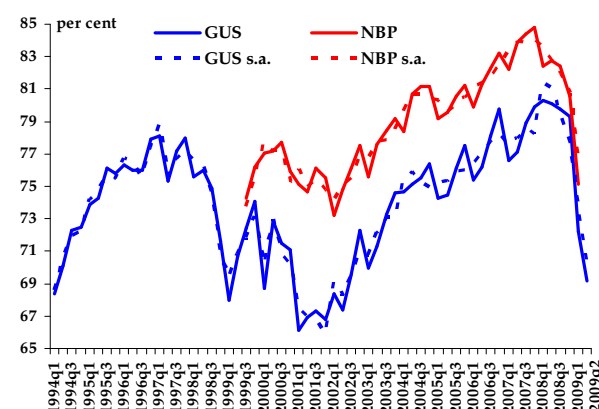
External demand

Activity in the world economy continued to decline strongly in the first months of 2009. According to the estimates of the International Monetary Fund of April 2009, global GDP contracted in 2009 Q1 almost as fast as in 2008 Q4, i.e. by 6.25% q/q (in annualised terms). The significant activity slowdown in the world economy was accompanied by a slump in the global trade. In the period between November 2008 and January 2009 the value of world trade decreased by 15.7% y/y and its volume by 8.9% y/y.

In 2009 Q1 GDP in the US economy continued a steep decline, though the scale of this fall was smaller than in the preceding quarter (–5.7% q/q in annualised terms compared with –6.3% q/q in 2008 Q4). In turn, the fall in GDP in the euro area, which is the most important market for Polish exports, deepened significantly. GDP also suffered significant falls in many developing economies, including all – except for Poland –

Figure 2.9:

Production capacity utilisation in industry (GUS) and in the corporate sector (NBP).

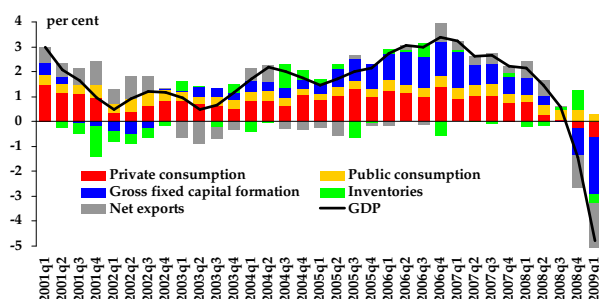


Source: GUS data, NBP business tendency survey.

The production capacity utilisation obtained from the GUS business survey is significantly lower from one obtained from the NBP business survey. However, the changes in this indicator are similar in both surveys. The difference is due to the fact that the two surveys are based on different enterprise samples. The GUS sample includes ca. 3500 enterprises from manufacturing excluding waste processing. The NBP sample in March 2009, in turn, included 888 enterprises from the whole corporate sector. The difference may also reflect the overrepresentation of big enterprises in the NBP sample, while the GUS sample is representative with respect to enterprise size.

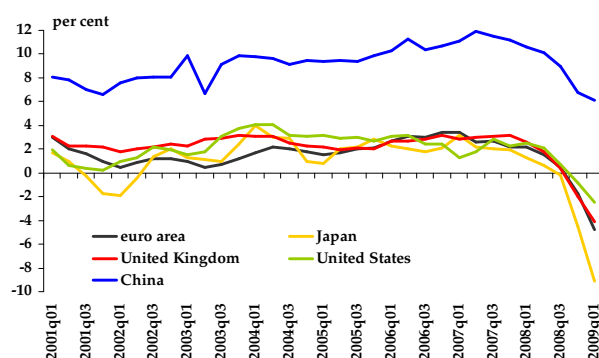
¹⁹Export and import data for euro area and Poland presented in this chapter refer to values expressed in EUR.

Figure 2.10:
Decomposition of the euro area GDP growth.



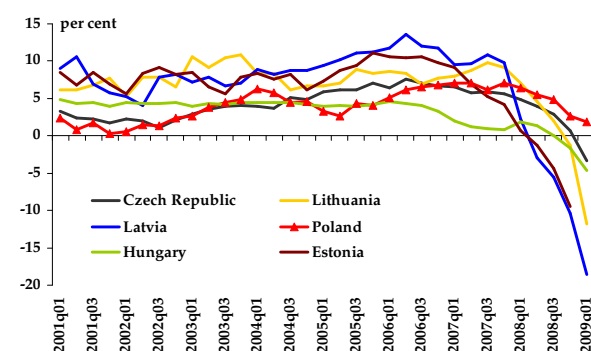
Source: Eurostat data.

Figure 2.11:
Economic growth in selected countries (y/y).



Source: Eurostat, IMF data.

Figure 2.12:
Economic growth in Central and Eastern Europe (y/y).



Source: Eurostat data (seasonally adjusted)
Eurostat has not published yet the seasonally adjusted data on GDP growth in 2009 Q1 for Estonia.

Central and Eastern European countries²⁰ (Figures 2.11, 2.12). Since the publication of the previous Report – along with the advancing recession – the forecasts of economic growth of the global economy in 2009 have been revised downwards²¹. At the same time, some macroeconomic data and economic climate indicators currently point to the possibility of the activity decline in the world economy decelerating over the next few quarters, including the weakening of recession in the United States and – to a lesser extent – in the euro area in 2009 Q2.

According to preliminary estimates, 2009 Q1 was the fourth consecutive quarter of GDP decline in the euro area in quarter-on-quarter terms (a drop reached 2.5% q/q as compared with a fall of 1.8% q/q in 2008 Q4). In relation to the corresponding period of the previous year GDP fell by 4.8% y/y (compared with a drop of 1.7% y/y in 2008 Q4). Strong reduction in the economic activity occurred all the economies of the region²².

The most important factor that contributed to the strong drop of the annual economic growth in the euro area in relation to the previous quarter was further decline in investment and a negative contribution of inventories to GDP growth (down to -0.4 percentage point in 2009 Q1 from 0.8 percentage point in 2008 Q4). Moreover, the negative contribution of net exports and private consumption deepened in comparison to 2008

²⁰ According to Eurostat estimates, in 2009 Q1 the annual GDP growth (in seasonally adjusted terms) was -3.4% y/y in the Czech Republic, -4.7% y/y in Hungary and -5.4% y/y in Slovakia. In contrast, in the same period GDP in Poland recorded a rise of 1.9% y/y.

²¹ The IMF forecasts of April 2009 indicate that the global GDP in 2009 may decline by 1.3% y/y, compared with the drop of 0.5% y/y forecast in January 2009. Moreover, the consensus of forecasts published in June 2009 by *The Economist* assumes that in 2009 GDP will drop by 4.1% y/y in the euro area (compared with the fall of 2.1% expected in February 2009), by 2.8% y/y in the United States (compared with 2.0% y/y) and by 3.7% y/y in the United Kingdom (compared with 2.6% y/y).

²² A significant deepening of recessionary tendencies was observed in the German economy, where GDP dropped by 6.9% y/y in 2009 Q1 and by 3.8% q/q. A strong GDP decline in both annual and quarterly terms was also recorded in Italy (of -5.9% y/y and -2.4% q/q, respectively). French GDP decreased in 2009 Q1 by 3.2% y/y and by 1.2% q/q, while the scale of GDP decline in quarter-on-quarter terms was smaller than in 2008 Q4.

Q4, while the positive contribution of public consumption to growth edged down (Figure 2.10).

In 2009 Q1 euro-area imports and exports continued a steep decline. The drop of exports was recorded in relation to all main trading partners. The decrease of export sector activity was conducive to reducing the demand for intermediate goods, which, in combination with the drop in consumption and investment demand, translated into a plunge in imports.

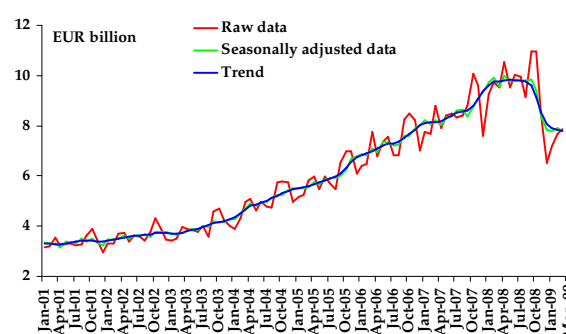
The quickly deepening recession in the euro area in 2009 Q1 contributed to a strong weakening of the Polish exports both to this region and also to the economies of Central and Eastern European countries and the Community of Independent States, which was due to the growing significance of intermediate goods in Poland's exports to this group of countries (Figure 2.13).

The deepest decline in exports was recorded in intermediate goods, which is consistent with tendencies in the global trade. On the other hand, the drop in sales of consumer goods was relatively shallow. The level of the exports of agricultural products remained unchanged, while the drop in the exports of cars was relatively small in comparison to other CEE countries²³.

The value of Polish imports in 2009 Q1 dropped deeper than the value of exports. Intermediate goods imports recorded the biggest decline. Additionally, the decline in the value of imports was fuelled by an earlier plunge in the prices of commodities, particularly crude oil. There was also a pronounced reduction in the imports of investment goods, which points to a strong decline in the demand of Polish enterprises for these goods. The imports of consumer goods recorded the smallest drop, which is connected with the still relatively high growth of consumption spending at the beginning of 2009, as compared to other European countries. Deeper decline in imports than exports resulted in a significant shrinking of the negative trade balance in January–March 2009.

²³Polish automotive exports are dominated by small and relatively cheap models of cars, which attracted higher demand in Western Europe after some countries introduced bonuses for scrapping old vehicles.

Figure 2.13:
The value of Polish exports.



Source: GUS data, NBP calculations.

Table 2.2: Polish export and import competitiveness measures.

Change (per cent)	2006				2007				2008			
	q1	q2	q3	q4	q1	q2	q3	q4	q1	q2	q3	q4
Export prices / Unit labour costs*												
y/y	2.1	10.3	13.5	13.0	10.4	3.4	2.1	-2.3	-2.6	-4.8	-8.9	-3.5
q/q	2.5	6.4	3.6	0.0	0.1	-0.4	2.4	-4.3	-0.2	-2.7	-2.0	1.4
Import prices / Domestic producer prices**												
y/y	-2.2	3.4	0.9	0.3	1.8	-2.8	-3.7	-3.9	-5.8	-4.9	-5.8	5.8
q/q	2.1	0.9	-1.0	-1.6	3.7	-3.8	-1.9	-1.9	1.7	-2.8	-2.8	10.1
REER ULC***												
y/y	-1.3	-2.7	-5.3	-2.1	-2.6	5.0	7.4	10.1	14.9	18.9	21.1	-1.3
q/q	0.1	-4.2	-1.1	3.2	-0.4	3.3	1.1	5.9	3.9	6.9	3.0	-13.8

Source: NBP's calculations based on Eurostat, OECD and GUS data.

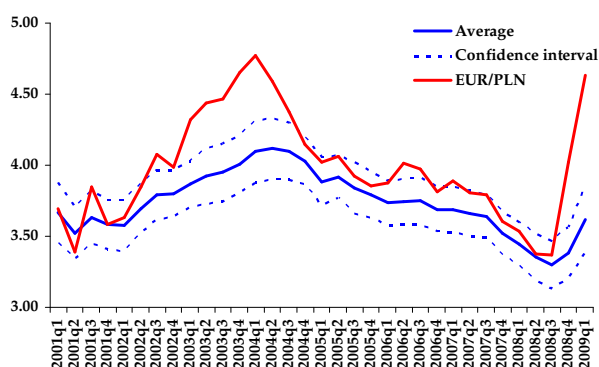
* Unit labour cost (ULC) index is calculated as the ratio of payroll growth to labour productivity growth, measured as output (volume) in manufacturing per person employed in this sector.

** Domestic PPI in manufacturing.

*** Estimates on the basis of monthly GUS data and ECB data. REER ULC – real effective exchange rate deflated with unit labour costs in manufacturing. Minus denotes depreciation.

Figure 2.14:

Threshold exchange rate of exports profitability (EUR/PLN) declared by enterprises.



Source: NBP data and estimates.

The threshold exchange rate - at which exports become unprofitable, is determined as the average of responses to a question (see below) included in the survey of NBP quick monitoring addressed at enterprises *Information Concerning the Condition of the Corporate Sector and the Economic Climate*. The survey covers non-financial enterprises representing all NACE (PKD) sections (except for Agriculture, Forestry and Fisheries) of both public and non-public sector, including small and medium-sized enterprises and large entities.

Survey question: "What is the threshold level of the foreign exchange rate at which exports will become (is) unprofitable (in zloty)?"

In comparison to the previous quarter, 2008 Q4 brought a significant improvement to the competitive position of enterprises producing for the domestic market and, to a slightly lesser extent, of Polish exporters, which was connected with a significant depreciation of the nominal zloty exchange rate (Table 2.2). Further weakening of the zloty in 2009 Q1 favoured the continuing improvement in competitiveness of Polish producers, which finds confirmation in NBP economic climate surveys (Figure 2.14).

Current account balance and foreign debt of Poland²⁴

In quarter-on-quarter terms, following a rise in 2008 Q4, the current account deficit in 2009 Q1 decreased significantly, which was the result of the strong decline in trade deficit and in income deficit (Figure 2.15). The current account deficit in relation to GDP (in terms of four quarters) fell down to 4.2% at the end of 2009 Q1 (compared with 5.5% at the end of 2008 Q4). In turn, the combined current and capital account deficit

²⁴Changes in the current account balance in 2009 Q1 were described on the basis of monthly NBP estimates for January–March 2009.

in relation to GDP decreased to 3.2% at the end of 2009 Q1 (from 4.4% at the end of 2008 Q4). Current account deficit was financed in 44% and the current and capital account deficit in 55.1% with the inflows of capital in the form of direct investments. Following a decline in the last two quarters of 2008, the surplus in the financial account edged up in 2009 Q1 in relation to 2008 Q4, which was the result of the reduction in the negative balance of portfolio investments, connected with a significantly smaller net outflows of non-resident investment into debt securities and with a slight increase in foreign direct investment.

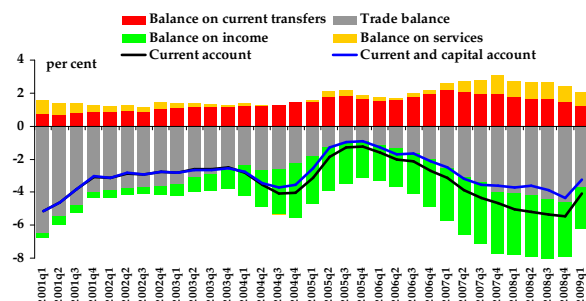
At the end of 2008 Q4 Poland's foreign debt amounted to approx. EUR 172 billion, which is 56% of GDP (compared to 48% at the end of 2007). Approx. 37% of this amount is due for repayment in 2009 (i.e. EUR 64 billion), of which over a half accounts for the debt of domestic entities versus their foreign shareholders, which could be expected to be fully rolled over in the future. The remaining part of the foreign debt to be repaid in 2009 accounted for approx. 42% of the total value of the currency reserves of the NBP as at the end of 2008, deposits of Polish banks and enterprises with foreign banks and trade loans granted by Polish enterprises, which indicates a low risk of problems with foreign debt servicing this year.

2.2 Output

The growth of gross value added in 2009 Q1 decreased significantly in relation to the preceding quarter and amounted to 1.2% y/y, which was slightly below the expectations of the previous *Report* (Figure 2.16).

The reduction of value added growth in 2009 Q1 was mostly driven by the increase in the negative contribution of industry with a concurrent lowering of the positive contributions of construction and market services. Services remained the main factor of gross value added growth. In the NBP's assessment in the next few quarters the growth of value added may stabilise at a low level, which finds support in the results of GUS business tendency surveys (Figure 2.17).

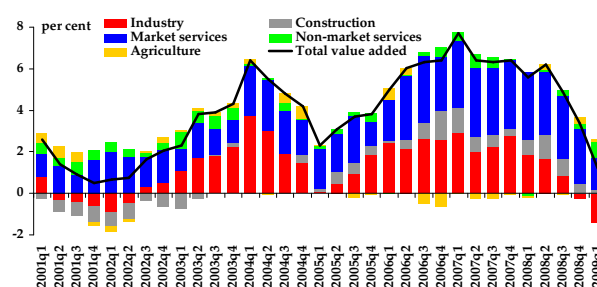
□ **Figure 2.15:**
Current account and its main components to GDP (4-quarter rolling window).



Source: NBP data.

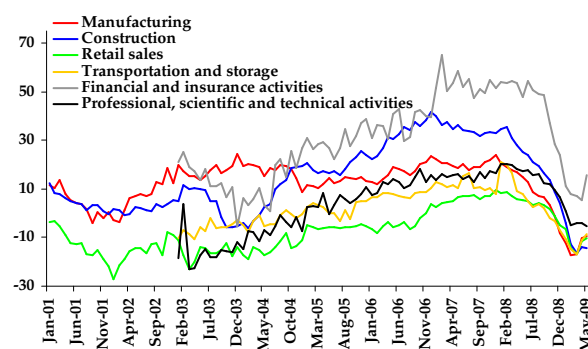
2009 Q1 – based on NBP monthly estimates of the current account for the period of January–March 2009.

□ **Figure 2.16:**
Sector contribution to annual gross value added growth.



Source: NBP calculations on the basis of GUS data.

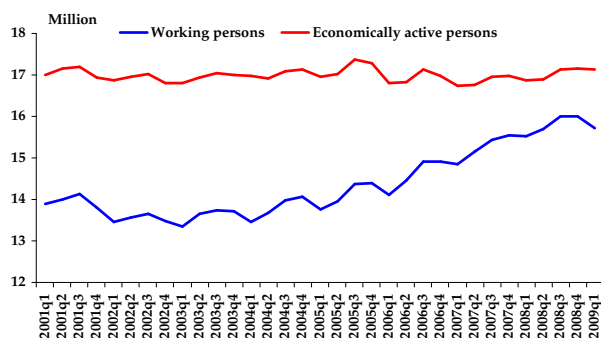
□ **Figure 2.17:**
Indicators of future economic activity in selected sections.



Source: GUS business tendency survey.

□ **Figure 2.18:**

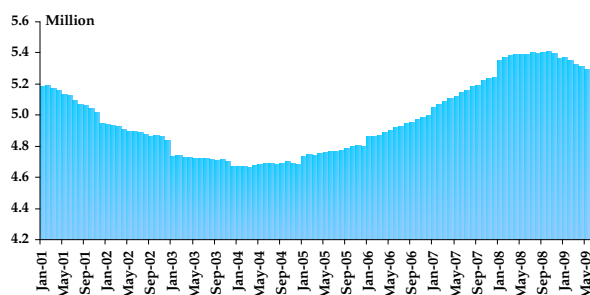
Working persons and the economically active in the economy (according to BAEL).



Source: GUS data.

□ **Figure 2.19:**

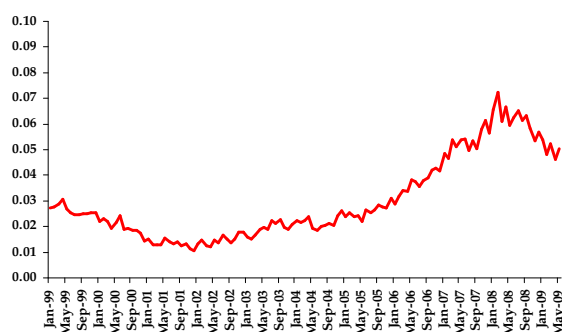
Employment in the enterprise sector.



Source: GUS data.

□ **Figure 2.20:**

Vacancy-Unemployment Ratio



Source: GUS data (seasonally adjusted), NBP calculations. Labour Market Tightness Index: the number of job offers (vacancies) per unemployed.

This ratio is directly proportional to the probability of an unemployed person finding a job (the more vacancies per unemployed the more likely he/she is to find a job) and inversely proportional to the probability of filling a vacant post by an employer (the more job offers in relation to unemployed persons the less likely it is to fill in the vacancy). This measure also reflects the relative power of employees and employers in wage negotiations.

2.3 Labour market

2.3.1 Employment and unemployment

In 2009 Q1 demand for labour weakened significantly. Although the number of working persons according to BAEL (Labour Force Survey) continued to grow in annual terms, the growth declined from 3.0% y/y in 2008Q4 to 1.3% y/y, whereas in quarterly terms (seasonally adjusted) it fell down to zero (Figure 2.18 and Table 2.3). While the number of persons working on permanent contracts rose by 2.6% y/y, the one of working on fixed-term contracts declined (by 1.6% y/y).

Since the end 2008 the employment in the corporate sector dropped by 61 thousand persons and in May 2009 it was lower by 1.7% y/y than in the corresponding period of the previous year (Figure 2.19). On the other hand, the number of persons working in the economy (in entities employing more than 9 employees) declined by 1.0% y/y in 2009 Q1 (while in 2008 Q4 it grew by 1.8% y/y).

The fall in demand for labour was also reflected in labour office statistics. Whereas the number of job offers reported by employers dropped by 24% y/y in the period January–April 2009, the labour offices registered about 250 thousand unemployed persons more than in the corresponding period of 2008. Hence, the number of job offers per one registered unemployed person declined strongly, which reflects a substantial easing in labour market tensions (Figure 2.20).

Weakened demand for labour was also reflected in the reduction in planned recruitment and disappearance of difficulties in hiring reported by the employers²⁵.

Despite negative changes in the labour market in 2009 Q1 labour supply continued to rise. The

²⁵ According to the results of NBP business tendency survey, only 4.9% of enterprises declared in 2009 Q1 their plan to employ additional employees in the following quarter (compared with 18.3% in 2008 Q1). While GUS business tendency surveys indicate that the shortage of qualified employees was declared in May 2009 by 20.0% of employers in construction (compared with 51.6% in May 2008) and in manufacturing – respectively 9.0% in 2008 Q2 (compared with 27.2% a year before).

Table 2.3: Working population according to BAEL in selected sections.

	Working persons in 2009q1		Growth in 2008q4		Growth in 2009q1		Growth in 2008q4	Growth in 2009q1
	thousands	structure	y/y thousands	y/y percent	y/y thousands	y/y percent	q/q seasonally adjusted (percent)	q/q seasonally adjusted (percent)
Total	15,714	100.0	467	3.0	199	1.3	0.6	0.0
Total excluding private agriculture	13,770	87.6	466	3.4	231	1.7	0.6	-0.1
Place of residence								
urban areas	9,721	61.9	312	3.3	74	0.8	0.5	-0.8
rural areas	5,993	38.1	155	2.6	125	2.1	0.8	0.7
Economic sector								
agriculture	2,080	13.2	-35	-1.6	-57	-2.7	-0.6	-0.8
industry	4,915	31.3	270	5.6	-21	-0.4	0.6	0.3
services	8,716	55.5	224	2.6	277	3.3	1.0	0.7
Ownership sector								
public	4,294	27.3	9	0.2	29	0.7	0.2	-0.5
private	11,421	72.7	458	4.1	171	1.5	1.1	-0.1
Employment status								
hired employees	12,119	77.1	446	3.7	177	1.5	0.4	0.0
employers and self-employed	2,994	19.1	-28	-1.0	24	0.8	-0.2	0.2
contributing family workers	601	3.8	49	8.2	-3	-0.5	0.7	0.0
Type of job contract								
fixed-term contract	3,111	25.7	-52	-1.5	-49	-1.6	-0.3	-0.9
permanent contract	9,008	74.3	498	5.8	226	2.6	1.1	-0.4

Seasonally adjusted growth was computed based on data seasonally adjusted with TRAMO/SEATS on a sample beginning in 1995 Q1. Data on working persons in the public sector were seasonally adjusted on a sample beginning in 2002 Q1.

Source: GUS data, NBP calculations.

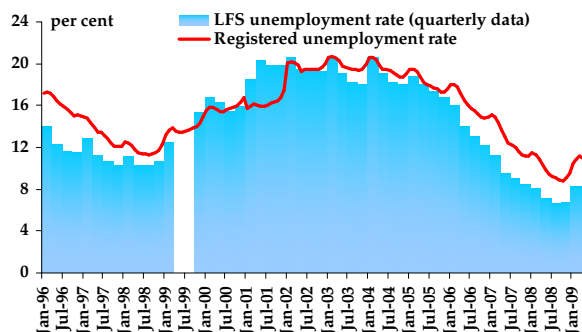
number of economically active persons rose by 1.5% y/y to 17,128 thousand (following a growth of 1.0% y/y in 2008 Q4.). The total labour participation ratio rose as well (in 2009 Q1 by 0.8 percentage points y/y, to 54.5%) with especially high increase recorded in the pre-retirement population (aged 45-59/64)²⁶.

A considerable decline in demand for labour accompanied by an increase in labour supply translated into a rise in the unemployment rate, both BAEL-based and registered unemployment (Fig-

²⁶The structure of economically inactive persons by main sources of income suggests that the record-high increase in the number of pensioners in 2008 and at the beginning of 2009 primarily reflected taking retirement by the economically inactive population, who lived on other benefits (mainly disability pensions).

□ **Figure 2.21:**

Unemployment rate registered by labour offices and unemployment rate according to BAEL.



Source: GUS data.

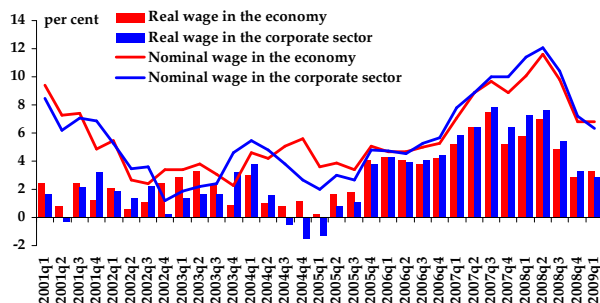
Data till 2002 are adjusted for the results of the 2002 National Census.

The BAEL survey was not conducted in 1999 Q2 nor in Q3.

There are two reasons for the differences between the unemployment rate according to BAEL and the registered unemployment rate: (1) Different definition of unemployed person. (2) Different definition of population to which the number of the unemployed is referred.

□ **Figure 2.22:**

Annual growth of wages in the economy and in the corporate sector (nominal and real).



Source: GUS data, NBP calculations.

ure 2.21). The unemployment rate according to BAEL rose to 8.3% in 2009 Q1 (compared with 6.7% in 2008 Q4), whereas after seasonal adjustment it was by 0.4 percentage points higher than in 2008 Q4. The registered unemployment rate in April 2009 stood at 11.0% (compared with 9.5% in December 2008), and the number of registered unemployed persons rose to 1.72 million people. According to the preliminary data for May 2009²⁷ the registered unemployment rate fell to 10.8%, which after seasonal adjustment points to the further rise in unemployment rate, albeit smaller than in the first months of 2009.

The NBP business tendency survey²⁸ labour market situation will deteriorate over the coming quarters. In 2009 Q2 employment forecasts again deteriorated for most of the surveyed industries. A decline in employment is anticipated in all surveyed sectors – ie. industry, construction and services.

2.3.2 Wages and productivity

A significant decline in demand for labour translates into developments of wages, however, due to some nominal rigidities the growth of wages responds to changes in labour demand with some lag. Following the decline in 2008 Q3 and Q4, the growth of nominal wages in the economy in 2009 Q1 remained at the level recorded in the previous quarter and stood at 6.8% y/y. A slowdown in the decline of growth of wages in the economy reflected mainly pay rises in the public sector and the growth in wages in micro-enterprises being higher than in 2008 Q4. On the other hand, the wage growth in the corporate sector was decreasing relatively fast (to 4.8% y/y and 3.8% y/y in April and May 2009 as compared with 6.3% y/y in 2009 Q1 and 7.2% y/y in 2008 Q4; Figure 2.22). In the period February–May 2009 the growth of real wages in the corporate sector (CPI-deflated) amounted to 1.2% y/y as compared with 3.6% y/y in the period November 2008–January 2009.

²⁷The estimates of the Ministry of Labour and Social Policy.

²⁸See: *The condition of the non-financial enterprises in 2009 Q1 and expectations for 2009 Q2*, the NBP.

A relatively slow adjustment of the labour market situation to the strong weakening of activity in the Polish economy was reflected in – characteristic for this stage of business cycle – labour productivity drop and an increase in growth of unit labour costs. In 2009 Q1 labour productivity dropped by 0.5% y/y²⁹(compared with a decline of 0.1% y/y in 2008 Q4), which was due to the significant slowdown in GDP growth accompanied by a smaller decline in the growth of the number of working persons. As a result of the decrease in labour productivity and the stabilization of wage growth, the growth of unit labour costs in the economy rose from 6.9% y/y in 2008 Q4 to 7.3% y/y in 2009 Q1³⁰(Figure 2.23). A relatively high growth in unit labour costs prevails also in the industrial enterprises³¹, which is primarily due to output decline (Figure 2.24).

The NBP business tendency survey³² indicate substantial decline in wage pressure in the non-financial enterprises. The share of enterprises which anticipate pay rises in 2009 Q2 significantly declined, and was lower than those which plan wage reductions³³. A decrease also occurred in the average amount of the contemplated pay increases³⁴.

In turn, in GUS consumer tendency surveys the percentage of people concerned about growing unemployment – despite a certain reduction – remains high, which will dampen the wage pressure on the part of employees. Growth in wages

²⁹Labour productivity in the economy: GDP in constant average annual prices of the previous year per one person working in the economy according to BAEL.

³⁰Unit labour costs in the economy: nominal aggregate wages in the economy (average nominal wage in the economy multiplied by the number of people working in the economy according to the BAEL) in relation to GDP (in constant average annual prices of the previous year).

³¹Unit labour costs in industry: the ratio of the average gross nominal wage in industry to the labour productivity in industry (labour productivity in industry: the ratio of industrial output in constant prices to the average employment in the sector).

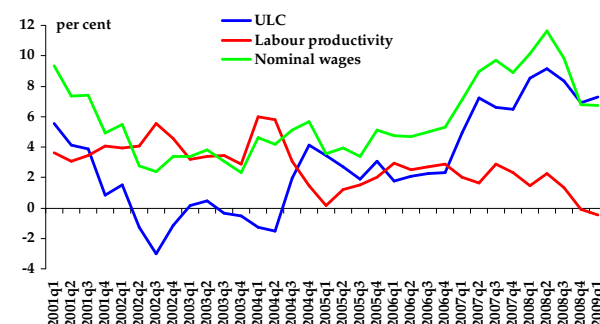
³²See: *The condition of the non-financial enterprises in 2009 Q1 and expectations for 2009 Q2*, the NBP.

³³8.2% enterprises anticipate pay rises in 2009 Q2 as compared with 24.8% in 2009 Q1. At the same time, 9.5% of the surveyed entities declared to reduce wages in 2009 Q2.

³⁴The average amount of pay increase in the group of enterprises planning pay rises stood at 5.5% as compared with 5.8% in 2009 Q1.

□ **Figure 2.23:**

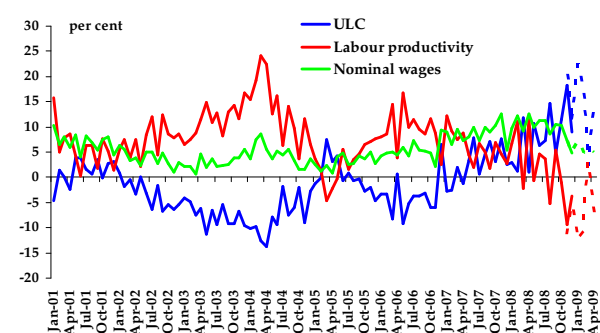
Annual growth of labour productivity, wages and unit labour costs (ULC) in the economy.



Source: GUS data, NBP calculations.

□ **Figure 2.24:**

Annual growth of labour productivity, wages and unit labour costs (ULC) in industry.



Source: GUS data, NBP calculations.

Since January, 1 2009 GUS has employed new classification of activities (PKD 2007), which results in growth rates of wage and employment in industry in the period starting in November 2008 not being fully comparable with the data from preceding periods. In the chart the growth rates calculated on the basis of PKD 2007 are marked with dashed line.

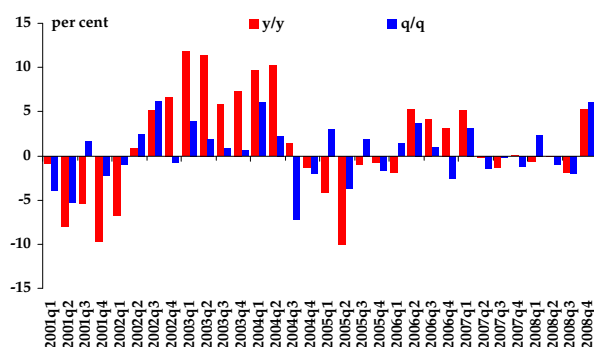
in the economy, on the other hand, will be supported by pay rises scheduled for 2009 in the public sector, primarily in education.

2.4 Other costs and prices

2.4.1 External prices

Figure 2.25:

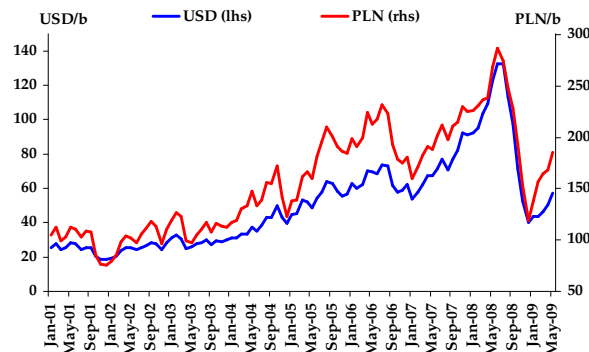
Changes in import prices expressed in PLN.



Source: GUS data.

Figure 2.26:

Brent crude oil prices in USD and PLN.



Source: The US Department of Energy data, NBP calculations.

In 2008 Q4, import prices expressed in PLN rose strongly further (by 5.3% y/y compared with 6.0% y/y in 2008 Q3) reflecting the strong depreciation of the zloty nominal exchange rate. However, the decline in commodity prices, including prices of oil on global markets, observed in the second half of 2008 had mitigated this rise³⁵. At the same time, as a result of further drop in export prices (albeit smaller than in the preceding quarters) the *terms of trade* continued to deteriorate.

Following a strong decline in 2008 Q4, at the beginning of 2009 oil prices were relatively stable due to further drop in demand for fuels accompanied by ongoing output reduction by the OPEC countries. However, as from mid-March 2009 oil prices have been on the increase, amidst better sentiments in the financial markets and economic recovery expected to occur in the US economy already in 2009 (as a result of improvement of some indicators on the real economy). In June Brent crude oil price again exceeded 70 USD/b – the highest level since October 2008. On the other hand, the demand for oil in the global economy continued to decline rapidly, even though some symptoms indicate that world recession decelerates³⁶. Both developed and developing countries reported stronger than expected drop in the demand for oil. Due to the significant decline in the demand, the inventories rose rapidly, even though oil supply was reduced.

³⁵In 2008 Q4 oil import prices expressed in PLN fell by 7.1% y/y (compared with an increase of 34.4% y/y in 2008 Q3). On the other hand, import prices of other goods (excluding oil) expressed in PLN rose by 6.1% y/y over this period (compared with a decline of 4.4% y/y in 2008 Q3).

³⁶As estimated by the US Department of Energy in June 2009, the demand for oil in 2009 Q1 dropped by nearly 3.4 million b/d (compared with an expected decline of 1.3 million b/d as of February 2009).

As a result of stimulus packages implemented in the economies that are the biggest consumers of fuels (especially the US and China), the global demand for fuels may increase in 2009 Q4³⁷, which may be conducive to further increase in oil prices. On the other hand, high level of inventories and significant excess capacity in the OPEC countries (four times higher than the average level of the preceding four years) may have a dampening impact on the growth of oil prices.

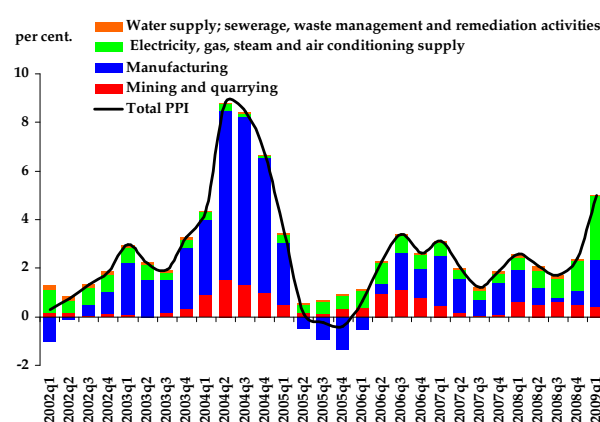
2.4.2 Producer prices³⁸

In 2009 Q1 PPI rose and reached 5.0% y/y (Figure 2.27). Due to the depreciation of zloty exchange rate and the ensuing higher growth of producer prices of exported goods, the PPI in the domestic market ranged below the total PPI (at 4.3% y/y in 2009 Q1). The highest growth of producer prices was recorded in the section *electricity, gas, steam and air conditioning supply*, which also had the greatest contribution to the total PPI growth. The latter was additionally strongly supported by the rising growth of producer prices in *manufacturing*. The growth of producer prices in *mining and quarrying* remained high, though its contribution to PPI growth was reduced. Looking at monthly data (Figure 2.28) it should be emphasised that since February 2009 both total PPI and PPI in the domestic market have been declining.

³⁷The US Department of Energy in June expected that the global demand for oil would decline by 1.8 million b/d in 2009 (compared with a decline of 1.2 million b/d expected in February 2009). At the same time, demand is expected to grow by 0.7 million b/d in 2009 Q4.

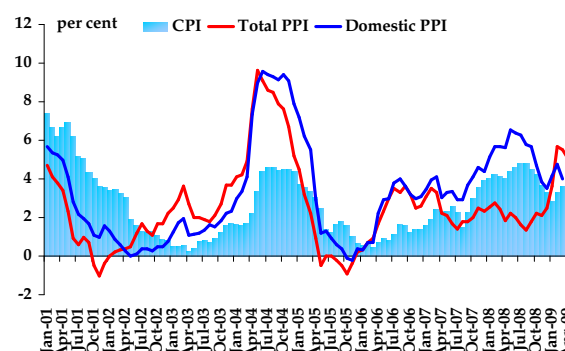
³⁸Total producer prices in industry and in four main sections (i.e. *mining and quarrying*, *manufacturing*, *electricity, gas, steam and air conditioning supply* and *water supply, sewerage, waste management and remediation activities*) referring to a specific month are published in the next calendar month, while the prices in particular divisions of *manufacturing* and the producer prices in the domestic market are available with a longer lag (of about two months).

Figure 2.27:
Composition of PPI total annual growth.



Source: GUS data.

Figure 2.28:
CPI and PPI changes (y/y).



Source: GUS data.

Since January 2009 the Central Statistical Office (GUS) has published PPI data using PKD 2007 classification (instead of the previously used PKD 2004 classification).

2.5 Financial markets³⁹

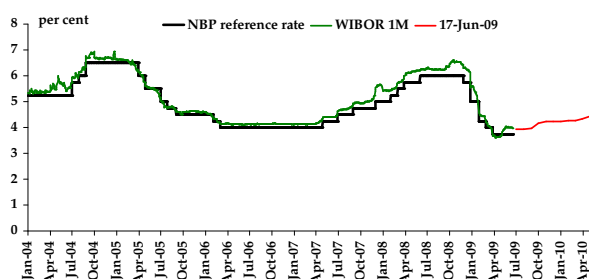
2.5.1 Asset prices and interest rates

Short-term interest rates

Between February and May 2009, the Monetary Policy Council reduced the reference rate by 50 basis points to 3.75%. The interest rate cuts were effected in February and March 2009 (by 25 basis points in each month). The February cut was smaller than expected by most analysts who anticipated a 50 basis point decrease. On the other hand, the reference-rate decisions made in March, April and May were in line with analysts' expectations. At the May meeting the MPC decided to reduce the reserve requirement by 0.5 percentage points from 3.5% to 3.0%. The decision applies to the required reserves to be held at the NBP starting from 30 June 2009.

Initially interbank rates decreased, following interest rate cuts in February and March 2009. Between the second week of February and the second week of April 2009⁴⁰ average WIBOR 3M declined from 4.71% to 4.14%. However, it started rising subsequently and stood at 4.61–4.64% between the end of May and 17 June. It should be emphasized that WIBOR 3M and longer rates started rising at a time when the shortest ones (including POLONIA) continued to fall in line with liquidity conditions then prevailing in the banking sector. Furthermore, WIBOR 3M rose more markedly than it would follow from an adjustment of market participants' expectations of future development of the NBP interest rates⁴¹. It is noteworthy that the risk premium in the major markets declined in this period. WIBOR rates, similarly to other interbank market rates in the world (e.g. LIBOR) are not transactional but informative rates derived from quotations of a group of banks. In other words, they do not necessarily reflect the level of actual market rates.

□ **Figure 2.29:**
NBP reference rate, 1-month WIBOR and 1-month interest rate implied by FRAs.



Source: Reuters data, NBP calculations.

³⁹The cut-off date for the data presented in this section is 17 June 2009.

⁴⁰That is from 6 till 10 April 2009.

⁴¹Longer term rates depend, among others, on the anticipated path of the NBP interest rates and on the risk premium. It should be emphasized that the longer the maturity of an instrument, the more factors determine its value.

Consequently, WIBOR 3M, a common reference rate for PLN-denominated loans, may be elevated relatively to the actual cost of money in the interbank market. This may be due to banks' attempts to increase their revenues from loans in a situation of high costs of attracting new deposits.

As the NBP interest rates were kept unchanged in April and May, the expectations concerning the future value of the reference rate changed. According to the Reuters survey of 9 June 2009 36% of analysts expected the NBP policy rate to decline to 3.50% by December 2009, 32% saw it at 3.25%, and another 32% – at 3.00%. Since the publication of the previous *Report* analysts' expectations have changed significantly – currently the majority expects the NBP rates to remain above 3.00%, whereas in the survey of 10 February 2009 75% of respondents anticipated rates of between 2.50 and 3.00%⁴².

One-month WIBOR FRA rates (including the risk premium) could point to expectations of the NBP rates at 3.75–4.00% over the next three months and 4.25% over a one-year horizon (Figure 2.29). It should be emphasized, however, that the quotations of these contracts may still be distorted by a heightened risk premium included in the WIBOR rate. After a sudden increase in February, following a rise in risk aversion towards developing countries and significant exchange rate fluctuations, FRA quotations gradually declined, in line with market expectations of the future path of the NBP interest rates.

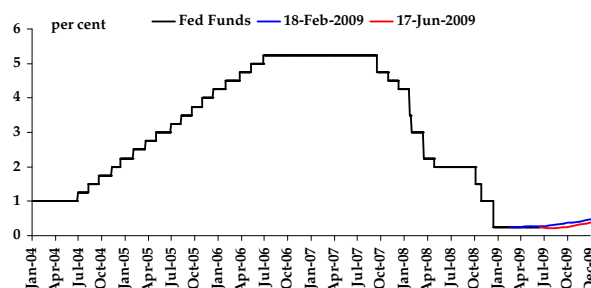
Since the publication of the previous *Report* the Fed has kept its key interest rate unchanged at 0.00–0.25%. In line with forward market quotations it is currently expected that the federal funds rate will remain unchanged over the horizon of the next six months (Figure 2.30).

Since the end of February 2009 the European Central Bank (ECB) has cut its key interest rate by 100 basis points to 1.00%. The current forward market quotations suggest expectations of a further interest-rate decline in the euro area to 0.75% and of the rate remaining at this level

⁴²In the survey of 10 February 2009 45% of analysts anticipated the NBP policy rate in December 2009 to stand at 3.00%, 32% indicated the level of 2.50–2.75%, and 23% – of 3.25–3.50%.

□ **Figure 2.30:**

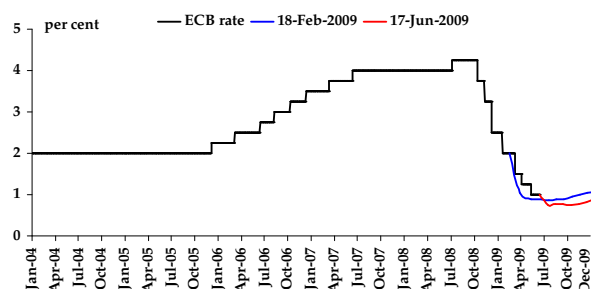
Monetary policy expectations in the United States – actual developments and expected Fed Funds rate.



Source: Bloomberg data, NBP calculations.

□ **Figure 2.31:**

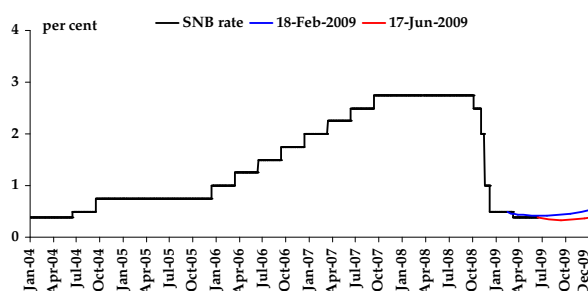
Monetary policy expectations in the euro area – actual developments and expected ECB interest rate.



Source: Bloomberg data, NBP calculations.

□ **Figure 2.32:**

Monetary policy expectations in Switzerland – actual developments and expected SNB rate.



Source: Bloomberg data, NBP calculations.

till the end of 2009 (Figure 2.31). Expectations of a further reduction of the ECB reference rate are driven by a deeper-than-expected decline in economic activity in the euro area.

Since the publication of the previous *Report* the Swiss National Bank (SNB) has lowered the target range for the three-month LIBOR by 25 basis points, narrowing it to 0.00–0.75%, and pledged to bring the LIBOR down to the level of 0.25%. According to the SNB the quickly deteriorating economic situation in the external environment of Switzerland will contribute to a deeper than previously expected deterioration of domestic economic conditions. Current market expectations point to no change in the SNB interest rate over the horizon of the next six months (Figure 2.32).

In addition to the foregoing interest-rate decisions the Fed, the ECB and the SNB have taken unconventional measures consisting in these banks' direct interventions in the credit markets (see: the Box below).

Unconventional monetary policy measures of major central banks

Under normal conditions when interest rates are above zero and the financial system works effectively, central banks conduct monetary policy by providing liquidity to the market or absorbing liquidity from the market through repo/reverse repo transactions or issuance of money market bills. In this way, monetary authorities control the level of short-term interest rates, which, in turn affect interest rates of corporate and household deposits and loans, and – through expectations and arbitrage – translate into interest rates of longer-term deposits and loans and yields of many assets in the economy.

In their attempt to counteract the consequences of the current economic crisis, major central banks have cut their nominal interest rates to levels close to zero thus driving the decline in short-term interest rates in the interbank market. Yet, the scale of the recession seemed to justify further easing of monetary policy, especially as the crisis in the financial market has considerably limited the transmission of monetary impulses to the real economy. In this situation some central banks decided to intervene directly in the credit markets – a strategy referred to as quantitative easing or credit easing – which resulted in the change of the size and composition of their balance sheets as well as a rise in the monetary base¹.

Japan was the first country to adopt quantitative easing – in the years 2001–2006. The Bank of Japan switched from targeting the overnight interest rate to targeting the level of commercial banks' reserves. That level was then raised nine times in the whole period (from the original JPY 5 trillion to JPY 35 trillion). It seems that in the Japanese case, the impact of quantitative easing on credit expansion was rather limited. In spite of a considerable increase in the monetary base, corporate and household loans declined, while lending to the public sector increased (Figure R.2.1). Hence, quantitative easing contributed mainly to lowering the yield curve and, consequently, reducing the cost of government borrowing.

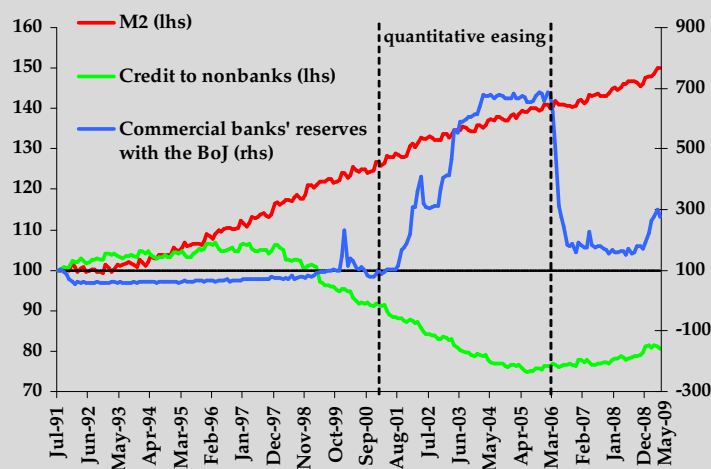


Figure R.2.1: M2 monetary aggregate, credit extended to the non-financial sector and reserves of commercial banks in the Bank of Japan, July 1991=100.

Source: BoJ data, NBP calculations.

The box outlines the objectives, mechanisms and the potential impact of quantitative easing on the economy.

Although there is as yet no consensus in the economic literature regarding the precise distinction between the two terms, it has usually been assumed that quantitative easing involves outright purchases by the central bank of financial assets, mostly Treasury securities, through the creation of central-bank reserves. In the case of credit easing, the central bank purchases private sector securities, in an effort to increase their liquidity and decrease risk premia which is supposed to facilitate corporations and households to raise funding. Contrary to quantitative easing, asset purchase under credit easing may be sterilised, i.e. it does not have to increase the central bank's balance or the monetary base. At present, the major central banks combine both strategies, i.e. make unsterilised purchases of securities with a view to changing their relative quantities and market prices and increasing the liquidity of institutions holding such securities. Three main channels of the impact of those measures on the economy may be distinguished.

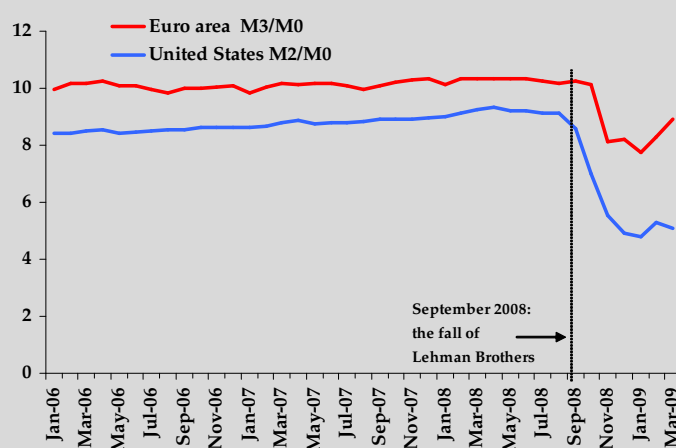


Figure R.2.2: The ratio of broad money to the monetary base in the United States and the euro area.

Source: Reuters, Fed, ECB data, NBP calculations.

First, the purchase of assets directly from commercial banks raises their reserves at the central bank. This may encourage banks to transform the surplus liquidity into loans, i.e. transfer the base

money created by the central bank outside the financial sector. However, the decision to grant a loan depends primarily on the creditworthiness of potential borrowers and the non-banking sector's demand for credit, as well as on the bank's capital situation and the quality of credit portfolio. The data on monetary aggregates in the United States and the euro area indicates that a considerable increase of the monetary base, observed since September 2008, did not lead to a marked rise in the broader monetary aggregate, even though it could counteract its fall. The limited impact of the growth in monetary base on the broader monetary aggregates is reflected in the decline of the money multiplier² observed in that period (Figure R.2.2).

Second, increased demand for specific securities boosts their price (reduces their yield) and improves their liquidity. This is a direct benefit for the issuers of the assets purchased by the central bank and for those who hold them in their portfolios, but potentially indirectly also for a wider group of borrowers. For example, if the central bank purchases government securities, this lowers the yield curve and may not only result in reducing the cost of servicing the public debt but also in lowering interest rates on corporate and household loans. Yet, the scale of transmission of the declining bond yields to the costs of non-banking sector loans depends on the features of the particular credit markets.

Third, the purchase of assets by the central bank may affect inflation expectations and expectations about the future interest rate path. This is of particular importance in the economies where nominal interest rates are close to zero, and economic agents expect inflation to run below the central bank's target for a protracted period of time. In this situation, a considerable scale of asset purchases adds credibility to the central bank's commitment to keep interest rates at a low level for a longer period of time and to bring inflation back to the target, thus leading to an increase in inflation expectations and a decrease in real interest rates. However, it should be emphasized that an increase in inflation expectations triggered by quantitative easing or credit easing may, at the same time, raise long-term nominal interest rates limiting the potential demand effect.

Listed below are unconventional monetary policy measures taken by selected central banks which had already reduced their interest rates to low levels.

United States

In order to promote economic growth and to improve the functioning of the financial market by expanding the size of the central bank's balance sheet, the Fed decided in November 2008 to purchase outright USD 100 billion worth of federal agency debt securities and USD 500 billion worth of mortgage-backed securities. In March 2009 the Fed increased the purchases to USD 200 billion and USD 1.25 trillion respectively, and decided to purchase additionally USD 300 billion worth of long-term Treasury bonds. The aim of this policy is to lower the rate on mortgage loans and the yields on Treasury securities. These measures were conducive towards increasing the central's bank balance sheet and the monetary base.

In the minutes of the Federal Open Market Committee's (FOMC) April meeting, FOMC members assessed that due to a large scale of financial asset purchases, the Fed had a positive impact on the outlook for economic growth in the United States. Yet, despite signs of improvement in the money market and a reduced risk premium, the availability of loans for households and corporations remained low. FOMC members also declared that before taking additional measures it was necessary to assess the impact of measures already implemented on the country's economic situation.

In his public speeches the Fed's Chairman referred to the so-called exit strategy aimed at enabling the central bank to lower the monetary base and reduce the size of its balance sheet. Declarations concerning the strategy assume that the Fed's balance sheet will shrink automatically along with an improvement in the credit market due to the Fed programmes' becoming less attractive and their limited duration. The reserve surplus may be absorbed from the market by conducting reverse repo transactions or selling bonds issued by US Treasury and depositing the funds raised in the central bank's account. In addition, while raising the interest rate on the commercial banks' reserves held at the central bank, the Fed will set the minimum level of market interest rates. This

will make it possible to increase interest rates prior to reducing the central bank's balance sheet to the level observed before the financial crisis.

Initially, after the Fed's decision to purchase assets was made public, yields on Treasury bonds declined. Since April 2009, however, yields began to rise, which could be connected with expectations of an improvement in economic conditions, concerns about the fiscal situation in the US and the rise in inflation expectations (Figure R.2.3, left panel). After the announcement of the programme to buy mortgage-backed securities and GSE debt securities interest on new mortgage loans declined as well (Figure R.2.3, right panel). However, this tendency reversed in April 2009, accompanying a rise in Treasury-bond yields which became an attractive alternative to granting new mortgage loans, thus raising the cost of the latter.

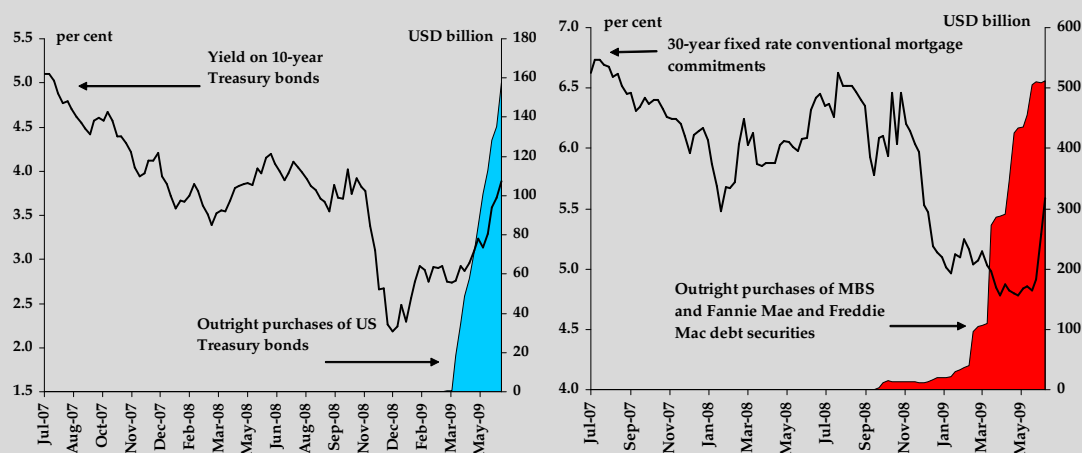


Figure R.2.3: Purchase of Treasury bonds and their yields (left panel) and purchase of mortgage-backed securities and interest of mortgage loans in the United States (right panel).

Source: Fed data.

Great Britain

On 5 March 2009 the Monetary Policy Committee (MPC) announced the launch of a scheme to purchase GBP 125 billion worth of assets financed through the creation of central bank's reserves. The objective of quantitative easing in Great Britain is to increase the money supply, improve liquidity in the credit markets and, as a result, to stimulate aggregate demand and facilitate the meeting of the inflation target. Under the Asset Purchase Facility both UK Treasury bonds (with maturities of 5 to 25 years) and private-sector assets are purchased. Measures used to lower the yields would, most probably, allow the Bank of England to improve situation in the financial market by reducing the cost of financing and increasing the value of assets held by economic agents.

The Bank of England closely monitors the effects of quantitative easing. In April 2009 the Asset Purchase Facility Quarterly Report 2009 Q1 was published in which the current outcome of the Bank's unconventional measures was presented. After the announcement of the programme, yields on UK Treasury bonds (gilts) initially decreased but they have risen since mid-March, which could be due to expectations of an increased supply of gilts and higher inflation expectations (Figure R.2.4). The Bank of England emphasizes that a comprehensive assessment of the programme's effects will require more time and admits that it will be difficult due to the wide spectrum of tools employed by the government as well as the dynamic changes in the financial markets.

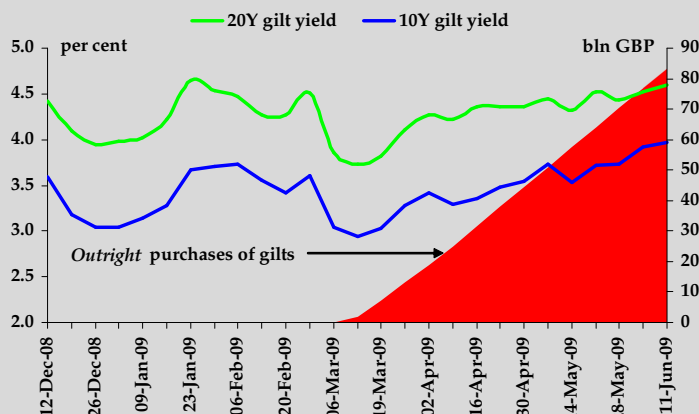


Figure R.2.4: Purchase of gilts and their yields in Great Britain.
Source: EcoWin data.

In May 2009 the Bank of England announced that it would take appropriate measures to contain the risk of inflation exceeding the inflation target as a result of quantitative easing. At the same time, the Bank's Governor emphasized that the exit strategy would combine increases of the central bank's interest rate and the sale of some of the purchased assets.

Euro area

In June 2009 the ECB presented a programme to purchase EUR 60 billion worth of euro-denominated covered bonds issued in the euro area³. In the ECB's opinion the functioning of this segment of the euro-area financial market has been significantly distorted in the current crisis. The main aim of the covered bonds purchase (used by commercial banks mainly to finance mortgage loans) is to improve the conditions of financial institutions' functioning in the money market, to encourage banks to increase lending and to improve liquidity in selected segments of the financial market. The purchase program for euro-denominated covered bonds will start in July 2009 and will be conducted both in the primary and in the secondary market.

Switzerland

On 12 March 2009 the Swiss National Bank announced a plan to purchase corporate bonds denominated in Swiss francs. According to statements made by the Bank's representatives at the press conference of 18 June 2009, the Bank has hitherto purchased CHF 2.5 billion worth of covered bonds and CHF 0.3 billion worth of corporate bonds. In the Bank's opinion the measures taken have caused a decline in the risk premium of corporate bonds. At the same time, the Bank's representatives assured that further purchases would be made, although no indication of their scale was given.

¹ Since the beginning of the financial crisis central banks have been using a wide array of unconventional monetary policy tools aimed to ensure liquidity in the financial markets and to restore the proper functioning of the monetary transmission mechanism. Yet, not all of them may be classified as quantitative easing or credit easing tools (e.g.: the extension of maturity, the widening of collateral accepted for liquidity-providing transactions as well as changes in the principles of functioning of the so-called standing facilities and open market operations). Their aims are complementary to quantitative/credit easing measures taken by central banks but they are not discussed in this box.

² The money multiplier illustrates the extent to which additional liquidity provided by central banks to commercial banks translates into growth in credit to households and corporations.

³ The scale of the purchase programme for covered bonds presented by the ECB is small compared to programmes carried out in the United States and in Great Britain. Its size in relation to GDP in the euro area amounts to 0.6%. The values of the programmes conducted by the Fed and the Bank of England are 12% and 10% respectively.

Long-term interest rates and the equity market

Between March and June 2009 yields on US and euro area Treasury bonds have risen (Figure 2.33). This was primarily due to the decline in risk aversion in the global financial markets and in investors' lower demand for government securities issued by developed countries. Improved sentiment could be attributed to better-than-expected economic data in the US (a rise in consumer confidence and a fall in employment lower than in previous periods). Furthermore, the increase in T-bond yields resulted from an increase in the supply of these securities due to new issues.

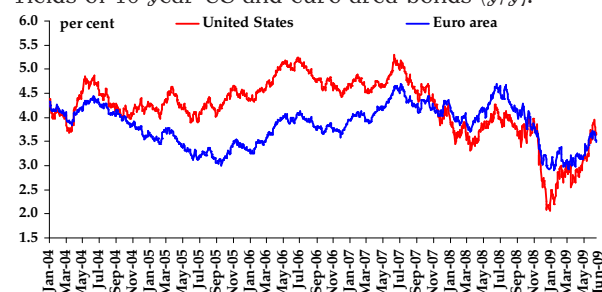
Since the publication of the previous *Report* yields on Polish bonds have changed to a small degree. In March and in the first half of April 2009 a temporary increase in bond-yield volatility could be observed. Between 18 February and 17 June 2009 yields on 2-year bonds decreased by 3 basis points, whereas yields on 5-year and 10-year bonds increased by 24 and 30 basis points respectively. Among the factors acting towards a decline in yields were foreign investors' improved sentiment towards the region (reflected in a marked fall in CDS rates), and zloty appreciation since mid-February this year. The factors conducive to yield increases included the uncertainty about the amendments to the State budget and about the possibility of financing the budget deficit amidst large-scale issues of government securities in the global markets, heightened inflation and the associated change in expectations concerning interest rates.

Having climbed to 349 basis points at the beginning of March 2009, on 17 June the spread between the Polish 10-year Treasury bond and the corresponding German bond narrowed to 268 basis points, the level of mid-February 2009⁴³.

While in the first half of January 2009 non-residents significantly increased their involvement in the debt market in Poland due to a temporary improvement in sentiment towards the Polish T-bond market, February and March saw an out-

Figure 2.33:

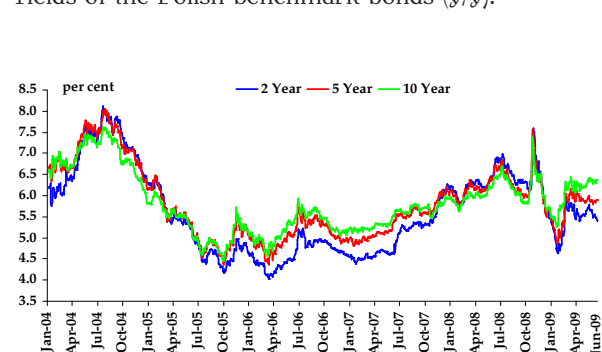
Yields of 10-year US and euro area bonds (y/y).



Source: Bloomberg data.

Figure 2.34:

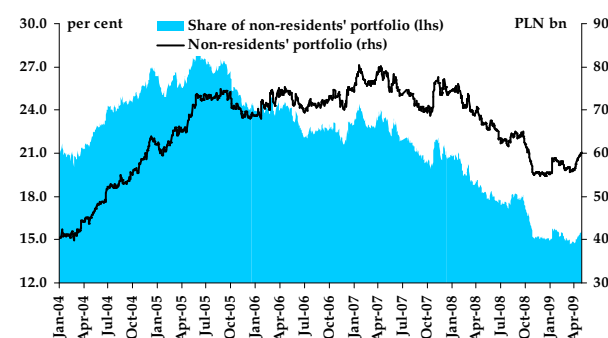
Yields of the Polish benchmark bonds (y/y).



Source: Reuters data.

Figure 2.35:

Non-residents' participation in the Polish Treasury bond market.

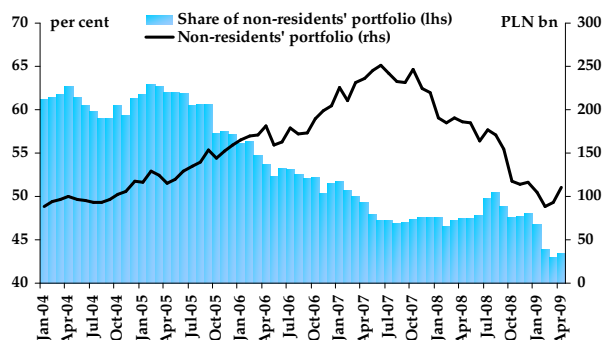


Source: National Depository for Securities (KDPW) data.

⁴³In the case of Czech and Hungarian bonds the spread stood at 209 and 672 basis points respectively.

□ **Figure 2.36:**

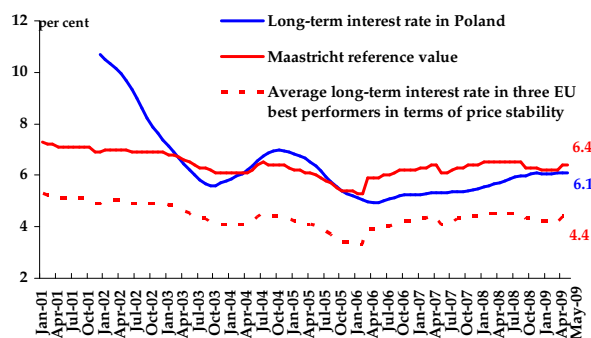
Non-residents' participation in the Polish equity market – on the basis of market value of stocks.



Source: NBP data.

□ **Figure 2.37:**

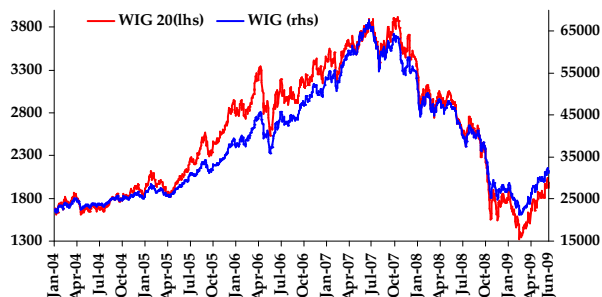
Average annual yield (12-month moving average) for long-term Treasury bonds in Poland versus the reference value for the Maastricht criterion.



Source: NBP estimates based on Eurostat data.

□ **Figure 2.38:**

WIG and WIG 20 stock exchange indices.



Source: Reuters data.

flow of foreign capital. In April foreign investors again increased their engagement in the Treasury bond market in Poland.

The yield on Polish long-term bonds in average annual terms, used to assess the compliance with the Maastricht interest-rate criterion, increased slowly in the last two years and approached the Maastricht reference value. In May 2009 the average annual yield on 10-year T-bonds in Poland stood at 6.1%, while the reference value amounted to 6.4% (Figure 2.37). Since the end of 2005 Poland has been complying with the long-term interest rate criterion.

The situation in the domestic equity market reflected the overall sentiment prevailing in international markets. January witnessed a steep decline in indexes while the balance of non-resident transactions was negative (Figure 2.38). The January decline continued into February when WIG20 sank to its lowest level since July 2003. At the same time, foreign investors considerably reduced their involvement in the Polish equity market, and the scale of capital outflow surpassed that reported in January (Figure 2.36). At the end of February, however, share-price declines, together with zloty depreciation, came to a halt, preceding similar developments in international markets where the stock-market sell-off ended only in March. Equity prices rebounded strongly in March and WIG20 rose by 10%. Despite this rise, foreign investors sold off Polish stocks, and the share of non-residents in the Polish equity market dropped on a similar scale as in January. The equity prices continued to rise in April, and WIG20 gained 11%. At the same time, non-residents increased their involvement in the Polish equity market for the first time since last December. In May share prices moved within a horizontal price range but in June the indexes soared again. In the period 18 February–17 June 2009 WIG20 rose by 34%.

Home prices

The situation in the housing market has remained broadly unchanged since the beginning of 2009. In 2009 Q1, similarly to the second half of 2008, asking prices of flats continued a moderate de-

Table 2.4: Change in the average price of a flat in selected local markets.

	Dec 2005	Dec 2006	Dec 2007	Dec 2008	Jun 2008	Sep 2008	Dec 2008	Mar 2009	Mar 2009
	y/y (per cent)	y/y (per cent)	y/y (per cent)	y/y (per cent)	q/q (per cent)	q/q (per cent)	q/q (per cent)	q/q (per cent)	average price (PLN/m ²)
Primary market – asking prices									
Poland (total)	7.9	51.5	21.1	-0.6	0.3	-1.6	-0.8	-1.1	7351
Most important housing markets in Poland^{†‡}	12.6	56.1	19.7	-2.4	0.9	-1.4	-2.7	-1.2	7863
Capitals of voivodships[‡]	15.0	45.2	22.7	-3.4	-0.6	-1.6	-1.9	-1.3	7525
Small and medium towns[‡]	7.0	10.4	95.7	-0.8	1.1	-8.4	7.1	-6.2	5920
Warsaw	12.9	54.3	13.1	3.6	3.2	-0.1	-2.2	-1.9	8726
Cracow	22.3	67.4	15.7	-10.4	-5.3	-1.0	-2.6	0.3	7398
Wroclaw	17.9	101.2	8.1	-2.1	2.6	-8.1	-1.1	5.5	7756
Gdansk	15.7	63.7	22.6	-5.7	-3.1	0.5	-2.6	-12.6	5655
Gdynia	8.5	46.0	48.5	-15.6	-8.7	30.3	-24.6	-17.2	5719
Poznan	3.0	18.9	119.2	-11.9	3.4	-15.4	6.1	-6.3	7307
Lodz	-5.3	67.4	37.8	-8.3	-6.5	-2.5	-4.1	-4.4	5323
Secondary market – asking prices									
Poland (total)	8.7	77.6	10.9	-9.2	-4.0	1.9	-4.4	-1.5	4975
Most important housing markets in Poland^{†‡}	-1.6	84.1	4.6	-0.4	1.0	-3.4	-0.6	1.1	7070
Capitals of voivodships[‡]	4.5	82.2	3.6	-3.9	-2.4	2.3	-2.4	3.2	5914
Small and medium towns[‡]	9.6	49.4	47.7	-4.1	-3.8	0.6	-2.7	-4.0	4352
Warsaw	15.1	55.6	14.5	5.3	-2.1	5.1	-2.1	-4.8	9343
Cracow	31.3	62.4	8.4	-10.8	4.0	-0.3	-3.7	-1.5	7146
Wroclaw	13.8	74.8	11.1	-4.5	0.0	-0.5	-4.8	-2.3	6727
Gdansk	18.9	82.5	24.2	-5.6	-1.6	-3.1	-2.6	-3.5	6435
Gdynia	17.7	77.8	10.4	3.3	0.5	3.4	-5.1	3.5	7152
Poznan	4.5	49.4	36.7	0.2	-2.1	-1.4	3.8	-5.8	6038
Lodz	3.9	74.5	47.3	-10.3	-4.6	-3.6	-3.1	-3.7	4249
Secondary market – sale prices[#]									
Most important housing markets in Poland[†]	n.a.	n.a.	31.3	-1.1	-1.8	-2.3	2.4	-4.0	6091
Warsaw	n.a.	n.a.	24.7	1.6	-1.9	-0.9	2.7	-5.8	7554
Cracow	n.a.	n.a.	12.0	-3.7	3.4	-9.1	3.0	-4.7	6149
Wroclaw	n.a.	n.a.	11.5	0.2	0.2	3.7	-2.3	-3.9	5691
Gdansk	n.a.	n.a.	49.0	-3.5	-0.1	-3.2	1.3	0.0	6039
Gdynia	n.a.	n.a.	31.3	0.5	-3.7	-4.7	7.1	-4.7	5916
Poznan	n.a.	n.a.	52.0	-8.3	-11.0	-1.3	2.3	3.5	5023
Lodz	n.a.	n.a.	62.9	0.5	-1.5	-2.6	3.5	-5.9	3591

[†]Warsaw, Cracow, Wroclaw, Gdansk, Gdynia, Poznan, Lodz. The selection was based, among other things, on the number of transactions, the housing construction volume and the potential for development.

[‡] Weighted average with the number of offers in the sample (cities' weights vary depending on the size of the sample).

[#] Index of sale prices, weighted-average method with *location* as the classification variable. The data presented in the previous *Report* concerning the average price of a flat in Warsaw and in the most important housing markets in Poland in Q4 2008 have been revised.

Source: NBP estimates based on the data from the *PONT Info Nieruchomości* asking price database, NBP sale price database and AMRON.

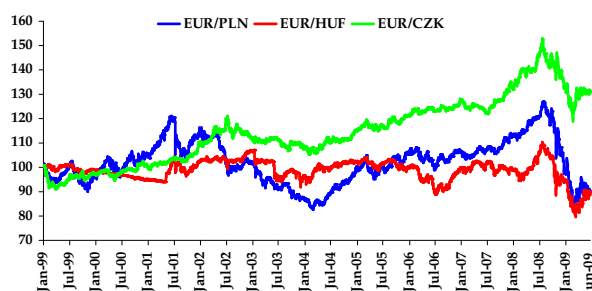
cline. Negative growth in annual terms could be observed both in the major housing markets as well as in small and medium-sized towns.

Prices fell both in the primary and in the secondary market, although in annual terms more rapidly in the segment of new flats offered by developers. In the secondary market the situation somehow stabilized, following steeper price declines at the turn of 2008 Q3 and Q4. According to data available for the seven biggest city markets, in 2009 Q1 also sale prices in the secondary market continued to decline at an average rate surpassing that of 2008 Q4.

In line with earlier forecasts, in 2009 Q1 the main property markets saw a deepening imbalance between the demand and the rising supply of new flats. In the context of restricted availability of housing loans, buyers' expectations of a further fall in flat prices, as well as deteriorating economic outlook (forecasts of slower economic growth, declining wage growth in the corporate sector and rising unemployment), a slight decline in flat prices was not enough to significantly stimulate the growth in demand. As a result, according to market data, the sales of flats in 2009 Q1 remained markedly below the level recorded in the previous year, which coupled with a rising supply led to a growing number of unsold flats. Combined with flats bought for speculation purposes and then put up for sale the excess supply will bring further downward pressure on flat prices.

2.5.2 Exchange rate

Figure 2.39:
Nominal exchange rates of CEE-4 currencies against the euro (increase denotes appreciation).



Source: EcoWin data.

The second half of February 2009 brought a reversal of the depreciation trend of the zloty nominal exchange rate vis-a-vis the euro, the US dollar and the Swiss franc. The zloty had been strengthening till mid-April but it weakened subsequently. The depreciation of the Polish currency continued until mid-June, though its scale was lower than the previous appreciation. Between 18 February and 17 June the zloty appreciated against the US dollar, the euro, and the Swiss franc by approx. 17%, 8% and 10%, respectively. In this period other currencies of the re-

gion also strengthened significantly, i.e. the Hungarian forint and the Czech koruna (Figure 2.39).

Zloty appreciation was supported primarily by global factors, among others, decline in risk aversion in the global financial markets translating into better sentiment towards the currencies of emerging economies. Apart from the global factors, zloty strengthening was probably supported by information on improvement of the current account balance in Poland in February and March 2009, which could have been viewed as a sign that the Polish economy maintains an external balance. The factors acting towards the depreciation of the zloty could have included the expectations of a larger than previously assumed economic slowdown in 2009 as well as information signalling a deteriorating fiscal position.

Between August 2008 and February 2009 along with the depreciation of the nominal effective exchange rate of the zloty a depreciation of similar magnitude of the real exchange could be observed. Since March 2009 both the real and nominal effective exchange rate of the zloty have appreciated (Figure 2.40).

2.5.3 Credit and money⁴⁴

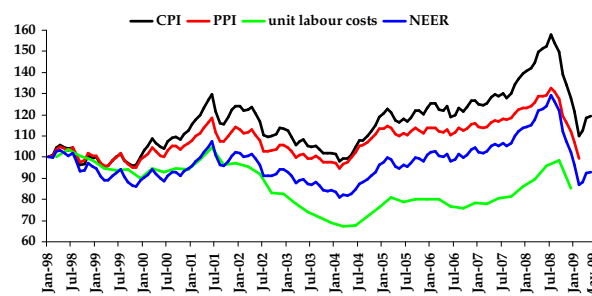
Credit

Due to the continuing downturn, a negative assessment of enterprises of their sales perspectives and further tightening of the credit policies of banks, the increase in the value of loans granted to enterprises in 2009 was halted – in January–April 2009 loans rose by only PLN 0.5 billion, while the annual growth dropped by 7.6 percentage points to 14.6% y/y (Figure 2.41). The effect of demand and supply factors found reflection in the results of NBP economic climate

⁴⁴It should be emphasised that the monetary data released by the NBP over the past few quarters, most specifically those about the changes in the volume of housing loans to households and loans to enterprises, continued to be strongly affected by exchange rate shifts. Therefore, the monetary data presented in this charter refer to variables adjusted for the impact of fluctuations in the zloty exchange rate against main foreign currencies.

Figure 2.40:

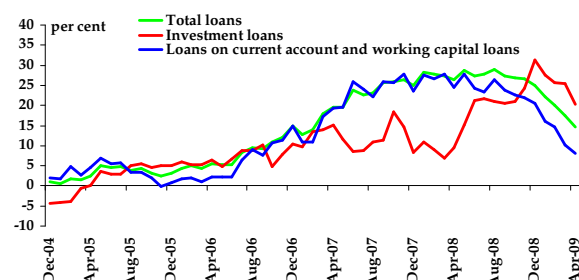
Zloty real and nominal effective exchange rate (increase denotes appreciation).



Source: NBP, European Commission, and EcoWin data. For unit labour costs (in manufacturing): quarterly data, NBP estimates based on GUS, ECB, and European Commission data.

Figure 2.41:

Loans to enterprises (y/y).



Source: NBP data.

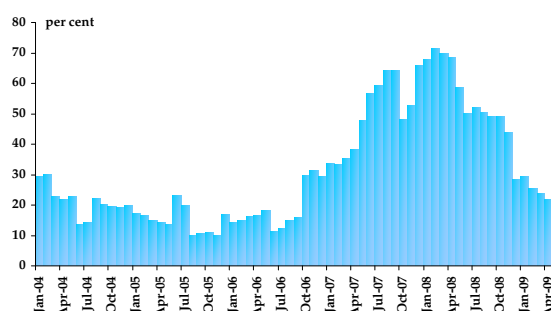
Table 2.5: Foreign loans of Polish enterprises (EUR).

Change y/y (per cent)	2006				2007				2008			
	q1	q2	q3	q4	q1	q2	q3	q4	q1	q2	q3	q4
non trade loans	17.5	17.4	22.4	30.8	31.5	34.8	28.3	21.1	24.8	29.1	27.9	18.4
trade loans	19.3	25.1	18.4	17.0	24.4	23.3	24.9	21.9	21.3	19.1	15.4	-1.8

Source: NBP data.

Figure 2.42:

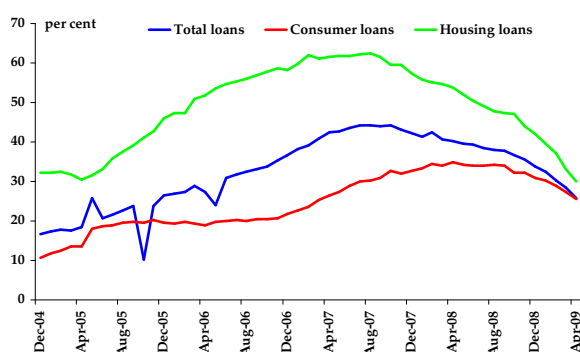
Loans to enterprises for the purchase of real estate (y/y).



Source: NBP data.

Figure 2.43:

Loans to households (y/y).



Source: NBP data.

surveys⁴⁵, which indicate that 2009 Q1 brought a reduction in the number of companies applying for credit with a concurrent significant increase in the percentage of rejected loan applications – every third application was refused.

The NBP surveys reveal that in 2009 Q1 the indicator of investment continuation suffered further significant decline (of 13.6 percentage points y/y to the level of 85.6%). There was also a reduction in the enterprises' interest in beginning new investment projects. At the same time, the results of the NBP survey addressed at senior loan officers⁴⁶ show that over 50% of banks tightened their criteria for granting loans to enterprises. As a result, in April 2009, in comparison to January 2009, the growth of loans for the purchase of real estate decreased by 7.4 percentage points to 22% y/y, while the growth of investment loans fell by 7.1 percentage points to 20.4% y/y. There was also a significant deceleration of the growth in loans for current needs.

According to the balance of payments data, in 2008 Q4 the foreign debt of enterprises was reduced, which translated into a significant drop of its growth by 13.4 percentage points in comparison to 2008 Q3, i.e. to 11.7% y/y (Table 2.5).

As regards loans to households (Figure 2.43), their growth in 2009 decelerated, which was primarily connected with a significant reduction of lending in the housing loan segment (in January–April 2009 its increase amounted to PLN 4.7 billion, compared to PLN 13.6 billion recorded in the corresponding period of the previous year). The growth of housing loans dropped significantly by

⁴⁵See: *The condition of the non-financial enterprises in 2009 Q1 and expectations for 2009 Q2*, the NBP.

⁴⁶See: *Senior loan officer opinion survey on bank lending practices and credit conditions in 2009 Q2*, NBP

Table 2.6: Average interest rates in commercial banks: new PLN denominated loans and deposits and selected foreign currency loans (major currencies).

per cent	2008								2009			
	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Households												
Total deposits	5.1	5.2	5.2	5.4	5.8	6.1	6.2	6.5	6.2	5.4	5.0	4.5
Total loans	13.6	13.6	13.8	13.7	13.7	13.6	14.1	13.6	14.1	13.9	13.4	13.6
Consumption loans	15.3	15.3	15.5	15.5	15.5	15.6	15.8	15.3	16.0	15.8	15.7	15.9
Housing loans in PLN	7.8	8.0	8.3	8.4	8.6	8.7	8.8	8.7	8.5	7.4	7.1	7.0
Housing loans in CHF	4.7	4.6	4.7	4.7	4.8	5.2	5.4	4.5	4.2	4.2	3.2	3.3
Enterprises												
Total deposits	5.4	5.6	5.6	5.6	5.6	5.7	5.5	5.6	4.9	4.0	3.4	3.3
Total loans	7.7	8.3	8.1	8.2	8.3	8.4	8.4	8.3	7.8	7.1	6.4	6.4

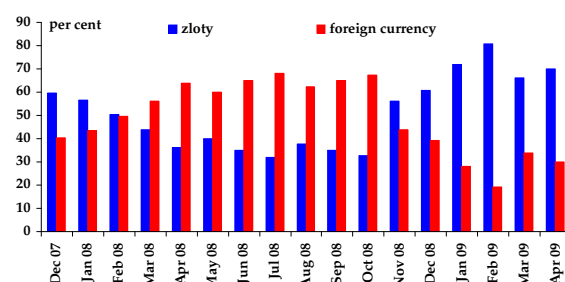
Source: NBP data.

9.5 percentage points to 29.9% y/y. Apart from demand factors, which translated into a significant decrease in the interest in those loans, the growth of housing loans was also negatively affected by bank policies which were tightening their loan granting criteria. As indicated by the NBP survey studies, in 2009 Q1 a considerable number of banks raised loan margins, increased the level of required own contribution to real estate financing, tightened their collateral requirements or shortened the maximum lending period. Tightening of requirements was more pronounced for currency loans than for loans denominated in the zloty. Some surveyed banks withdrew foreign currency loans from their offer, which was reflected in the changed structure of the newly granted loans (Figure 2.44).

The increase of consumer loans also decelerated, though to a smaller extent than of housing loans. In January–April 2009 the level of household indebtedness in this segment of loan market rose by PLN 5.4 billion, compared with a rise of PLN 8.3 billion in the corresponding period of the previous year. As a result, the annual growth of consumer loans fell between January and April 2009 by 4.7 percentage points to 25.5% y/y (Figure 2.43). Apart from a slight drop in the demand for those loans on the part of households, the volume of lending was also decreased by reduced availability of consumer

□ **Figure 2.44:**

Currency structure of newly granted housing loans to households.



Source: NBP data.

Structure based on information from interest rates reporting of 20 banks whose market share in credits to non-financial sector amounts to approx. 75%.

loans. Nearly half of the surveyed banks tightened their criteria for granting consumer loans, primarily by raising their profit margins and non-interest loan costs. However, the tightening of bank policies was in this case milder than in the case of housing loans or loans to enterprises.

Average interest charged on new loans to enterprises in January–April 2009 decreased, which was connected with the NBP interest rate cuts. In turn, the interest charged on newly granted housing loans denominated in zloty fell, though the scale of the drop was smaller than the reduction of the NBP interest rates. On the other hand, the average interest charged on new consumer loans, after rising to 16.0% in January 2009, remains at a high level (Table 2.6).

The development of lending in the coming periods will depend on the share of non – performing loans in credit portfolios, current and expected capital standing of banks and an increased risk connected with the anticipated economic situation. The introduction of government guarantees for loans to enterprises and subsidies to housing loans may also be an important factor affecting the growth of lending. In order to increase the supply of credit, in May 2009 the NBP lowered the rate of required reserves by 50 basis points to 3.0%⁴⁷.

In the months to come further deceleration can be expected in the growth of indebtedness of enterprises and households. The growth of loans to enterprises will be curbed by shrinking demand for their products, which also translates into lower investment activity. Similarly, pro-development investments will not be supported by the currently observed significant decline in the utilisation level of production capacity and the building of inventories of finished goods⁴⁸. In turn, households will be discouraged from borrowing by the deteriorating situation in the labour market and the uncertainty connected with their future income situation. The supply of loans

⁴⁷The decision applies to the required reserve to be held starting from 30 June 2009.

⁴⁸2009 Q1 compared with 2008 Q4 saw an 2 percentage points increase (to 22.5%) in the share of companies where inventories exceeded the needs. See: *The condition of the non-financial enterprises in 2009 Q1 and expectations for 2009 Q2*, the NBP.

denominated in foreign currencies will probably be further reduced. An increasingly important reason behind lending deceleration will be limited population of potential borrowers who meet the tightened credit criteria.

Deposits and monetary aggregates

The deepening decline in both the external and domestic demand was negatively affecting the economic situation of enterprises. Additionally, due to limited access to bank loans, enterprises were forced to more heavily rely on own funds to finance their current operations. As a result, the value of corporate deposits dropped in January–April 2009 by PLN 7.3 billion, while their growth decreased by 5.0 percentage points to -4.7% y/y.

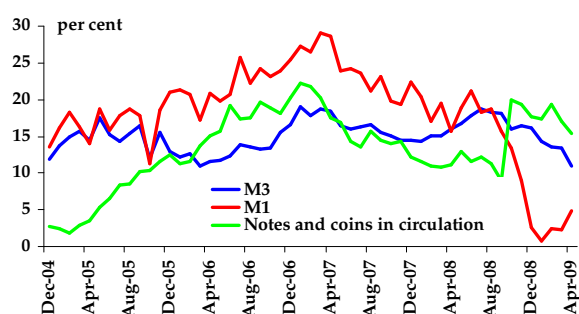
As banks declare further tightening of their credit policies, own funds will remain the main source of financing both current and investment activities of enterprises⁴⁹. Thus, the expected further deterioration of financial results can be also accompanied by further fall in deposits of enterprises.

Analysis of the structure of the financial assets of households reveals that in January–April 2009 bank deposits were the dominant form of investment (in January–April 2009 the rise in bank deposits amounted to PLN 15.9 billion, i.e. 4.6%). This was the result of strong competition among banks for customer savings amid continuing lack of investors' confidence in the capital market. The rise in deposits was accompanied by the increase in household exposure to shares (of PLN 5.4 billion, i.e. 20.9%) and investment fund units (of PLN 2.5 billion, i.e. 4.2%) due to rise in stock indices..

The trends observed in the credit market in the analysed period found reflection in the development of major monetary aggregates. The deceleration of lending was accompanied by a slow-

⁴⁹ According to NBP studies, 2009 Q2 brought a decline in the percentage of investments financed by bank loans from 30% in 2009 Q1 to 25%. At the same time 46% of respondents (i.e. 8 percentage points more than in 2009 Q1) declared that own funds will remain their main source of financing new investments in 2009 Q2.

□ **Figure 2.45:**
M1, M3, and notes and coin in circulation (y/y).



Source: NBP data.

down in the growth of broad M3 money aggregate to 11% y/y in April 2009 (Figure 2.45).

It should be emphasised that the continuing high growth of M3 in 2008 was partly the effect of the inflows of household savings withdrawn from investment funds into bank term deposits (with maturities of up to 2 years). Recently the impact of that factor on the value of money supply was markedly weaker. In 2009 Q1 the negative balance between new investments and the amortisation of earlier invested savings in investment fund units amounted to PLN 2.0 billion, while in 2008 Q4 it stood at PLN 9.3 billion. In April outflow from investment funds was only PLN 0.3 billion⁵⁰. As a result, in the analysed period the growth of less liquid money aggregates (M3–M1) was reduced by 14.3 percentage points to 18.4% y/y. In turn, the growth of M1 rose by 4.1 percentage points to 4.9% y/y, which was the joint effect of a building-up of households' current deposits and a gradual increase in the currency in circulation. As a consequence, the liquidity of M3 money measured as share of M1 in M3 aggregate increased by 0.7 percentage point to 51.7%. After a surge in the growth of cash in October 2008 (to 19.9% y/y), when the level of currency in circulation rose significantly, gradual lowering of its growth was observed (down to 15.4% y/y in April 2009).

⁵⁰In May 2009 balance between new investments and the amortisation of earlier invested savings in investment fund units was slightly positive (PLN 0.1 billion) for the first time since October 2007.

Monetary policy in February – June 2009

During meetings in February and March 2009 the Monetary Policy Council lowered the interest rates by 0.25 percentage points on each occasion. In April and May 2009 the Council decided to keep the NBP interest rates unchanged. At the May meeting the MPC decided to reduce the reserve requirement by 0.5 percentage points from 3.5% to 3.0%. In June 2009 the Council decided to lower NBP interest rates by 0.25 percentage points: reference rate to 3.50% on an annual basis; lombard rate to 5.00% on an annual basis; deposit rate to 2.00% on an annual basis; rediscount rate to 3.75% on an annual basis.

What follows in the next part of the chapter are the previously published *Minutes of the Monetary Policy Council decision-making meetings* held in February, March, April and May 2009 as well as the *Information from the meeting of the Monetary Policy Council* in June 2009.

Minutes of the MPC decision-making meeting held on 25 February 2009

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 zloty exchange rate developments, the outlook for economic growth in Poland and abroad and credit market conditions. The Council discussed the influence of those factors on the future inflation developments in Poland in view of the February projection of inflation and GDP.

The Council paid a lot of attention to exchange rate developments. It was pointed out that the currencies of Central and Eastern Europe, including the zloty, had weakened significantly since the previous meeting of the Council. It was emphasized that the depreciation of those currencies was triggered, inter alia, by the deteriorating economic outlook for the countries of the region, including concerns over macroeconomic stability of some of those countries. An increase in the global aversion to risk, resulting in capital outflow from the emerging markets, fears of financing large trade deficits in some countries, and foreign exchange transactions by short-term investors were also considered as factors conducive to the depreciation of the currencies of the region, including the zloty. It was pointed out that the scale of zloty depreciation resulting from a relatively larger liquidity of the Polish foreign exchange market did not reflect the comparatively favourable condition and outlook for economic growth in Poland. Some Council members pointed out that the zloty depreciation might have been additionally

strengthened by demand for foreign currency of Polish enterprises engaged in option contracts.

The Council also discussed the impact of changes in the NBP interest rates on the zloty exchange rate developments. Some members of the Council argued that in a period of high exchange rate volatility a considerable interest rates reduction may increase the risk of further depreciation of the exchange rate. Other Council members emphasized that the impact of the interest rate disparity on the zloty exchange rate had recently been limited. They pointed out that the economic outlook for Poland constitutes the factor influencing the zloty exchange rate developments. According to those members of the Council, easing the monetary policy will counter the excessive deterioration of economic growth and, therefore, it may be a factor conducive to strengthening of the zloty exchange rate in the medium term.

While analyzing the impact of the zloty depreciation on the economy, it was pointed out that the weakening of the exchange rate contributes to reducing the domestic demand by increasing households' and enterprises' expenditure on servicing financial obligations denominated in foreign currencies. On the other hand, it was pointed out that the zloty depreciation improves the competitiveness of Polish exports, and, contributing to the rise in prices of imported goods, is conducive to the increase in competitiveness of Polish producers in the domestic market. It was also indicated that the zloty exchange rate depreciation leads to a rise in the zloty value of EU funds.

While discussing the impact of the zloty depreciation on the credit market situation, some Council members indicated that as a result of the weakening of the Polish currency the zloty value of bank assets denominated in foreign currencies increases. Without raising the capital it may lead to a decrease in banks' capital adequacy ratios and, in consequence, may be conducive to further reduction of lending.

While analyzing the impact of the zloty depreciation on the budget deficit and public debt, the Council members indicated that the exchange rate depreciation increases public spending on contributions to the European Union budget and on servicing the foreign debt. Some members of the Council assessed that a significant zloty depreciation may limit the foreign investors willingness to finance the borrowing needs of the state budget. Additionally, some Council members pointed out that further depreciation of the exchange rate may cause long-term investors, holding debt instruments issued by the Polish government, to hedge against the foreign exchange risk by making transactions in the forward market, which may strengthen the zloty depreciation as a result of arbitrage between the spot and the forward market. Other Council members, however, pointed to a relatively small share of foreign debt in the total debt of the general government sector and the dominant share of domestic investors in financing the borrowing requirements of the state. According to those Council members an increase in the borrowing needs of the governments of the developed countries resulting from undertaken counter-crisis measures is a more important factor than the zloty depreciation in limiting the possibility of external financing of the budget deficit and public debt in Poland, as well as in other developing countries.

While addressing the situation in the external environment of the Polish economy, the deepening recession in developed economies (the United States, the euro zone, Japan) and the increasing slowdown in economic growth in developing countries was noted. It was argued that the worsening outlook for economic growth in China may put the expected improvement in global economic performance at risk. It was also indicated

that some of the central banks had continued to ease their monetary policy in the recent period. Some members of the Council pointed out, however, to a change in monetary policy stance of the central banks of Central and Eastern Europe, which was due to the recent depreciation of their currencies.

While discussing the outlook for domestic economic growth, it was pointed out that the decrease in industrial output and orders in January 2009, as well as worsening indicators of economic climate confirm that the activity in the Polish economy is deteriorating further. Moreover, it was noted that reduced lending by banks, increase in the burden for economic agents due to the previously incurred foreign-currency-denominated liabilities as well as increases in administered prices limiting the purchasing power of households will be conducive to decreasing domestic demand. The negative influence of a significant deterioration of economic outlook on corporate investment was also noted. It was indicated that further decrease in demand for Polish exports, which is connected with the deepening recession experienced by Poland's major trade partners, will contribute to a further deterioration of economic growth in Poland. The impact of the decrease in foreign demand for Polish exports may be cushioned by the depreciation of the zloty exchange rate. Some Council members assessed that the scale of the economic slowdown in Poland may be larger than forecasted in the February NECMOD projection.

The meeting also addressed the influence of the NBP interest rates reductions on domestic demand and on the situation in the banking sector as well as in the credit market. It was indicated that interest rate cuts ease the burden of servicing zloty-denominated loans of economic agents, which limits the risk of debts being unsettled by these agents, and, in consequence, acts towards increasing the stability of the financial system. It was also emphasized that lowering the interest rates leads to an increase in purchasing power of the these agents, which may contribute to an increase in domestic demand. Some Council members pointed, however, to the uncertainty surrounding the impact of lower interest rates on the domestic demand in the context of the credit market distortions. They indicated that the NBP interest rate cuts made in November and December 2008 - despite a significant drop in the 3M WIBOR rate - were accompanied by a smaller decrease in interest on corporate loans, only a slight decrease in interest on housing loans and a small increase in interest on consumer loans. Those Council member argued that the reductions of the NBP interest rates decrease the banks' incomes from servicing the previously granted loans, which - coupled with a relatively high interest rate on deposits - may induce banks to increase margins on newly granted loans. According to some Council members, too low competition in the Polish banking sector may be a factor limiting the influence of the reductions of the NBP interest rates on the interest on loans.

Some members of the Council indicated that limited demand for loans from economic agents related to negative outlook for economic growth may constitute a barrier to the credit growth. They emphasized that the decrease in creditworthiness of economic agents related to the drop in value of their assets and the increase in the burden due to the incurred foreign-currency-denominated loans may also be a factor limiting the credit growth.

The Council discussed the possibility of modifying the employed monetary policy instruments in order to improve the liquidity situation in the banking sector and prevent extensive reduction of banks' lending, including the potential extension of maturity of repo transactions, lowering the reserve requirement rate and reducing the deposit rate

to a greater extent than other NBP interest rates. The Council also debated on the issues connected with employing the instruments directly influencing the zloty exchange rate in the context of developments in the foreign exchange market.

While addressing the outlook for inflation, some Council members estimated that in the nearest future CPI and core inflation will remain at elevated levels, which also is indicated by the February NECMOD inflation projection. Those members argued that substantial rise in administered price and current strong depreciation of the zloty exchange rate will be conducive to increasing inflation. Other members pointed out that the February NECMOD inflation projection points to an increase of the negative output gap leading to a considerable drop in the inflationary pressure in the monetary policy transmission horizon. Those members also pointed to a decreasing wage pressure in the Polish economy. According to those Council members, the risk of permanent overshooting the inflation target due to the zloty depreciation is small in the conditions of significantly weakening demand. Those members assessed that - despite a strong depreciation of the zloty exchange rate - the core inflation in 2009 Q1 may be lower than forecasted in the February inflation and GDP projection. Moreover, they pointed out that in February 2009 the inflation expectations of households and bank analysts declined. At the meeting, the uncertainty related to inflation developments in the nearest period resulting from accounting for the changes in the consumption basket of households by GUS was also brought up.

The Council also discussed the prospects of fulfilling the Maastricht price stability criterion by Poland. Some Council members indicated that due to a more rapid drop in current headline inflation in most European Union countries than in the Polish economy, in the nearest future the 12-month moving average HICP inflation in Poland, taken into account when assessing the compliance with the price stability criterion, may still exceed the reference value. Other Council member pointed out, however, that according to the February inflation and GDP projection in the NECMOD model it may be expected that the CPI inflation will decrease to a low level over the monetary policy transmission horizon, and, thus, Poland will be complying with the price stability criterion in the medium term.

While analyzing the influence of fiscal policy on the economy, some Council members pointed out that the scale of reductions of public spending in 2009 announced by the government is larger than assumed in the February inflation and GDP projection. Those members indicated that the change in the way of financing some infrastructural expenditure, which shifts the expenses incurred for this purpose by the central budget to other units of the general government sector, may - should difficulties with acquiring sufficient funds on the market arise - lead to the refrainment from a part of these expenditures. They also emphasized that a more severe economic slowdown than the one currently expected by the government, and consequently lower-than-expected budget revenues, may lead to further curbing of budget expenditures. Those Council members argued that a restrictive fiscal policy supports further monetary policy easing. Other Council members, however, pointed to the actions announced by the government aimed at alleviating the effects of the crisis, including, inter alia, mortgage-loan-repayment aid for the unemployed, which will limit the restrictiveness of the fiscal policy.

While considering the decision on interest rates, some Council members argued that the quickly deteriorating economic situation in the world and in Poland, the drop in inflation below the target over the projection horizon expected in the February inflation and GDP projection, and the relatively high restrictiveness of fiscal policy are factors supporting

additional considerable NBP interest-rate cuts. Those members assessed that in the current conditions the influence of the interest rate disparity on the zloty exchange rate, and, by the same token, the risk of further depreciation of the zloty exchange rate, is limited. Other Council members argued that the risk of further significant depreciation of the zloty exchange rate that may lead to a considerable deterioration of economic activity in Poland, and the uncertainty about the magnitude of the impact of interest-rate cuts on domestic demand justified the decision of keeping interest rates unchanged at the current meeting. According to the majority of the Council members, given the considerable depreciation of the zloty the scale of the reduction of the NBP interest rates at the February Council meeting should be moderate.

Motions to lower the NBP interest rates by 25 and 50 basis points were put forward. A motion to lower the NBP interest rates by 50 basis points did not pass. A motion to lower the interest rates by 25 basis points was passed. The Council decided to lower the NBP interest rates to the level: the reference rate to 4.00%, the lombard rate to 5.50%, the deposit rate to 2.50% and the rediscount rate to 4.25%.

The Monetary Policy Council judged also that the situation on the foreign exchange market may justify employing the instruments directly affecting the zloty exchange rate.

Minutes of the MPC decision-making meeting held on 25 March 2009

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 short-term interest rate developments in the context of conducted open market operations, zloty exchange rate changes, outlook for inflation and economic growth in Poland and situation in the banking sector.

The Council paid a lot of attention to the consequences of change introduced to conducting open market operations by limiting the supply of NBP bills. This change resulted in higher liquidity remaining in the banking sector and related reduction in short-term interest rates in the interbank market significantly below the NBP reference rate. It was argued that limiting the supply of NBP bills as compared to the demand is aimed at fostering activity of commercial banks in the interbank market. In the opinion of some discussants, lack of possibility of investing all the banks' liquid assets in money bills should further result in this liquidity being used to increase lending. At the same time, it was pointed out that limited supply of NBP bills translated into banks' increased interest in investing in Treasury bills.

Some members of the Council argued that changes introduced to conducting open market operations, translating into short-term interest rates in the interbank market lowering below the NBP reference rate should be taken into account in the Council's decisions concerning both the level of the NBP interest rates and the possible further changes in the monetary policy instruments used. At the same time, they pointed out that increased liquidity in the interbank market might impede exchange rate stabilization. Moreover, the Council decided that reduction of reserve requirement rate and decrease of the deposit rate by more than other NBP interest rates were not justified at the moment.

The Council also discussed the possible change in interest rates on FX swaps used by the NBP and extension of their maturity.

While addressing the exchange rate issues, it was pointed out that since the February meeting of the Council, the previously observed depreciation of the zloty had been halted. Some members of the Council emphasized that the role of interest rate disparity was temporarily limited, and exchange rate developments continued to be largely affected by other, mainly global and regional factors, which was indicated by similar changes in exchange rates of the currencies of Central and Eastern Europe. Other members of the Council argued that foreign exchange market is still marked by high volatility and that the Council should continue to take into account the risk of further depreciation of the zloty. In this context the importance of macroeconomic situation in other economies of the region and the impact of any negative developments in those countries on the zloty exchange rate were emphasized. In the opinion of those Council members, a major factor behind uncertainty concerning zloty exchange rate developments was prospects of Poland's accession to the euro area.

While discussing the exchange rate, it was stressed that the previously observed considerable zloty depreciation was the main risk factor for price stability in the coming months. It was pointed out that the weakening of the zloty, through a strong increase in fuel prices, contributed largely to a rise in inflation in February as compared to January 2009. Yet, at the same time, some Council members stressed that the impact of exchange rate fluctuations on inflation would probably be short-lived, and translation of the depreciation into domestic prices might be limited amidst economic slowdown. Other members of the Council argued that a rise in producer prices in February which proved considerably higher than expected, might be largely connected with the previously observed weakening of the zloty exchange rate. In the opinion of those Council members, although rising producer prices did not automatically translate into consumer prices, in the situation of weakening external demand, rising production costs might be compensated for by price increases in the domestic market, thus contributing to higher inflation. Those members also pointed out that any further weakening of the zloty might lead to the fading of the anti-inflationary effect connected with lower imported inflation.

It was emphasized that, apart from the previously observed considerable depreciation of the zloty exchange rate, higher inflation was driven mainly by rising administered prices, including, in particular, flat maintenance and energy prices. Some Council members argued that the coming months might be expected to see those prices continue to grow at an increased rate which would reduce a fall in inflation. It was also pointed out that food price developments resulting from unfavourable occurrences in the regions being important suppliers of main agricultural products, were a risk factor for inflation.

While addressing other factors affecting the outlook for inflation, some members of the Council pointed out that deepening recession in the global economy putting a downward pressure on inflation abroad and a relatively low level of prices of raw materials - below the level accounted for in the NBP February projection - would curb inflation in Poland. They also argued that amidst weakening external and domestic demand, falling demand for labour would cause faster than accounted for in the February inflation projection decline in wage growth which would be conducive to a reduction of growth in unit labour costs. Those Council members assessed that the above mentioned factors connected with strong decline in the demand pressure in the economy indicated faster decrease in inflation than accounted for in the projection, which is also suggested by the results of short-term forecasts prepared by the NBP.

While assessing the outlook for economic growth abroad, attention was paid to deep-

ening recession in the United States and in the euro area as well as to further lowering of forecasts for those economies and the related risk of global recession lasting longer than accounted for in the February projection. It was emphasized that in response to the strong decline in economic activity and risks to stability of the financial sector, major central banks lowered their interest rates to very low levels and undertook actions aimed directly at increasing the supply of reserve money which were intended to intensify lending and decrease long-term interest rates. Attention was also paid to the fact that no further interest rate cuts were implemented by central banks of Central and Eastern Europe.

While discussing the domestic economic growth, it was pointed out that recession in Poland's main trading partners translated into decreasing exports and industrial output which was corroborated by the data for the first months of 2009. It was argued that weakening demand in the economy was leading to falling employment in the corporate sector, rising unemployment and declining wage growth. At the same time it was emphasized that deteriorating situation in the labour market was curbing consumer demand which was reflected by retail sales data. It was also indicated that deteriorating financial situation of enterprises was hindering their investment activity. According to some members of the Council, the above mentioned factors, namely reduced external and domestic demand (both consumer and investment demand) would result in GDP growth being considerably lower than accounted for in the February projection. Other Council members emphasized that the risk of further zloty depreciation was also of considerable importance for the outlook of economic growth, since through increase in the value of obligations denominated in foreign currencies and the related rise in debt service costs it might also lead to further deterioration in financial situation of households and enterprises leading to lower GDP.

While analyzing the situation in the banking sector, attention was paid to high liquidity preference of banks and their striving to attract deposits of non-financial sector by offering still high interest rates. It was pointed out that high costs of financing bank activity resulting from the above were reflected in increased margins on newly granted credits. At the same time, however, it was emphasized that in the first few months of 2009 reduction in interest rates on deposits and loans, following a considerable lowering of the NBP interest rates, was observed. Some discussants argued that NBP interest rate cuts should lead to further fall in interest rates on deposits thus reducing the costs of banks' financing and contributing to a reduction in interest rates on loans. Yet, it was pointed out that considerable increase in banks' margins was largely due to higher credit risk and, consequently, no considerable reduction in margins should be expected.

Some members of the Council emphasized that even if NBP interest rates reductions were not fully reflected in interest rates on newly granted loans in commercial banks, lower interest rates decreased the costs of servicing already taken loans which was of considerable importance for the financial condition of some households and enterprises. Other Council members pointed out that the impact of further interest rate cuts on the development of bank lending was currently limited since the volume of loans depended, to a major extent, on factors not directly linked to the NBP interest rates (such as high liquidity preference and high credit risk assessment).

The Council discussed the prospects of Poland's accession to the euro area and related requirement to fulfill the convergence criteria, including, in particular, price stability criterion.

While considering the decision on interest rates, some members of the Council argued that considerable decline in economic activity leading to significant reduction in demand, combined with lower wage pressure, and consequently also inflationary pressure, justified further lowering of the interest rates. The reduction of the NBP interest rates should - in their opinion - translate into lower interest rates on deposits and loans in commercial banks contributing to intensified lending and preventing excessive decline in economic activity. Other Council members argued, however, that the decision on interest rates should take into account the lowering of the short-term interest rates in the interbank market significantly below the NBP reference rate driven by changes introduced to the conducting of open market operations. They also pointed at the risk of further zloty depreciation and at a decline of real interest rate.

A motion to lower the NBP interest rates by 25 basis points was put forward and passed. The Council decided to lower the NBP interest rates to the level: the reference rate to 3.75%, the lombard rate to 5.25%, the deposit rate to 2.25% and the rediscount rate to 4.00%.

Minutes of the MPC decision-making meeting held on 29 April 2009

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

The discussion at the meeting focused on the outlook for economic growth in Poland and abroad, situation and outlook for public finance, inflation developments in Poland, zloty exchange rate developments and credit market situation.

While discussing the domestic economic growth, it was noted that the decline in exports, industrial output and retail sales in the first months of 2009 confirm a considerable slowdown in the economic activity in Poland. Yet, some members of the Council pointed out that better than expected macroeconomic data and a slight improvement in some business climate indicators in March 2009 might be a sign of a low-level stabilization of the activity in the Polish economy. Other members argued that a minor decline in industrial output and higher than expected rise in wages in March 2009 might be linked to a different than in 2008 holiday calendar, and some business climate indicators continue to indicate a further deterioration in the activity in the enterprise sector and a decline in demand in the Polish economy.

While addressing the outlook for domestic economic growth it was pointed out that due to a considerable - albeit not so high as in the majority of other countries of Central and Eastern Europe - openness of the economy, the global economic situation and related changes in demand for Polish exports are the factor of uncertainty to the economic situation in Poland. In this context, attention was paid to the deepening recession in the euro area and activity in the United States continuing at low level as well as to further downward revision of growth forecast for the global economy. The forecasts of considerable decline in GDP in 2009 in the German economy and in non-EU economies being Poland's major trading partners were indicated. However, at the same time, attention was also paid to a slight improvement in the situation in global financial markets and some signs suggesting that an intensification of unfavourable developments in the global economy had been halted.

Some members of the Council pointed out that improvement in exports might, in the later part of the year, constitute a factor driving recovery of the Polish economy which

would, however, depend on zloty exchange rate developments. Other members of the Council assessed that changes in foreign demand might be of higher importance for the outlook for Polish exports than zloty exchange rate developments.

While analyzing the exchange rate developments, it was pointed out that the previously observed depreciation of the zloty had been halted. Yet, at the same time it was indicated that developments in exchange rates of currencies of emerging economies, including the zloty exchange rate, currently depended largely on changes in risk aversion in the international financial markets. Moreover, some members of the Council emphasized that postponement of the zloty joining the ERM II might be conducive to its depreciation. They also pointed out that worse than previously expected situation of the public finance sector might be another factor increasing the risk of zloty depreciation.

While discussing the situation in the public finance sector it was pointed out that the sector's deficit in 2008 was considerably higher than the one assumed by the government in the December 2008 Convergence Program. In this context, reference was made to the factors which contributed to considerably higher than anticipated deficit level. Some members of the Council emphasized that amidst the strong slowdown of economic activity it was likely that the budget deficit would exceed the level assumed for 2009 or budget expenditures would be cut. Some Council members also pointed out that possible implementation of additional anti-crisis measures might contribute to a rise in the budget deficit in the coming years. It was indicated that uncertainty about the fiscal situation, both of the central government and other entities of the public finance sector, hindered the assessment of its impact on the outlook for inflation in Poland.

While addressing the prospects of compliance with the Maastricht fiscal criterion it was assessed that as a result of strong deterioration in the economic situation in Poland, the deficit of the public finance sector in relation to GDP might increase considerably in the years 2009 and 2010. In this context, it was pointed out that fulfillment of the Maastricht fiscal criterion in the coming years might be impeded.

While discussing the current inflation developments, it was indicated that a rise in consumer price index in March 2009 up to 3.6% i.e. above the upper limit for deviations from the NBP inflation target set at the level of 3.5% had mostly been driven by a rise in food prices. It was also pointed out that the growth in regulated prices, including, in particular, rises in the prices of energy and prices related with maintenance of dwellings continued to be the factor boosting inflation. It was stressed that a rise in inflation had been driven by the previously observed zloty exchange rate depreciation and that exchange rate developments continued to be the main risk factor for price stability. Some members of the Council assessed, at the same time, that - taking into account the zloty appreciation observed since the middle of February 2009 - the impact of the previously observed depreciation of the zloty exchange rate on inflation may be rather short-lived. Other members of the Council argued that higher than expected rise in inflation in March 2009 indicated that even amidst strong economic slowdown, exchange rate depreciation translates significantly into a rise in consumer prices in Poland.

While addressing the outlook for inflation in Poland, some members of the Council assessed that in the medium term inflation should decline to the inflation target which was also suggested by the February inflation projection and short-term forecasts prepared by the NBP. This might be favoured by declining domestic demand and falling labour demand translating into a gradual fall in wage pressure and by the commodity prices

continuing at relatively low levels. Those members also argued that a fall in inflationary expectations of households should contribute to a decline in inflation. Other members of the Council pointed, however, to the risk of inflation persisting at an increased level in the case of shocks affecting food and energy commodity markets. Moreover, some members of the Council indicated that considerable worsening in the situation of the public finance sector might urge the government to increase budget income through rises of indirect taxes, including excise tax, and local governments - to increase the prices of services depending on their decisions, which would, in turn, contribute to higher inflation.

The Council also discussed the prospects of Poland's compliance with the Maastricht price stability criterion. Some Council members indicated that amidst inflation in some EU countries falling to very low levels the reference value for price stability criterion in 2010 might run considerably below the 12-month moving average HICP inflation in Poland. In the opinion of those members fast disinflation in Poland that would enable to fulfill again the Maastricht criterion might then require considerable tightening of the monetary policy. At the same time, some members of the Council pointed out that the developments of HIPC inflation in Poland against the reference value for price stability criterion in the coming years would largely depend upon changes in regulated prices.

While discussing the credit market situation, some members of the Council pointed out that banks in Poland currently focused their lending activity on consumer loan market. Interest rates on consumer loans slightly increased despite NBP interest rate cuts implemented since November 2008. Moreover, they argued that excessive rise in households' burden resulting from servicing consumer loans might - through rising value of irregular loans - lead to deterioration in banks' capital adequacy ratios and, in consequence, result in limiting future lending. Other members of the Council pointed out, however, that the rise in the value of consumer loans was lower than last year, and the share of consumer loans in the total loans was relatively small.

Members of the Council also discussed strong reduction in corporate lending in 2009 Q1. It was pointed out that banks' tightening of their lending conditions, partly connected with persisting uncertainty about future economic developments hindering the assessment of the credit risk, constituted the factor limiting corporate lending. Some members of the Council assessed that in order to intensify corporate lending further modifications of the monetary policy instruments might be necessary.

At the meeting, the Council also addressed the possibility of Poland obtaining the IMF flexible credit line. It was emphasized that the flexible credit line is aimed at countries with strong economic fundamentals which used to pursue a responsible macroeconomic policy in the past and which are likely to continue such a policy in the future. It was pointed out that Poland's access to the IMF funds might favour the exchange rate stabilization and indirectly facilitate obtaining the funds to finance the budget deficit and public debt in foreign markets as well as to reduce debt service costs. The Council analysed also the impact of Poland's access to the flexible credit line on the outlook for inflation in Poland.

The meeting also focused on dilemmas connected with the interest rate policy in the longer term. It was pointed out that recovery in the global economy would require considerable tightening of macroeconomic policy in many countries, which might be difficult both due to the scale of the implemented anti-crisis instruments and uncertainty about the sustainability of such economic recovery. In this context, some members of

the Council pointed out that lowering the NBP interest rates currently to excessively low levels might later on require a relatively faster and stronger tightening of the monetary policy in order to stabilize inflation at the level of the inflation target. Moreover, it was pointed out that excessive interest rate cuts might - in the situation of further deterioration of the economic climate or economic stagnation - limit the possibility of lowering interest rates in the future in order to support economic growth in Poland.

Some members of the Council indicated that the real ex post interest rate (deflated with current headline inflation) in Poland was lower than in the euro area. Besides, it was pointed out that - according to the short-term forecasts prepared at the NBP - in April 2009 inflation might exceed the current level of the NBP reference rate, and, as a result, the real interest rate would be negative. Yet, it was also indicated that amidst the unfavourable economic climate and persisting uncertainty about future economic developments, a fall in real interest rates to the negative levels might have a limited impact on households' propensity to save. In this context, attention was paid to considerable decline in the monetary policy restrictiveness, which was driven - apart from interest rate cuts - also by the previously observed significant weakening of the zloty exchange rate.

Members of the Council agreed that uncertainty about the outlook for economic recovery in Poland and abroad, the situation in the public finance sector and zloty exchange rate developments and their impact on inflation justified keeping the NBP interest rates unchanged at the current meeting. Moreover, some members of the Council indicated that also very low level of real interest rates spoke in favour of leaving the NBP interest rates unchanged. The majority of the Council members maintained the opinion that the probability of inflation running below the inflation target in the medium term was higher than the probability of inflation running above the target.

The Council kept the interest rates unchanged: the reference rate at 3.75%, the lombard rate at 5.25%, the deposit rate at 2.25% and the rediscount rate at 4.00%.

Minutes of the MPC decision-making meeting held on 27 May 2009

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 situation in the credit market and in the banking sector as well as on the outlook for economic growth and inflation in Poland and abroad.

The Council paid a lot of attention to the situation in the domestic credit market. It was pointed to a strong decline in the growth of corporate and mortgage loans. On the other hand, attention was paid to a still high growth in consumption loans. It was pointed out banks might give preference to consumer loans market as the average volume of this type of loan is lower and the average maturity shorter, whereas interest rate significantly higher than in the case of other loan categories. Yet, some members of the Council paid attention to the growing risk of the loan portfolio deterioration related with granted consumption loans and, as a result, possible reduction of lending also in this segment.

It was emphasized that reduction in lending has a negative impact on economic activity in Poland. It was also pointed at the risk of unfavourable feedback between deteriorating situation in the real economy and situation of the financial sector.

While discussing measures that could support lending growth, the lowering of the required reserve rate was considered. It was emphasized that lowering of the reserve requirement was one of the expectations stated by banks during the preparation of the Pact on Credit Action Development in Poland. In the opinion of the Council, the reduction of the required reserve rate should be conducive towards increasing banks' lending. While analysing the scale of the reduction in reserve requirement, it was pointed out that lowering of this rate should be implemented gradually, and potential further adjustments should depend on the impact of this reduction on bank lending and interest rate developments in the interbank market.

Some members of the Council argued that high credit risk assessment was a more important reason for banks' limiting their lending than liquidity situation. In this context it was assessed that implementation of the guarantees and warranties of the Bank Gospodarstwa Krajowego introduced under the governmental Stability and Development Plan would favour the growth of corporate lending.

While discussing the outlook for bank lending in Poland, the capital position of the banking sector was also addressed. It was pointed out that solvency ratio for the whole banking sector had recently stabilized, yet the capital position of different banks was diverse. The risk of decline in capital adequacy ratios may - in the case of some banks - reduce their lending.

It was also pointed out that amidst the low limits for interbank transactions - in their attempt to acquire deposits from non-financial sector - banks had offered, for several months now, relatively high interests rate on deposits, considerably exceeding interest rates on loans in the interbank market. In the opinion of some members of the Council, banks undertake such measures in order to change the structure of their balance sheets to improve the relation between the value of granted loans and the value of acquired deposits. Those members also pointed out that relatively high costs of financing of banks' activity were coupled with falling yields on previously granted loans whose interest rate was largely based on variable WIBOR 3M rate.

While analyzing the money market interest rate developments, it was pointed at the recent rise in WIBOR 3M rate which occurred amidst NBP interest rates being kept unchanged. Attention was also paid to the fact that WIBOR 3M rate was now considerably higher than the interest rate on repo transactions with the same maturity. According to some members of the Council, decline in banks' income on granted loans being the result of falling interest rates in the interbank market accompanied by high costs of acquiring deposits induces those banks to undertake measures aimed at maintaining WIBOR 3M rate at a heightened level, while limiting their interbank transactions.

While discussing the external environment of the Polish economy, it was pointed to the signs of easing of downward trends in the global economy. At the same time, it was emphasised that the uncertainty about the starting point and sustainability of a possible recovery in the world economy remains high. In this context, attention was paid to the data suggesting stabilization of economic activity in the United States, while, at the same time, it was pointed out that some recently released data on American economy was worse than expected.

While analysing the outlook for economic growth in Poland's major trading partners, it was assessed that due to relatively lower flexibility of product and labour markets, the recession in Western Europe might be longer than in the United States. It was emphasized that a strong drop in GDP growth in euro area economies in 2009 Q1

might suggest that decline in economic activity in this region in 2009 - despite recent improvement in some economic indicators - would be deeper than expected. Some members of the Council also indicated that good economic situation in Western European economies in the past few years was largely driven by the boom in real estate markets and high demand for investment goods in the world. Those members argued that amidst current slump in real estate markets the recovery might take relatively long time both in the countries where the real estate bubble had burst and in the countries which had not reported any significant disequilibrium in these markets but whose exports were largely dependent upon high demand in the global economy. At the same time, those members pointed out that persisting low level of production capacity utilization in Western European economies might lead to a decline in the inflow of foreign direct investment to the countries of Central and Eastern Europe, including Poland, which might negatively affect productivity and economic growth in this region.

While analysing the situation in the Polish economy, it was indicated that the released data suggested a possibility of GDP growth remaining positive in 2009 Q1. At the same time, it was assessed that subsequent quarters would see a downward trend in GDP growth which was suggested by macroeconomic data for April 2009 and economic indicators remaining at a low level despite a certain improvement in recent period. Some members of the Council assessed that GDP would probably grow in 2009, albeit the risk of its slight decline could not be excluded. Moreover, other members of the Council assessed that recovery in the Polish economy might come later than expected and the GDP growth might remain at a relatively low level for a longer period of time, should the recession in Poland's major trading partners prove long-lasting.

In the opinion of some members of the Council factors curbing the decline in GDP growth in subsequent quarters might include - similarly to 2009 Q1 - consumption and net exports. It was pointed out that consumption growth slowed down gradually due to still relatively high wage growth, income tax cuts implemented in 2009 and continuation of relatively high growth in consumption loans. On the other hand, it was emphasized that growing unemployment and anticipated decline in wage growth as well as worse consumer sentiment - despite certain recent improvement - as compared with the previous years constituted factors that might be conducive to limiting future consumption demand. Moreover, some members of the Council pointed to the risk of decline in real wages in the economy which might lead to further reduction in consumption.

While addressing investment in the Polish economy, it was pointed out that further decline in private investment would be driven by unfavourable outlook for economic growth in Poland and abroad amidst production capacity surplus connected with high level of investment in the previous years. It was also emphasized that factors acting towards decline in investment expenditure would in addition include limited possibility of financing private investment in Poland caused by falling inflow of foreign direct investment, reduced bank lending and deteriorating financial condition of enterprises. On the other hand, it was pointed out that investment decline in the Polish economy might be curbed by investment projects co-financed with EU funds.

While analysing current inflation developments, it was indicated that in April 2009 inflation exceeded expectations and remained above the upper limit for deviations from the inflation target. At the same time, it was pointed out that the rise in inflation in that month was caused by rising food prices, regulated prices and traded goods prices which was driven by the previous zloty exchange rate depreciation. Some members

of the Council emphasized that developments of consumer price index net of prices largely beyond the direct control of monetary policy signalled that inflationary pressure in Poland had not eased considerably yet.

While discussing the outlook for inflation in Poland, some members of the Council pointed out that short-term forecasts of the NBP suggested inflation might decline in the coming months below the upper limit for deviations from the inflation target. Those members also pointed out that the structure of inflation expectations had not deteriorated despite the rise in current inflation. In the opinion of those members of the Council in the medium term decline in inflation should be driven by the slowdown in economic growth and further widening of the negative output gap in Poland. Other members of the Council also pointed out that at the initial stage of recovery in the Polish economy inflationary pressure should not increase considerably due to faster labour productivity than wage growth and, consequently, favourable changes in unit labour costs.

Some members of the Council also argued that amidst persisting considerable negative output gap inflation in Western European countries might run, for a longer time, at a low level, which - through import prices - would be conducive to easing inflationary pressure in Poland. Yet, some members of the Council pointed at the risk of growth in agricultural and energy commodity prices in the case of revival of economic activity in the United States and China, likely to occur earlier than in Europe. Those members argued that continuing relatively low growth in the Polish economy connected with persisting recession observed in Poland's major trading partners might be then accompanied by inflationary pressure resulting from increase in commodity prices in the global markets.

At the meeting, it was also pointed out that the rise in inflation in the medium term might in addition be driven by a possible rise in indirect and local taxes as well as fees and prices regulated by local governments, connected with considerable deterioration in the situation of the general government sector. At the same time, some members of the Council pointed at high uncertainty about future tax policy of central government and about taxes, fees and prices decided by local authorities.

While discussing the impact of exchange rate on inflation, some members of the Council assessed that exchange rate developments remained the main risk factor for price stability. Those members also argued that - in the absence of current inflation growth translating into rising inflationary expectations and assuming exchange rate stabilization in the future - the impact of exchange rate depreciation on inflation might be expected to fade off gradually. Other members of the Council pointed out, however, that the pass-through of the previous exchange rate developments on inflation might be stronger than assessed earlier.

Moreover, some members of the Council argued that the risk of deterioration in the outlook for growth in the Polish economy as a result of longer-than-expected slowdown in the economic activity in the euro area and a fall in the inflow of direct investment might be conducive to zloty exchange rate depreciation in the medium term. Those members also pointed out that the risk of exchange rate depreciation might result from deteriorating situation in the general government sector in Poland. Deteriorating fiscal situation increases uncertainty about the moment of zloty entering the ERM II.

At the meeting the prospects of Poland meeting the Maastricht price stability criterion were also addressed. It was indicated that 12-month moving average HICP inflation in

Poland exceeded in April 2009 by 0.7 percentage point the reference value for price stability criterion and that the difference between those indicators increased considerably.

Members of the Council agreed that current inflation developments, uncertainty about the prospects of economic recovery in Poland and abroad and uncertainty about the situation in the public finance and its impact on inflation justified keeping the NBP interest rates unchanged at the current meeting. Some members of the Council indicated also that also very low level of real interest rates spoke in favour of leaving the NBP interest rates unchanged. The majority of the Council members decided that a more comprehensive assessment of the medium-term outlook for inflation would be possible after getting acquainted with the results of the June projection of inflation and GDP. Moreover, the Council decided that strong contraction in lending justified lowering the required reserve rate by 50 basis points at the current meeting.

A motion to lower the required reserve rate by 50 basis points was put forward and passed. The Council lowered the required reserve rate from 3.5% to 3%, keeping, at the same time, the interest rates unchanged: the reference rate at 3.75%, the lombard rate at 5.25%, the deposit rate at 2.25% and the rediscount rate at 4.00%.

Information from the meeting of the MPC held on 23-24 June 2009

The Council decided to lower NBP interest rates by 0.25 percentage points: reference rate to 3.50% on an annual basis; lombard rate to 5.00% on an annual basis; deposit rate to 2.00% on an annual basis; rediscount rate to 3.75% on an annual basis.

In 2009 Q1 GDP declined in majority of EU countries and other developed economies, which indicates recession in the global economy. However, recently there were signs pointing to the possibility that recession may be gradually fading out. Also the situation in the global financial markets improved slightly. Despite less pessimistic sentiment of economic agents, economic growth forecasts for the majority of Central and Eastern European countries were further revised downwards.

The growth of prices in the major economies decelerated considerably which was due to the significant slowdown in world economic growth and concurrent drop in commodity prices. Yet, recently commodity prices in the world markets have increased again.

Recession in the global economy contributes to significant weakening of economic activity in Poland. In 2009 Q1 GDP growth decreased to 0.8% y/y i.e. showing a slightly stronger decline than anticipated in the February NBP projection. 2009 Q1 saw a rise in consumption and a slight growth in investment coupled with a strong decrease in inventories. Exports plunged considerably, yet, due to the zloty exchange rate depreciation and the resulting improvement in the competitiveness of Polish products, as well as declining domestic demand, the reduction in imports was larger, which resulted in positive contribution of net exports to GDP growth.

In 2009 Q2 economic activity in Poland remained subdued which is reflected in a decline in industrial output and a drop in growth of construction and assembly production. At the same time, some economic indicators were better than expected. The sentiment of enterprises and households also improved slightly, yet, it continues to be low. Further deterioration was seen in the labour market i.e. employment in the corporate sector was falling and unemployment (after seasonal adjustments) was rising which was accompanied by considerable decline in the growth of nominal and real wages. Reduced

lending, in particular to the corporate sector, constituted an additional factor conducive to curbing economic growth.

Following a rise observed in the first months of 2009, CPI inflation declined in May 2009 to 3.6%, remaining, however, above the NBP inflation target of 2.5% and the upper limit for deviations from the NBP inflation target, set at 3.5%. Decline in inflation was driven by a drop in annual growth of food prices and administered prices whose increase in the preceding period drove CPI inflation to the currently elevated level. The growth of prices of some goods and services connected with the depreciation of the zloty exchange rate is also conducive to inflation continuing at elevated level; yet, the scale of this growth in May was smaller than in the preceding months. Increased inflation results also from the persistence of inflationary processes which is reflected i.a. in the relatively high core inflation.

The Council got acquainted with the projection of inflation and GDP prepared by the Economic Institute of the NBP, being one of the inputs into the Council's decision-making on the NBP interest rates. In line with the June projection – under assumption of constant interest rates – there is a 50-percent probability of inflation lying within the range of 2.8–3.5% in 2009 (as compared to 2.5–3.9% in the February projection), 1.1–3.2% in 2010 (as compared to 0.5–3.2%) and 0.8–3.4% in 2011 (as compared to -0.9–2.6%). In line with the June projection, there is a 50-percent probability of the annual GDP growth lying within the range of -0.4–1.1% in 2009 (as compared to 0.3–1.9% in the February projection), 0.2–2.5% in 2010 (as compared to 1.2–3.3%) and 2.4–4.5% in 2011 (as compared to 2.5–4.8%).

In the Council's assessment, inflation in the coming months will probably decrease, though it will remain at an elevated level, mainly as a result of the relatively high annual growth of food prices and administered prices, including primarily prices of energy. The recently observed rise in crude oil prices may be conducive to rising inflation. Yet, in the medium term further decline in demand pressure should reduce inflation.

The Council assessed the probability of inflation running below the inflation target in the medium term to be higher than the probability of inflation running above the target and decided to lower the interest rates. In the Council's assessment, the already implemented cuts in the NBP interest rates together with the lowering of the required reserve rate will support return of the economy to the potential growth path. The Council's decisions in the coming months will take account of the incoming information on the outlook for economic growth and inflation, the situation in the financial markets in Poland and abroad, information on the public finance sector and zloty exchange rate developments.

The Council will continue to analyse the impact of developments in the domestic inter-bank market on the monetary policy transmission mechanism in Poland.

The Council maintains its view that Poland should join the Exchange Rate Mechanism II (ERM II) and the euro area at the earliest possible date, after achieving the necessary political support for amendments in the Constitution of the Republic of Poland and other legal acts required for euro adoption in Poland.

The Council adopted *Inflation Report – June 2009* which will be published on 26 June 2009.

Projection of inflation and GDP

Projection of inflation and GDP

The inflation and GDP projection has been prepared at the Economic Institute of the National Bank of Poland. The content-related supervision over the work connected with the projection was entrusted to a member of the NBP's Management Board, Mr. Zbigniew Hockuba. The works on the projection was coordinated by the Bureau of Macroeconomic Forecasts of the Economic Institute. The projection was prepared based on the NECMOD macroeconomic model⁵¹. The projection is an outcome of an iterative process in the course of which the paths of some variables were adjusted if they diverged from NBP experts' economic intuition based on their knowledge of economic processes. The Management Board of the NBP approved the projection to be submitted to the Monetary Policy Council. The projection was prepared under the assumption of constant NBP interest rates and is one of the inputs to the Monetary Policy Council's decision-making process.

External conditions

In 2009 the economies of the United States, euro area and the United Kingdom will be still in recession. In the United States, in the last few months, some developments point to the possible deceleration of the fall of economic growth and to a gradual improvement of the situation in the real economy, which should be more clearly visible towards the end of 2009. Euro-area countries and the United Kingdom will take more time to overcome the recession. They will see the return to economic growth of 2% y/y only in 2011.

A low level of economic activity combined with a strong decline of prices in the world markets of agricultural and energy commodities at the turn of 2008 and 2009 translate into the easing of the current inflationary pressure in the global economy. This creates room for measures increasing banking sector liquidity to be continued and for major central banks to keep their interest rates at current low levels. In 2010, as the economies of the developed countries will be overcoming the recession, amid concurrent commodity price rise, inflationary pressure will be increasing, which may induce major central banks to hike their interest rate.

⁵¹Current version of the model's documentation is available at the NBP web site.

Aggregate demand

The growth in the Polish economy will be lowered by the drop in foreign demand, caused by the recession in the developed countries, and the tightening of banks' credit policies, which is reducing the pass-through of NBP interest rate cuts into the interest charged on loans and, in consequence, on private sector activity. There will be a marked weakening of domestic demand growth, which will turn negative in 2009 and will be gradually accelerating only in the following years.

The reduction of domestic demand will be mainly caused by the rapid decline in capital formation. Due to deteriorating perspectives of sales, limited availability of loans, connected with the restrictive credit policies of banks, and shrinking profits, there will be a significant reduction in investments made by private enterprises. In the process of adjusting to the decreasing output and sales, enterprises will also cut on their inventories.

As a result of deteriorating situation in the labour market and the tightening of the criteria for granting mortgage loans by banks, prices of flats will also be falling in 2009. The decline in the investment demand of households, due to the longer investment cycle, will be conducive to a drop in housing investments with a longer lag than in the case of the investments of private enterprises.

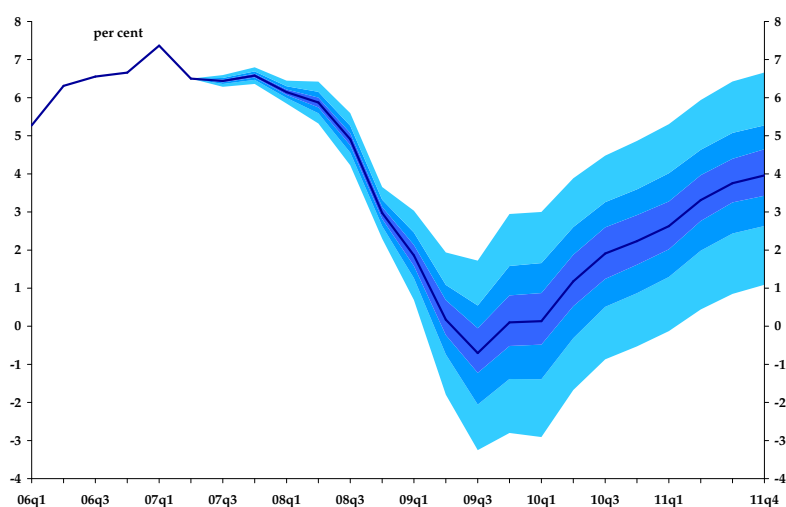
The factor which will be partly mitigating the slowdown in total investment growth is the public investments, implemented despite deteriorating revenues of the general government sector, stimulated by the inflow of EU structural funds.

In 2009 the scale of domestic demand decline will be curbed by stable increase in private consumption, whose growth in average annual terms will be ranging close to 2.5%. In the coming quarters consumption growth will be supported by the still high level of real disposable income at the turn of 2008 and 2009. Towards the end of 2009 the situation of households, which has been deteriorating since the beginning of the year, will increasingly feed through to consumption growth. This will be connected with both the slower growth of disposable income resulting from weaker labour market climate, and the decline in the value of household assets, due to the earlier strong zloty depreciation and the current slump in the housing market. As the unfavourable tendencies will be reversing, in particular in the foreign exchange and housing market, the growth of private consumption will start to consolidate again starting from mid-2010.

In 2009, due to the measures limiting budget expenditures undertaken in response to a significant drop in tax revenues, amid a high level of current expenditures of the general government at the end of 2008, the contribution of public consumption to growth will be negative. However, in the following years the growth of public consumption should be neutral for GDP growth.

Economic recession, which affected Poland's main trade partners, will translate into historically highest decline in trade. Due to the significant slowdown in the growth of domestic demand and the continued weak exchange rate of zloty, connected with its strong depreciation at the turn of 2008 and 2009, in the short projection horizon the contribution of net exports to growth will be a factor considerably accelerating GDP growth. In the longer horizon, economic recovery in the world will be conducive to rebuilding the growth of exports, while the improved domestic economic climate will translated into accelerated growth of imports. The above discussed phenomena, with the ensuing gradual zloty appreciation, will lead to the decrease in the contribution of

□ **Figure 4.1:** Central projection and GDP growth fan chart.



Source: NBP.

net exports to GDP growth, though it will remain positive throughout the projection horizon.

Macroeconomic equilibrium

The economic growth will continue to decline till the end of 2009 Q3, after which this tendency will be reversed. Economic activity will be rising gradually and it is only at the end of 2011 that GDP growth will come close to the level of 4% y/y (Figure 4.1).

As the economic slowdown will be deepening in 2009, so the demand for labour will be weakening. Enterprises will be adjusting to the worsening economic situation both by reducing employment and by lowering wage growth. Real wages, whose reaction to deteriorating economic conditions is relatively flexible together with the positive changes of the tax wedge in 2008 will limit both the scale of the reduction of the number of working persons in the economy and the scale of the unemployment rate increase. In 2011 the negative tendencies in the labour market will be reversed. Employment growth will be stimulated both by the resurgence in the demand for labour and by the increased labour supply triggered by favourable changes in the demographic structure of population⁵² as well as by weakening migrations outflows. However, the growth of real wages will remain below the growth of labour productivity, gradually closing the gap between the level of wages and productivity, that was related to the recovery in the labour market till 2008 and the tensions connected with intensive emigrations after 2004.

Both the current unemployment rate and the natural unemployment rate (NAWRU) will rise steadily in 2009–2010, fuelled by higher labour participation ratio, amid the continuation of a stable growth of capital formation and increase in non-wage cost of production resulting from strong zloty depreciation at the turn of 2008 and 2009. With a negative growth of the number of working persons, the rise in the actual unemployment

⁵²Growing share of population aged 25, 44 with high participation rate.

rate will be faster than the rise in NAWRU, leading to the closing of the unemployment gap at the turn of 2009 and 2010. In 2011, due to the improving economic conditions, the absorption of free labour force will accelerate, stabilising the unemployment rate slightly above 13%.

In 2010 the growth of potential output will slow down. The slowdown will be driven by the halting of the process of reducing fiscal burden applying to labour costs, the lowering of TFP growth, the zloty depreciation that is raising production costs and the related curbing of the absorption capacity of the labour market. Till the end of 2010 the GDP growth will remain below the growth of potential output. In consequence, the negative output gap will be widening, reflecting the easing of the demand pressure in the economy. In 2011, as the economic climate in Poland will improve amid stabilising the growth of potential output, the imbalance in the goods market will be gradually decreasing following developments of the imbalance in the labour market.

The current and capital account balance will markedly improve in 2009, exceeding the level of -2% of GDP, as compared to below -4% of GDP in 2008. This will be mainly driven by the reduction of trade balance deficit favoured by the zloty depreciation at the turn of 2008 and 2009. The rising inflow of EU funds will also help to improve the balance of transfers. In the long projection horizon the balance of current and capital accounts will stabilise in relation to GDP. Growing EU transfers and the improvement in trade balance will be offset by the deteriorating balance of income due to higher cost of debt servicing and a strong decline in the inflow of foreign remittances. In turn, slow appreciation of the exchange rate will favour stabilisation of the terms of trade following a pronounced weakening of this indicator at the beginning of 2009.

Cost pressure

The slowing wage growth and the reduction in the number of working persons in reaction to deterioration of the economic situation will translate into a deceleration of unit labour cost growth in the economy as a whole and excluding private farming. The growth of ULC will remain negative starting from the end of 2009 till mid-2011, when the improving economic condition will feed the rebound of ULC. The costs of labour will be kept relatively low in 2010-2011 supported, to a large extent, by the favourable supply situation in the labour market.

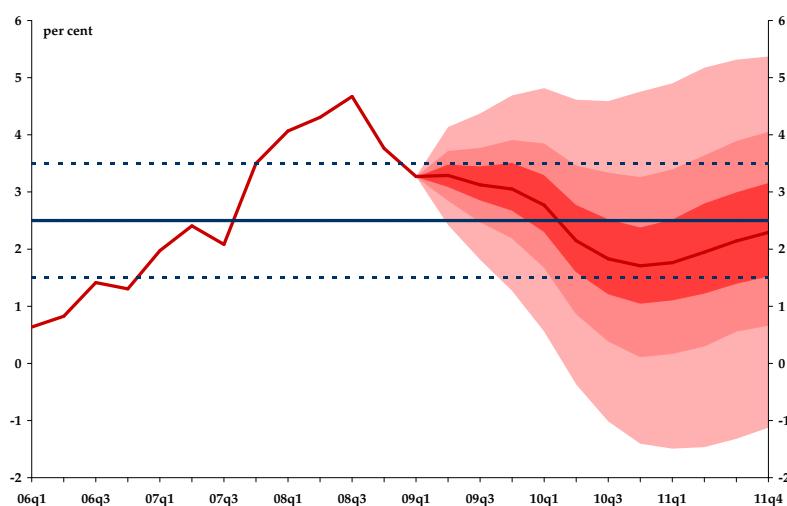
The strong depreciation of the zloty at the turn of 2008 and 2009 will push up the cost of domestic production in the short horizon of the projection, though the scale of this rise will be mitigated by unfavourable economic conditions in the domestic market. The prices of commodities in global markets, expressed in the dollar, significantly declined in 2008 Q4, yet in consequence of the zloty depreciation, food and energy price inflation will remain relatively high in 2009.

Inflation

The rate of CPI inflation will be gradually decreasing till the end of 2010 (reaching the NBP inflation target in the first half of 2010). Despite a rebound in the inflation rate in 2011, it will most probably stay below the inflation target of 2.5% (Figure 4.2). The probability of inflation running below the inflation target of 2.5% will be steadily

increasing over the shorter projection horizon and subsequently it will decrease to over 0.5 in the last quarters of the projection. In turn, the probability of inflation staying within the tolerance range for deviations from the target between 2009 and 2011 will decrease more than twofold.

□ **Figure 4.2:** Central projection, inflation fan chart and NBP inflation target.



Source: NBP.

The growth of consumer prices in 2009 will be significantly affected by a falling growth of prices of food and energy. On the other hand, core inflation, which in 2009 will record some further increase due to the acceleration of import price growth and high ULC growth in 2008, will continue at a relatively high level. With the easing of the cost pressure generated by the labour market and a moderate appreciation of the zloty by the end of the projection horizon, core inflation will be gradually decreasing.

The table below presents the most important characteristics of the probability distributions of the inflation path obtained in the June projection.

Table 4.1: Probability of forecasted inflation

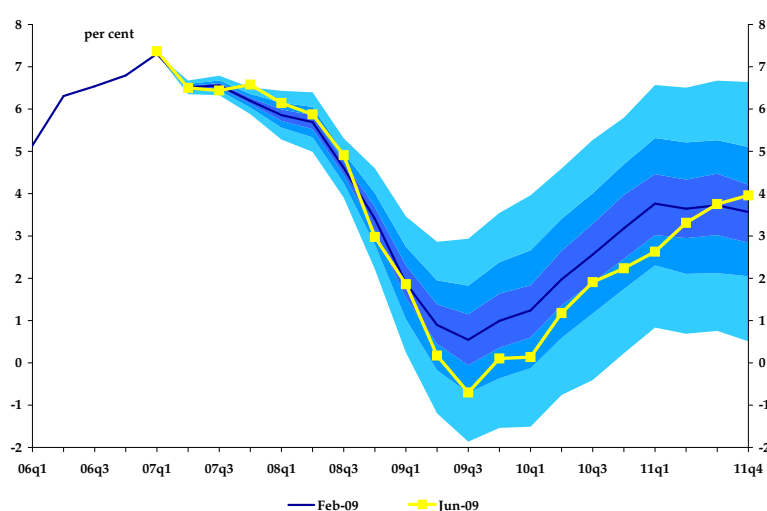
	Probability of inflation				
	below 1.5%	below 2.5%	below 3.5%	below central projection	within (1.5%; 3.5%)
2009q2	0.00	0.06	0.66	0.49	0.66
2009q3	0.03	0.21	0.67	0.48	0.65
2009q4	0.07	0.29	0.64	0.48	0.57
2010q1	0.16	0.41	0.71	0.48	0.55
2010q2	0.32	0.59	0.81	0.49	0.48
2010q3	0.42	0.64	0.83	0.50	0.41
2010q4	0.43	0.66	0.83	0.48	0.40
2011q1	0.42	0.64	0.81	0.49	0.39
2011q2	0.40	0.60	0.78	0.49	0.38
2011q3	0.37	0.55	0.74	0.49	0.37
2011q4	0.34	0.52	0.71	0.48	0.36

Source: NBP.

The June projection compared to the February projection

The projection of inflation and GDP in the June forecasting round was prepared amid materialisation of some risks concerning the external environment articulated in the February forecasting round. Significantly grimmer expectations of GDP growth in the main trading partners of Poland in relation to forecasts formulated at the beginning of 2009, stronger than expected zloty depreciation and increasingly visible limitations in the access to credit for the private sector all together led, on the one hand, to the downward revision of forecasts of trade turnover and domestic demand and, on the other hand, to the upward revision of the forecast contribution of net exports to growth. As a result, the GDP projection was significantly lowered till mid-2011 (Figure 4.3).

□ **Figure 4.3:** June projection against February projection: GDP growth.



Source: NBP.

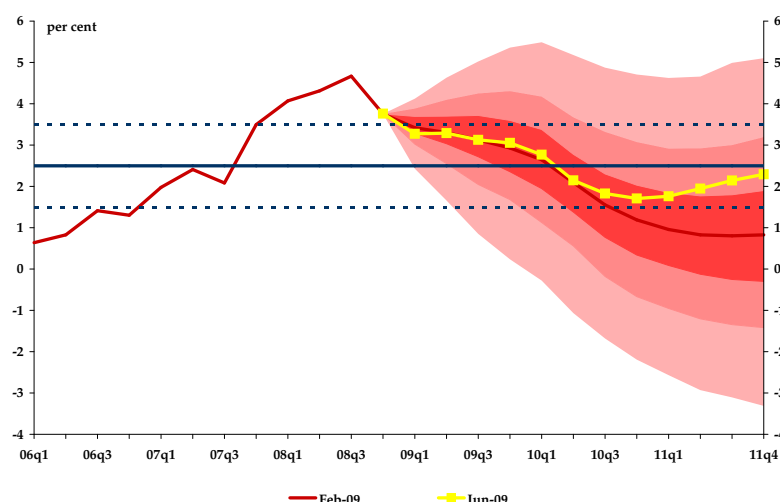
The deteriorating outlook for growth, the ensuing less favourable labour market situation and a lower level of core inflation at the beginning of 2009 were conducive to lowering the path of core inflation in relation to the previous projection. However, a factor mitigating the lowering of the CPI inflation path was a significant upward revision of the forecasts of food prices for 2009 and 2011, among others, due to the weaker than previously expected zloty exchange rate. The inflation path in the June projection is running slightly below the inflation path of the February projection till mid-2010 and above it in the following quarters (Figure 4.4).

Main areas of uncertainty

Situation in public finance sector and fiscal policy

The scale and effectiveness of the necessary changes to be introduced to the budget policy are subject to considerable uncertainty under a significant shrinking of the general government revenues due to the deteriorated economic conditions. Additional factors of uncertainty include: the continuing high risk aversion in the global financial markets, which may translate into higher cost of financing public debt, and the risk of breaching

□ **Figure 4.4:** June projection against February projection: CPI inflation.



Source: NBP.

the prudential thresholds for the ratio of public debt to GDP (50%, 55% and 60%) set in the Act on Public Finance and the Constitution of the Republic of Poland. The rise in the yields on Treasury bonds and bills and the necessity of implementing measures envisaged in the Act may result in a stronger reduction of the general government deficit.

The most probable steps which may be taken by the government in the coming years include the reduction of current spending on materials and services and cutting those government investments which are not co-financed with EU funds. At the same time, there are other measures possible, like freezing the wages of the general government sector employees and changes limiting access to certain social benefits or reducing the amount of such benefits. Tax rises or increased social security contributions are also probable. The pro-savings adjustments of the fiscal policy constitute a risk of lowering the path of economic growth in the horizon of the projection. While the reduction of current expenditures on materials and services, similarly to freezing the wages of the general government sector employees will primarily constitute a negative demand shock, whose effects should fade out in the coming years, the reduction of investment outlays or raising the fiscal burden may negatively affect also the rate of medium-term growth and the situation in the labour market.

Fiscal policy developments in the coming years remain a risk factor also for the path of inflation. Cuts in the current expenditures of the public finance sector may be conducive to a further drop in the inflation rate, while raising taxes and quasi-taxes may increase the risk of inflation running above the path of the current projection.

Another risk to the projection is the effect of the interaction between the public finance sector situation and the processes influencing the zloty exchange rate, which may lead to even further aggravated impact of the crisis on the Polish economy. Due to the fact that part of the public finance sector debt consists of Treasury securities denominated in foreign currencies and of foreign currency loans, possible further depreciation of the zloty could result in the rise of the ratio of the current value of public debt (expressed in zloty) to GDP and a further deterioration of conditions for the government policies. On

the other hand, further deterioration of the budget situation may threaten the stability of the Polish currency.

Another risk factor for the scenario presented in the June projection is the effectiveness of government policies in alleviating the impact of the economic crisis. The proposals so far presented by the government, included, among others, in the Plan for Stability and Development, aim at fostering growth in the period of slump mainly by means of guarantee instruments and state warrants. This remains consistent with the government's intention of retaining the discipline of public finances and minimising the risk of negative assessment of excessive deficit by the financial markets. The efficiency of the presented solutions will depend on: the economic effectiveness of the proposed tools, the time needed to conclude the legislative procedure with respect to proposals which require parliamentary approval, the transparency of the elaborated procedures and the organisational efficiency of involved public institutions.

Labour market developments

The flexibility of the Polish labour market will be important both for the growth and inflation outlook in the coming years. This factor is particularly significant in view of the fact that the economic downturn will be accompanied by a considerable increase in labour supply conditioned, to a large extent, by demographic factors, the weakening of emigration trends and the intensification of return migration. Thus, the economy's absorption capacity will not only determine the scale of employment growth but also the efficiency of utilising that potential by the Polish economy to maintain high growth. Moreover, the scenario of labour market developments is subject to a number of multi-dimensional risks related to the structural policies of the government, the impact of the anticipated or already implemented regulations on the labour market (such as the cuts of tax rates or changes to the minimum wage level), the actual scale of return migration, the quality of workforce and its structural fitting with the demand for labour. The risk of less flexible adjustments of the labour market than those accounted for in the projection and, consequently, the probability of lower GDP growth and higher inflation paths is assessed as being higher than the risk of a more flexible reaction of the labour market to changes in the economic situation.

Situation in the financial sector

Actions undertaken by the central bank aimed to reduce the cost of credit through lowering the NBP interest rates and providing liquidity to the banking sector should have a positive impact on economic activity and help to keep inflation at the inflation target within the projection horizon. Amid strong economic slowdown and increased uncertainty about the outlook for economic development, and given the heightened risk premium included in market interest rates, the transmission of cuts in the central bank's reference rates on supply and cost of credit may be incomplete. Deteriorating sales outlook and financial condition of enterprises, the possibility of payment bottlenecks, as well as less favourable situation in the labour market lead to growing credit risk for both enterprises and households. Growing credit risk and constrained capital buffers as well as banks' pursuit to maintain the necessary liquidity reserves lead to tightened loan granting conditions, including increased loan margins. As a result, reference rate cuts may not be fully transmitted to lower interest rates on newly granted loans and

increased supply of household and corporate loans. Therefore, the current projection takes into account, to a larger extent than assumed in the previous projection, limited effectiveness of monetary policy amidst economic slowdown.

Global economic situation and its transmission to Polish economy

The assessment of the scale of the global economic downturn and its transmission to economic slowdown in Poland remains a significant risk of the present projection, despite a significant downward revision of global growth forecasts, and expectations concerning growth in Poland as compared to the previous forecasting rounds. The projection is based on the scenario assuming recession in the global economy, which will gradually fade away in 2010-2011, when growth rates are expected to return to their long-term trends. It is also assumed that the Polish economy will be affected by the global economic crisis mainly through deteriorating conditions for exporters, pessimistic producers' expectations about market demand, and employees' concerns about employment possibilities. Whereas, it is assumed that the structure of the economy, the banking sector and the labour market will be sufficiently flexible to prevent the effects of the crisis in Poland from lingering beyond 2011, when domestic growth should accelerate again following recovery abroad. Both the protracted global recession and lower resilience of the Polish economy to external shocks may have a significant negative impact on growth prospects during the years of the projection.

Exchange rate developments and competitiveness of the economy

The present uncertainty concerning the development of both real and nominal processes in the global economy makes it difficult to assess the mode of transmission of changes in global markets to relative competitiveness of export products of Polish companies, as well as the attractiveness of Poland as a country of profitable investments. There is a persisting uncertainty related to future volatility of the zloty exchange rate, development of terms of trade and contribution of net exports to growth. The lack of clearly fixed date of zloty joining the ERM II constitutes an additional uncertainty factor.

Assessment of the economic situation based on preliminary estimates of GDP

GDP estimates published by GUS for 2008 and for 2009 Q1 increase uncertainty of the assessment of economic situation. GDP data based on current statistical reporting of economic entities and own estimates of GUS pointed, among others, to a sharp decline in the contribution of inventories to growth at the turn of 2008 and 2009 following the previously reported regular increase in inventories largely exceeding GDP growth. At the same time, the growth of public consumption, especially at the end of 2008 increased considerably, and the data on private consumption and investment demand suggest only a slight economic downturn in the private sector. These data significantly affect GDP forecasts, particularly in 2009.

Risk for EU funds utilisation

Financial crisis and economic slowdown may threaten utilization of EU funds by the public sector. Deteriorating income situation of local government entities and tightening of banks' lending criteria might constitute an obstacle for local government to provide necessary co-financing for EU funds. On the other hand, higher absorption of EU funds may be driven by institutional changes involving increase in the amount of advances assigned to particular projects, extending the range of entities authorized to benefit from such advances as well as the possibility to finance some of investment projects without the need to make own contribution.

Food and energy prices developments

Due to the difficulties in determining the pace and extent of energy market liberalization in Poland and possible incomplete transmission of sinking world prices of coal to domestic coal prices, the forecast of growth in domestic energy prices is subject to high uncertainty. Economic mechanisms in regulated sectors, including the energy market in Poland may be weak, in particular, throughout the projection horizon. Also the forecast of food prices in the domestic market, including the impact of falling global market prices on the decline of inflation in Poland, is subject to risk.

Integration and institutional processes

Integration of the Polish economy with other EU countries requires gradual regulatory adjustment to EU regulations. At present, it is difficult to assess how economic activity will be affected by new regulations governing emissions of carbon dioxide and possible further, more restrictive, requirements in the field of environmental protection. The direction of the EU trade policy with non-EU countries amidst deteriorating global economic situation and possible growing of protectionist tendencies constitutes another source of risk. Also the lack of final solutions in spatial and urban planning contributes to the uncertainty connected with legal environment.

It is assessed that these risks lead to higher probability of worse medium-term growth prospects and higher inflationary pressure as compared with the scenario assumed in the projection.

Discussion of data released after 22 May, 2009

At the turn of May and June 2009 a rise in both current prices and futures contracts quotations of majority of energy commodities was observed. This was most probably connected with improved market assessments of the outlook for growth in the global economy, growing confidence in the financial markets and depreciation of the dollar exchange rate. Additionally, the data released after 5 June 2009 by the International Monetary Fund suggest that majority of food commodity markets have observed clear upward trends whose scale is bigger than expected at the time when projection assumptions were made. Higher prices in the global markets, especially those of oil and coal, and also food, enhance the risk of a higher inflation path than the one suggested by the current projection.

On May 29, 2009, GUS released preliminary estimates of GDP for 2009 Q1 and revised the estimates of the national accounts for the years 2007-2008. GDP growth estimated by GUS in 2009 Q1 reached 0.8% y/y, while the assessment of GDP growth assumed in the current projection amounts to 1.6% y/y. On the other hand, estimates of growth in main demand components, i.e. private consumption and gross fixed capital formation proved close to that assumed in the current projection.

Summary of risks to inflation and GDP projection

The key factors conducive to increasing inflation above the levels assumed in the projection include: lower-than-assumed flexibility of the Polish labour market, possibility that the government may conduct fiscal policy whereby the public finance sector is largely consolidated through fiscal burden tightening, the past and possible further depreciation of the zloty as well as commodity price developments in the global markets and the scale of transmission of commodity price fluctuations to food and energy prices in Poland. The possibility of inflation running below the central path is indicated by the risk of deeper recession in the global economy than assumed in the projection, more restrictive fiscal policy through curbing public finance sector's expenditures and lower absorption of the EU funds. Upon consideration of the above-discussed uncertainty factors, it may be assessed that the risk of inflation running above the central path prevails throughout the projection horizon. In turn, in the case of GDP growth, the risk factors to the projection indicate that it is possible that economic slowdown in Poland may persist for a longer period than it is assumed in the projection.

Table 4.2: The central path of the GDP and inflation projection.

	2008	2009	2010	2011
CPI (per cent y/y)	4.2	3.2	2.1	2.0
Food prices (per cent y/y)	6.1	3.9	0.8	1.6
Energy prices (per cent y/y)	8.4	3.9	1.6	1.6
Core inflation excl. food and energy prices (per cent y/y)	2.3	2.7	2.7	2.3
GDP (per cent y/y)	4.9	0.4	1.4	3.4
Domestic demand (per cent y/y)	5.5	-1.4	0.9	2.8
Private consumption (per cent y/y)	5.4	2.5	1.4	2.4
Public consumption (per cent y/y)	7.6	-0.9	-0.3	0.8
Gross fixed capital formation (per cent y/y)	8.1	-4.9	1.2	2.9
Contribution of net export (per cent y/y)	-0.7	1.8	0.5	0.6
Exports (per cent y/y)	7.2	-7.5	3.8	11.7
Imports (per cent y/y)	8.3	-10.9	2.4	9.8
Average nominal gross wages(per cent y/y)	9.4	4.5	1.2	3.9
Number of employed (per cent y/y)	1.3	-1.5	-1.4	-0.3
Unemployment rate (per cent)	7.2	9.7	12.4	13.2
NAWRU (per cent)	11.3	11.8	13.2	14.5
Participation rate (per cent)	54.2	55.0	55.4	55.5
Labour productivity (per cent y/y)	3.7	1.9	2.8	3.7
Unit labour cost (per cent y/y)	5.9	2.1	-1.4	0.2
Potential output (per cent y/y)	6.0	5.5	2.9	3.0
Output gap (percentage of potential output)	2.1	-1.4	-4.5	-4.6
Index of agricultural commodity prices (USD; 2006=1.00)	1.13	0.95	0.96	0.98
Index of energy commodity prices (USD; 2006=1.00)	1.69	0.89	1.11	1.25
Foreign price level (per cent y/y)	2.5	1.3	1.2	2.0
Foreign GDP (per cent y/y)	0.7	-4.7	0.0	1.9
Current account and capital account balance (percentage of GDP)	-4.3	-1.8	-2.2	-2.1
WIBOR 3M (per cent)	6.25	4.41	3.98	3.95

Source: NBP.

Notes: Data on the number of working persons, labour productivity and unit labour costs are own estimates of the Economic Institute of the NBP based on BAEL data. The index of agricultural commodity prices is constructed on the basis of the IMF's forecasts of the prices of wheat, pork, beef, poultry, fish, sugar, olive oil, oranges and bananas with weights reflecting the consumption structure of Polish households. The index of energy commodity prices includes the prices of crude oil, coal and natural gas taking into account the consumption structure of these commodities in Poland.

Annex

The voting of the Monetary Policy Council members on motions and resolutions adopted in January–April 2009.

- **Date:** 27 January 2009

Subject matter of motion or resolution:

Resolution on the level of the reference rate, lombard rate, deposit rate and re-discount rate of the National Bank of Poland

MPC decision:

The MPC lowered the interest rates by 0.75 percentage points.

Voting of the MPC members:

For:	S. Skrzypek	Against:	D. Filar
	J. Czekaj		H. Wasilewska-Trenkner
	S. Nieckarz		A. Wojtyna
	M. Noga		
	S. Owsiak		
	M. Pietrewicz		
	A. Sławiński		

- **Date:** 27 January 2009

Subject matter of motion or resolution:

Motion to lower the NBP interest rates by 0.50 percentage points

MPC decision:

The motion to lower the NBP interest rates by 0.75 percentage points was passed, therefore the motion to lower the NBP interest rates by 0.50 percentage points was not put to voting.

- **Date:** 27 January 2009

Subject matter of motion or resolution:

Motion to lower the NBP interest rates by 0.25 percentage points

MPC decision:

The motion to lower the NBP interest rates by 0.75 percentage points was passed, therefore the motion to lower the NBP interest rates by 0.25 percentage points was not put to voting.

- **Date:** 25 February 2009

Subject matter of motion or resolution:

Motion to lower the NBP interest rates by 0.50 percentage points

MPC decision:

Motion did not receive a majority vote.

Voting of the MPC members:

For:	S. Skrzypek	Against:	J. Czekaj
	S. Nieckarz		D. Filar
	M. Pietrewicz		M. Noga
			S. Owsiak
			A. Sławiński
			H. Wasilewska-Trenkner
			A. Wojtyna

- **Date:** 25 February 2009

Subject matter of motion or resolution:

Resolution on the level of the reference rate, lombard rate, deposit rate and re-discount rate of the National Bank of Poland

MPC decision:

The MPC lowered the interest rates by 0.25 percentage points.

Voting of the MPC members:

For:	S. Skrzypek	Against:	D. Filar
	J. Czekaj		M. Noga
	S. Nieckarz		A. Wojtyna
	S. Owsiak		
	M. Pietrewicz		
	A. Sławiński		
	H. Wasilewska-Trenkner		

- **Date:** 25 March 2009

Subject matter of motion or resolution:

Resolution on the level of the reference rate, lombard rate, deposit rate and re-discount rate of the National Bank of Poland

MPC decision:

The MPC lowered the interest rates by 0.25 percentage points (due to tie vote, the Chairman's casting vote was decisive).

Voting of the MPC members:

For:	S. Skrzypek	Against:	D. Filar
	J. Czekaj		M. Noga
	S. Nieckarz		A. Sławiński
	S. Owsiak		H. Wasilewska-Trenkner
	M. Pietrewicz		A. Wojtyna

- **Date:** 7 April 2009

Subject matter of motion or resolution:

Resolution on submission of the opinion to the Constitutional Tribunal

Voting of the MPC members:

For:	J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna	Against:	S. Skrzypek
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- **Date:** 22 April 2009

Subject matter of motion or resolution:

Resolution on approving *the Annual Financial Report of the National Bank of Poland* prepared as of 31 December 2008

Voting of the MPC members:

For:	S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner	Against:	
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A. Wojtyna was absent.

- **Date:** 29 April 2009

Subject matter of motion or resolution:

Resolution amending resolution on setting the ceiling for liabilities arising from loans and credits drawn by the NBP at foreign banking and financial institutions

Voting of the MPC members:

For:	S. Skrzypek J. Czekaj D. Filar S. Nieckarz M. Noga S. Owsiak M. Pietrewicz A. Sławiński H. Wasilewska-Trenkner A. Wojtyna	Against:	
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- **Date:** 29 April 2009

Subject matter of motion or resolution:

Resolution on the stance of the Monetary Policy Council on the IMF Flexible Credit Line

Voting of the MPC members:

For:	S. Skrzypek	Against:
	J. Czekaj	
	D. Filar	
	S. Nieckarz	
	M. Noga	
	S. Owsiak	
	M. Pietrewicz	
	A. Sławiński	
	H. Wasilewska-Trenkner	
	A. Wojtyna	